

વિશ્વના સૌથી ઉમદા વ્યવસાયનુ પ્રવેશદ્વાર . .  
આપના ઉજ્જવળ ભવિષ્યનુ પ્રથમ પગથીયુ



  
**માં કામલ**  
Medical Center

D.C.N.( Diploma Course in Nursing)  
D.P.N. (Diploma in Practical Nursing)

- પ્રેક્ટીકલ ટ્રેનિંગ દરમિયાન પ્રતિભાસ રૂા. ૨૦૦૦/- પગાર
- ટ્રેનિંગ બાદ નોકરી અપાવવાની જવાબદારી સંસ્થા લે છે.
- સરકારશ્રીના નિયમોનુસાર સ્કોલરશીપનો લાભ



માટેલ કોર્નર, ઘાંચી શેરી, બેગમપુરા, સિનેમા રોડ, સુરત  
ફોન: ૦૨૬૧-૨૪૫૨૨૦૫, ૯૩૭૭૩ ૯૯૭૩૯, ૮૪૬૦૮ ૪૧૬૩૮

# **DIPLOMA IN HOSPITAL MANAGEMENT**

## **FIRST YEAR**

<b>PAPER: 1</b>	<b>GENERAL ENGLISH AND COMPUTER FUNDAMENTALS</b>
<b>PAPER-2</b>	<b>HOSPITAL PLANNING AND FUNCTIONS</b>
<b>PAPER-3</b>	<b>HOSPITAL SERVICES</b>
<b>PAPER-4</b>	<b>PATIENT CARE MANAGEMENT</b>

### **PAPER –I General English and computer fundamentals**

#### **Computer:**

#### **Definitions and short question (1-2 marks)**

1. Computer, CPU, Monitor, Key board, Mouse, Printer
2. Internet, E-mail, Community services
3. Facebook, orkut, google
4. File
5. Folder
6. Ctrl functions
7. Formulas in excel
8. Word art

#### **Short question (5 marks)**

1. Importance of computer
2. Explain window xp desktop
3. Explain regarding parts of computer ( Computer, CPU, Monitor, Key board, printer etc)
4. How to turn off , restart, standby computer
5. Different lay outs of computer
6. Aligning the text (center, left,right, justify etc)
7. Font
8. How to setup and run slide show in power point presentation
9. Explain excel

#### **Descriptive question (10-15 marks)**

1. Importance of computer and internet
2. Explain email
3. My documents/my computer/recycle been
4. Shortcut commands in word
5. Preparing a table in word
6. Explain power point presentation

## English:

### Definitions and short question (1-2 marks)

1. a[.v. mi> f[rvi[, b.v. mi> f[rvi[
2. yi[³y aiT)<kl m&ki[
3. (vFinviky/p\ÅniY<viky/nkiriRmk viky mi> f[rvi[
4. use of can/may/will/shall/should/must
5. use of preposition on/at/in/behind/of/to/for/with/by/and/but
6. use of or/so/for/yet/if/because/either or/ neither nor
7. definitions of singular/pleural/noun/count noun/pronoun/verb
8. your name and address
9. make list of .... (vocabulary )

### Short question (5 marks)

1. Importance of English in health sector
2. Explain indefinite articles a/an
3. Explain definite articles the
4. Write essay on

- Human Body
- MY SELF
- MY HOBBY
- MY FATHER
- MY MOTHER
- MY FAMILY
- MY NURSING SCHOOL
- THE HOSPITAL
- THE DOCTOR
- A NURSE
- GOOD HEALTH
- A MORNING WALK
- My city/village,
- My best friend,
- Visit to a blood bank
- Picnic
- My favourite: teacher
- My country: India

### **Descriptive question (10-15 marks)**

1. Explain tenses
2. Write your biodata and application for job
3. List characteristics of good nurse
4. Explain importance of English in Nurse life
5. Explain various prepositions

### **Computer basics**

ki[À¼y&Tr b(z)kn) ki[e pN b&k m[Lv) t[mi>Y) n)c[ m&jbni m&d`iai(n) t]yir) krv)

- **What is a Computer?**
- **What is an Operating System?**
- **What are the Basic Parts of a Desktop Computer?**
- **The Windows XP Desktop**
  - **Start button:** one of the most important tools you will use while working with Windows XP. The Start button allows you to open menus and start applications.

- **Taskbar:** primarily used to switch between open windows and applications. Learn more about using the Taskbar in a later lesson.
- **Icons (or graphical pictures):** represent applications, files, and other parts of the operating system. By default Windows XP provides you with one desktop icon, the Recycle Bin. Learn more about the Recycle Bin in a later lesson.
- **Turn Off and Restart the Computer**
- **Minimizing, Maximizing, and Restoring Windows**
- **What is a File?**
- **Some common file name extensions are:**
  - **doc:** Word or WordPad document
  - **xls:** Excel spreadsheet
  - **htm or html:** HTML file (web page)
  - **ppt :** PowerPoint presentation
- **Creating, Renaming, and Deleting Files**
- **What is a Folder?**
- **All Windows XP folders include the following features:**
  - **Title bar:** contains the name of the folder
  - **Menu bar:** contains the File, Edit, View, Favorites, Tools, and Help menus.
  - **Navigation bar:** contains the Back, Forward, Up, Search, Folders, and Views buttons.
  - **Address bar:** shows current folder location. Use the drop down arrow to navigate your computer's places.
  - **White space:** displays contents of the folder (folders and files)
  - **File and Folder Tasks list:** a convenient list of tasks
  - **Other Places:** convenient list of your computer's places
  - **Details:** describes the folder
- **Creating, Renaming, and Deleting Folders**
- **What is a Drive?**
- **Introduction to My Documents**
  - **My Documents** is a **folder** that provides you with a convenient place to store your important files and folders. Remember, you can quickly reach **My Documents** in the Start menu or by double-clicking the My Documents icon on your desktop.

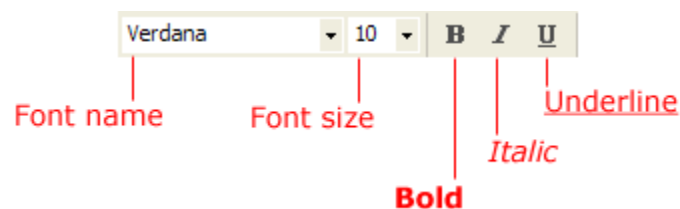
- **My Computer** is another tool you can use to manage files and folders. With this tool, you can **create, rename and move folders** and **copy, print, move, delete and rename files**. It also allows you to gain **access** to other system tools.
- **Copying Files and Folders**
- **What is the Recycle Bin?**
- **Opening the Search Companion**
- **Change in View**
  - **Normal** view is best used for typing, editing, formatting and proofreading. It provides a maximum amount of space without rulers or page numbers cluttering your view.
  - **Web Layout** view shows you what your text will look like on a web page.
  - **Print Layout** view shows you what your document will look like when it is printed. Under Print Layout view you can see all elements of the page. Print Preview shows you this as well.
  - **Outline** view is used to create and edit outlines. Outline view only shows the headings in a document. This view is particularly handy when making notes.
  - **Full Screen** view displays **ONLY** the document that you are working on. All the other pieces of the Word window are removed except for one button that allows you to Close View Screen.
- **Saving a New File**
- **Save As Dialog Box**
- **Backspace and Delete**
  - Use the backspace and delete keys (on your keyboard) to erase text in your document.
  - The **backspace** key erases the text to the left of the insertion point one character at a time.
  - The **delete** key (located under the Insert key) erases the text to the right of the insertion point.
- **Using Undo - Ctrl + Z**
- **Using Repeat - Ctrl + Y**
  - The **Repeat** feature allows you to repeat the last action and can help to save a lot of time as you create your document.
- **Cut and Paste: Copy and Paste:**
- **Ctrl+C = copy**

- Ctrl+X = cut
- Ctrl+V = paste
- **Using Find - CTRL + F**
- **Using Replace - CTRL + H**
- **Aligning Text**

Click the Align Left, Center, Align Right, or Justify button on the Formatting toolbar.



- **Using Page Setup to Specify Margins**
- **Bold, Italics and Underline**



- **Font** Names
- **Using Color**
- **Font Size**
- **Bullets and Numbering**
- **To Create a Bulleted List:**
- **To Create a Numbered List:**
- **Use of Symbols**
- **Working with Tables**
- **Row** - A row runs horizontal in a table and is divided by borders.
- **Borders** - Separating lines in the table.
- **Column** - A column runs perpendicular in a table and is divided by borders.
- **Cell** - A cell is the box that is created when your rows and your columns intersect each other. The cell contains your data or information.
- **Creating Tables Using the Insert Table Dialog Box:**
- **Inserting and Deleting Columns and Rows**
- **To Add Rows to Your Table:**
- **To Insert Rows in the Middle of the Table:**

- To Delete Rows:
- To Delete Single Table Cell:
- To Adjust Columns, Rows, and Cell Size:
- Adding Borders
- Add Shading
- Introduction to Word Graphics
  - AutoShapes: including Lines, Curves, and Textboxes
  - WordArt drawing objects
- WordArt Drawing Objects



- Inserting Clip Art
- Inserting Pictures from your Computer
- Changing the Appearance of your Pictures

**Powerpoint presentation:**

**Essay on preparing powerpoint presentation**

**How to design new slide in presentation?**

**How to run presentation.**

**Micro soft excel**

**Preparing table in excel**

**Formulas in excel... sum, deduction, multiplication**

**General English**

**Importance of English in Nursing:**

**Singular and Plural Nouns :** a[k vcn an[ bh& vcn

A noun names a person, place, thing, or idea. : Noun a[TI[ nim

**For the plural form of most nouns, add s.**

- bottle – bottles
- cup – cups

**For nouns that end in ch, x, s, or s sounds, add es.**

- box – boxes



- watch – watches

**For nouns ending in f or fe, change f to v and add es.**

- wolf – wolves
- wife – wives

**Some nouns have different plural forms.**

- child – children
- woman – women
- man – men

**Nouns ending in vowels like y or o do not have definite rules.**

- baby – babies
- toy – toys

**A few nouns have the same singular and plural forms.**

- sheep – sheep
- deer – deer

**Indefinite::Articles—a,an**

an—used before singular count nouns beginning with a vowel (a, e, i, o, u) or vowel sound:

gN) Skiy t[vi nim ni p\Ym axrni[ upcir Avr hi[y Ryir[

- an apple, an elephant, an issue, an orange

a—used before singular count nouns beginning with consonants (other than a, e, i, o, u):

gN) Skiy t[vi nim ni p\Ym axrni[ upcir Äy>jn hi[y Ryir[

- a stamp,
- an honest
- an M.B.A.
- a B.B.A.

## **2. Definite Article (the)**

Used to indicate a noun that is definite or has been previously specified in the context:

ci[kks p\kirn& nim aYvi agiuni vikymi> vpriy[l hi[y t[ nim b)ji vikymi> vpriit& hi[y t[ni miT[

- Please close the door.
- I like the clothes you gave me.

Used to indicate a noun that is unique: an<sup>o</sup>y hi[y t[v& nim

- Praise the Lord!
- The Narmada River is near to Bharuch.

## **Unit : 3 Capitalization**

Capitalization means using a capital letter (for example, A instead of a).  
Always capitalize the following:

The first word in a sentence. vikyni[ p\Ym axr

- I grew up in India.
- She left a message on my phone.

The pronoun I. "I" = h&> Yt& hi[y Ryrir[

- This country is where I dreamed of.

The first letter of a proper noun (specific name). nim , aTkni[ p\Ym axr

- David wants to play soccer with us.

The first letter of months, days, and holidays (but not seasons). Mh)ni, (dvsil[ an[ rjiail[ni[ p\Ym axr, ät&ail[ nh).

- Today is June 8, 2011.
- Sushil's birthday is this Thursday.

The first letter of nationalities, religions, races of people, and languages. riOT^y)ti, Fm<, ji(t, BiPini p\Ym axr

- We often eat Italian food.

**The first letter in a person's title.**

- This is Dr. Simon.
- I got it from Mr. Tom.

Geographic areas: cities, states, countries, mountains, oceans, rivers, etc. Sh[r, rijy, d[S, pv<ti[, sm&Wi[, nd)ail[ vg[r[

- My destination is Mumbai, India.

The first letter of each major word in the title of a book, movie, article, etc. p&Atkni (SP<k an[ ai p\kirni IKiNni dr[k S¼di[ni[ p\Ym axr

- Lord Krishna's Shrimad Bhagvad Gita is my favorite novel.

**Count nouns gN) Skiy**

- pen, computer, bottle, spoon, desk, cup, television, chair, shoe, finger, flower, camera, stick, balloon, book, table, comb, etc.

**Non-count nouns gN) n Skiy**

- water, wood, ice, air, oxygen, English, Spanish, traffic, furniture, milk, wine, sugar, rice, meat, **Possessive Nouns** mil)k) dS<k

a).v.

- John's book
- Kerry's car
- Grandma's mirror

b.v.

- The kids' toys

- My parents' house
- The teachers' lounge

**A pronoun takes the place of a noun.** : nimn) j³yia[ vipr) Skiy

**Personal Pronouns** Äy(ktdS< k

- I go to school.
- You are a student.

The word 'it' refers to an object {vAt& aYvi Äy(kt}:

- I drank it.
- It is big.

Memorize the personal pronouns:

		Singular Subject	Singular Object	Singular Reflexive	Plural Subject	Plural Object	Plural Reflexive
First		I	me	myself	we	us	ourselves
Second		you	you	yourself	you	you	yourselves
Third	Male	he	him	himself	they	them	themselves
Third	Female	she	her	herself	they	them	themselves
Third	Neutral	it	it	itself	they	them	themselves

Be (k\yipd a(AtRv dSi<v[ C[. t[n) siY[ subject = (vPy ji[Diy[I hi[vi[ ji[ea[.

- I am a doctor. ah)> "am" be C[ jyir[ "doctor" subject C[.
- He is sleepy.

Negative sentences need 'not' after the verb. nkiriRmk viky

- I am not a doctor.
- He is not sleepy.

The verb comes first in interrogative sentences. p\ÄniY< viky

- Am I a doctor?

"Are not" (is not) can be shortened to "aren't" (isn't).

- He isn't sleepy.
- We aren't there.

Present	Negative	Interrogative
I am	I am not	Am I?
You are	You are not (aren't)	Are you?

He is	He is not (isn't)	Is he?
She is	She is not (isn't)	Is she?
It was	It was not (wasn't)	Was it?
We are	We are not (aren't)	Are we?
You are	You are not (aren't)	Are you?
They were	They were not (weren't)	Were they?

### Action Verbs

Action verbs express action and are the most common verbs. t[ kimg)r) dSi<v[ C[ an[ Äyipk p\miNmi> vpriy C[.

Action verbs need s at the end with third-person, singular subject. a[.v. vikymi> (k\yipdn) piCL s lgivi[

- He eats bread.
- She walks to the station.

Negative sentences need do not, does not, or did not.

- I do not eat bread.
- It does not float on the sea.

Interrogative sentences begin with do, does, or did.

- Do you eat bread?
- Does he eat bread?

Affirmative Sentence	Negative Sentence	Interrogative Sentence
I sing a song.	I do not (don't) sing a song.	Do I sing a song?
You sing a song.	You do not (don't) sing a song.	Do you sing a song?
He (she) sings a song.	He (she) does not (doesn't) sing a song.	Does he (she) sing a song?
We sing a song.	We do not (don't) sing a song.	Do we sing a song?
They sang a song.	They did not (didn't) sing a song.	Did they sing a song?

### Unit 8 Tense kiL

Verb tense tells you when the action happens. There are three main verb tenses: present, past, and future. Each main tense is divided into simple, progressive, perfect, and perfect progressive tenses.

(k\yi kyir[ bn) t[ verb tense Y) jIN) Skiy C[. m&2y kiL #iN p\kirni C[. vt<min kiL, B&tkiL an[ B(vOy kiL, dr[k m&2y kiL fr) sidi[, cil&, p\*N< an[ cil& p\*N< a[m cir Bigmi> vh[>ciy[li hi[y C[. n)c[ dr[k kiL miT[n) viky rcni aip[l) C[.

	Simple	Progressive
Present	finish	am/is/are finishing
Past	finished	was/were finishing
Future	will finish	will be finishing

### Simple Tense sidi[ kiL

kiym) aYvi (nym)t bnt) GTni miT[ sidi[ kiL vpriy. sidi vt<minkilmi> be ni \$p tr)k[ do vpriy C[ j[ni[ simi°y vikyp\yi[gmi> li[p Yiy C[ {#i).p&.a[.v. mi> does vpriy C[ j[ni[ li[p Ye (k\yipd piCL s lgivvimi> aiv[ C[.]

#### run

- I run a marathon this year. (present)
- I ran a marathon last year. (past)
- I will run a marathon next year. (future)

#### eat

- You eat lunch now.
- You ate lunch an hour ago.
- You will eat lunch in one hour.

#### see

- They see a movie once a week.
- They saw a movie yesterday.
- They will see a movie tomorrow.

### Progressive Tense

j[ t[ vKt[ (k\yi cil& C[ t[v& dSi<vvi progressive tense vpriy C[ j[mi> be ni \$p tr)k[ am/is/are/was/were/will be/shall be + (k\p.n& ing viL& \$p vpriy C[.

#### run

- I am running a marathon right now. (present progressive)
- I was running a marathon at this time last year. (past progressive)
- I will be running a marathon next Sunday. (future progressive)

## eat

- You are eating lunch now.
- You were eating lunch when you saw me.
- You will be eating lunch in the meeting.

## Unit 10 Auxiliary Verbs shiyk (k\yipd

An auxiliary verb n& kiy< main (full) verb n[ mdd krvin& C[ t[Y] t[n[ "helping verb." pN kh[ C[.

### Can : Skv& - xmti

Used to express ability (to be able to do something): xmti dSi<v[

- I can make jewelry.
- He can't speak French.
- Can you open this jar?

### May : Skyti

Used to ask for formal permission: ai]pcir)k s>m(t m[Lvvi

- May I come in?
- May I say something now?
- May I ask one question?

### Will : hS[

Used to express desire, preference, choice, or consent: epCi, ps>dg) aYvi s>m(t dSi<vvi

- I will take this duty.
- Will you stop talking like that?

Used to express the future: B(vOy dSi<vvi

- It will rain tomorrow.
- The news will spread soon.

### Shall : hS[

Mainly used in American English to ask questions politely (it has more usages in British English). For the future tense, will is more frequently used in American English than shall.

American English mi> t[ni[ vFir[ upyi[g Yti[ nY) pr>t& mZdZtip\*v<k p\Ån p&Cvimi> vpriy C[.

- Shall we dance?
- Shall I go now?
- Let's drink, shall we?

**Should** : krv& ji[ea[ : frj

Often used in auxiliary functions to express an opinion, suggestion, preference, or idea: mt, s\*cn,ps>dg) aYvi (vcir dSi<vvi

- You should rest at home today.
- I should take a bus this time.
- He should be more thoughtful in the decision-making process.

**Must** : krv& j ji[ea[ - aig\h

Used to express something formally required or necessary: ai]pcir)k r)t[ j\$r) bibt dSi<vvi- aig\hni aY<mi>

- I must complete the project by this week.
- The government must provide health care for everybody.

**Have to /Has to** : krv& j pDS[ - frj piDvimi> aiv[ Ryr[

Used to express something compulsory required or necessary: frJyit r)t[ j\$r) bibt dSi<vvi- aig\hni aY<mi>

- I have to complete the project by this week.
- The government has to take care of health of everybody.

**Unit 11 Prepositions** nimyi(g) aÄyy

**"On", "At", and "In"**

A preposition is a word that links a noun, pronoun, or noun phrase to some other part of the sentence. nim, sv<nim aYvi S¼dsm&h nimn[ a°y viky siY[ ji[Dti S¼dn[ preposition kh[ C[.

Preposition nkk) krvi miT[ ki[e Kis (nym hi[tin Y) , vi>c)n[ aYn[ si>BL)n[ mi[Ti Big[ a¿yis Ye jiy C[.

- to the office ai[f)s pr
- at the desk m[j pr
- on the table T[bl pr
- in an hour a[k klikmi>
- about myself miri (vP[

A preposition is used to show direction, location, or time, or to introduce an object. (dSi, AYin, smy aYvi ki[e vAt&ni p(rcy miT[ preposition vpriy C[.

### On upr

Used to express a surface of something: ki[e vAt&n) spiT) dSi<vvi

- I put an egg on the kitchen table.

Used to specify days and dates: (dvs an[ ti(rK dSi<vvi

- The garbage truck comes on Wednesdays.

Used to indicate a device or machine, such as a phone or computer: vAt& aYvi m(Sn dSi<vvi

- He is on the phone right now.

Used to indicate a part of the body: S(rrni Big dSi<vvi

- The stick hit me on my shoulder.

### At : pr

Used to point out specific time: ci[kks smy dSi<vvi

- I will meet you at 12 p.m.

Used to indicate a place: ki[e AYL dSi<vvi

- There is a party at the club house.

### In : mi>, a>dr

Used for unspecific times during a day, month, season, year: (dvs, m(hni[, ät& aYvi vP<mi> aci[kks smy dSi<vvi

- She always reads newspapers in the morning.

Used to indicate a location or place: AYin aYvi AYL dSi<vvi

- She looked me directly in the eyes.

**Behind : n) piCL, Beside : n) bij&mi, Below : n) n)c[, Above : n) upr, Near : n) nJk, Opposite : n) sim[**

Used to indicate a location or place: AYin aYvi AYL dSi<vvi

- I am currently staying in Maa Kaamal Hostel
- My hostel is behind my school.
- My school is located beside Police station,
- Mahidharpura Police station is near Bhagal.
- My hostel is opposite to temple.
- My room is on first floor above room no 5 and below room no 16 of second floor.

### Of : n&>

Used for belonging to, relating to, or connected with: sb>F dSi<vvi

- The secret of this game is that you can't ever win.



- The highlight of the show is at the end.

Used to indicate reference: s>dB< dSi<vvi

- I got married in the summer of 2000.
- This is a picture of my family.

Used to indicate an amount or number: j, Yi[ aYvi s>²yi dSi<vvi

- I drank three cups of milk.
- A large number of people gathered to protest.

### **To : n[**

Used to indicate the place, person, or thing that someone or something moves toward, or the direction of something: n) trf gt) dSi<vvi

- I am heading to the entrance of the building.
- The package was mailed to Mr. Kim yesterday.

Used to indicate relationship: sb>F dSi<vvi

- This letter is very important to your admission.
- My answer to your question is in this envelop.

Used to indicate a time or a period: smy aYvi smygiLi[ dSi<vvi

- I work nine to six, Monday to Friday.
- It is now 10 to five. (In other words, it is 4:50.)

### **For : miT[**

Used to indicate the use of something: ki[e vAt&ni vpriS dSi<vvi

- This place is for exhibitions and shows.
- I baked a cake for your birthday.

Used to mean because of: kirN dSi<vvi

- I am so happy for you.

Used to indicate time or duration: smy aYvi smygiLi[ dSi<vvi

- He's been famous for many decades.

### **With : siY[**

Used to indicate being together or being involved: siY aYvi ji[DiN dSi<vvi

- I ordered a sandwich with a drink.
- He was with his friend when he saw me.

Used to indicate feeling: ligN) dSi<vvi

- I am emailing you with my sincere apology.
- He came to the front stage with confidence.

Used to indicate agreement or understanding: s>m(t aYvi smj\*t) dSi<vvi

- Are you with me?
- She agrees with me.

**By** : ni oiri

Used to indicate proximity:

- Can I sit by you?

Used to indicate a mean or method: mi<sup>1</sup>ym aYvi p<sup>1</sup>F(t dSi<vvi

- Please send this package to Russia by airmail.
- I came here by subway.

## **Unit 12 Coordinating Conjunctions and Correlative Conjunctions**

A conjunction joins words or groups of words in a sentence. vikymi> b[ aYvi b[ krti vFir[ S<sup>3</sup>/<sub>4</sub>di[n[ ji[Dvin& kiy< conjunction n& C[.

### **1. Coordinating Conjunctions**

Connect words, phrases, or clauses that are independent or equal Avt>#i aYvi srKi S<sup>3</sup>/<sub>4</sub>di[, vikyi[ aYvi vikyi>S n[ ji[D[ C[.

and, but, or, so, for, yet, and not

### **2. Correlative Conjunctions**

Used in pairs ji[D)mi> vpriy C[.

both/and, either/or, neither/nor, not only/but also

### **3. Subordinating Conjunctions**

Used at the beginning of subordinate clauses vikyn) S\$aitmi> m&kiy

although, after, before, because, how, if, once, since, so that, until, unless, when, while, where, whether, etc.

## **Coordinating Conjunctions**

### **1. And—means "in addition to": an[**

- We are going to a zoo and an aquarium on a same day.

### **2. But—connects two different things that are not in agreement: pr>t&**

- I am a night owl, but she is an early bird.

### **3. Or—indicates a choice between two things: aYvi**

- Do you want a red one or a blue one?

### **4. So—illustrates a result of the first thing: t[Y), agiuni vikyni an&s>Finn[ aigL vFirvi**

- This song has been very popular, so I downloaded it.

### **5. For—means "because": n[ kirN[**

- I want to go there again, for it was a wonderful trip.

6. Yet—indicates contrast with something: ti[ pN

- He performed very well, yet he didn't make the final cut.

### **Correlative Conjunctions**

1. Either/or a[k aYvi b)j&

- I am fine with either Monday or Wednesday.
- You can have either apples or pears.

2. Neither/nor ph[l& pN nh) an[ b)j& pN nh)

- He enjoys neither drinking nor gambling.
- Neither you nor I will get off early today.

3. Not only/but also ph[l& ti[ Kr& j pr>t& b)j& pN

- Not only red but also green looks good on you.
- She got the perfect score in not only English but also math.

### **Subordinating Conjunctions**

1. Although—means "in spite of the fact that": Cti pN

- Although it was raining, I ran home.

2. After—indicates "subsequently to the time when": bid

- Please text me after you arrive at the shopping mall.

3. Before—indicates "earlier than the time that": ph[li

- He had written a living will before he died.

4. Because—means "for the reason that": kirN k[

- Because he was smart and worked hard, he was able to make a lot of money.
- They stopped building the house because it was pouring.

5. If—means "in the event that": ji[ hi[y/Yiy ti[

- If it is sunny tomorrow, we can go to the beach.

6. Since—means "from the time when": ci[kks smy Y)

- I've been a singer since I was young.

9. When—means "at that time": t[ smy[

- When I came in the room, everyone looked at me.

### **Unit 13 "Wh" questions**

Wh questions ni[ upyi[g (v(vF AYL, (AY)t), Äy(kt, vAt&, smy an[ kirN jiNvi miT[ Yiy C[.

*WH- word + "do" + SUBJECT + VERB PHRASE*

**Who:** ki[N

Who is known as God of Cricket?

Sachin Tendulkar is known as God of Cricket.

Who is your Father?  
My father is a farmer.

Who killed Mahatma Gandhi?  
Nathuram Godse Killed Mahatma Gandhi.

**Whose:** ki[n&  
Whose book is this ?  
This is Ramesh's book.

Whose performance is best in class?  
Asha's performance is best in class.

**What:** S&>?  
What hit the dog?  
A car hit the dog

What if Radha's favourite subject?  
English is Radha's favourite subject.

What is your name?  
My name is Akash Patil.

What did Nita buy?  
Nita bought umbrella.

**When:** kyir[?  
When was Vijay's appointment?  
Vijay's appointment was at four o'clock.

When did Nitin arrive?  
Nitin arrived afternoon.

When is Diwali?  
Diwali is in the month of October.

**Which:** ky&?  
Which book do you like most?  
I like Shrimad Bhagvad Gita most.

Which window is broken?  
The second window is broken.

Which car met accident?  
GJ 5-2250 met accident.

**Where:** kyɪ>  
Where do you live?  
I live in Surat.

Where did Gandhiji born?  
Gandhiji born in Porbandar.

Where are the keys?  
The keys are on the table.

**Why:** Si miT[?  
Why is Mitul thin?  
Mitul is thin because he is sick.

Why do you worry?  
I am worried for my exams.

Why did Sita kidnapped?  
Sita kidnapped as she crossed Laxman Rekha

**How :** ke r)t[?  
How beautiful is Priya?  
Priya is very beautiful.

How did Rakesh run to school?  
Rakesh ran quickly to school.

How was your day today?  
It was very fine.

#### **Unit 14 Conversation** vɪtɔ)t

##### **Greeting** a(Bvɪdn

- Hi, hello.

- Good morning, good afternoon, good evening.
- How are you?
- How are you doing?
- How do you do?

**Introducing yourself:** pi[tini[ p(rcy aipvi[

**Introducing others:** a<sup>o</sup>yni[ p(rcy aipvi[

## Unit 15 Vocabulary S<sup>3</sup>/<sub>4</sub>dB>Di[L

### **People**

Man, woman, baby, boy, girl, child, old man,

**Gender:** (l>g

a>g\J g\imrmi> pN g&jrit(n) j[mj #iN l)>g aiv[l) hi[y C[.

p&Ãl)>g – p&\$Pvick :	A#i)l)>g- A#i) vick :	ni <sup>o</sup> ytr ji(t: Neuter
Masculine	Feminine	
Man, father, uncle, boy, husband	Woman, mother, aunt, girl, wife	child, cousin, teacher, relation, parents

### **Family members**

Daughter, son, father, mother, brother, husband, wife, children, parents, grand parents, grand father, grand mother, uncle, aunty, neighbour, cousin, nephew, in laws (brother in –law, son in-law)

### **Cardinal Numbers:**

Zero, one, two..., ten, twenty, thirty..., hundred, thousand, lac...,

### **Ordinal Numbers - used for ranking:**

1<sup>st</sup>: first, second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth, eleventh, twelfth, twenty second, twenty third, fiftieth, hundredth, etc...

### **Months days and times of the day**

January, February,..., Monday, Tuesday..., Morning, Early morning, noon, afternoon, evening, night, Midnight

### **Seasons**

Summer, Winter, Monsoon, autumn, spring

**Weather:**

What is the weather like?

It is rainy.

Rainy, cloudy, windy, snowy, sunny, nice, fine, cold, warm, hot etc

**Occupations (jobs)**

Carpenter, cook, farmer, fireman, fisherman, gardener, doctor, engineer, teacher, advocate, lawyer, journalist, nurse, laboratory assistant, surgeon, physician, plumber, mechanic, painter, postman, policeman, secretary, singer, taxi driver, soldier, waiter, pilot, tailor, actor, goldsmith etc..

**Colours**

Black, white, blue, green, yellow, pink, brown, grey, orange, purple, red etc

**Parts of the body**

Arm, back, beard, ear, elbow, eye, eyebrow, eyelashes, face, finger, foot, hair, hand, leg, mouth, neck, nose, shoulder, tongue, tooth, lips, moustache, knee, head etc..

**Rooms and Places in the Home**

Bedroom, Living room ,Bathroom, Hall, Shed, Basement, Porch, Terrace, Study room, Balcony etc.

**Objects of the home**

Television, remote control, power point, plug, arm chair, chair, table, dining table, door, door handle, ward rob, bedside table, bed, carpet, mirror, curtain, drawer, towel, vase etc

**Animals**

Lion, cheetah, tiger, fox, buffalo, cow, goat, dog, cat, monkey, donkey etc

**Birds**

Parrot, sparrow, peacock, dove, cuckoo, hen

**Flowers**

Rose, lily, sunflower, lotus etc

**Electrical - Electronic appliances**

Fridge, television, radio, iron, fan, air conditioner, oven, air cooler etc

**Cities, Villages, States, Countries, Male names, Female names, Surnames**

Complete this list

**Write essay on**

- Human Body
- MY SELF
- MY HOBBY
- MY FATHER
- MY MOTHER
- MY FAMILY
- MY NURSING SCHOOL
- THE HOSPITAL
- THE DOCTOR
- A NURSE
- GOOD HEALTH
- A MORNING WALK
- My city/village,
- My best friend,
- Visit to a blood bank
- Picnic
- My favourite: teacher
- My country: India

**BHARAT SEVAK SAMAJ  
NATIONAL DEVELOPMENT AGENCY, PROMOTED BY GOVERNMENT OF INDIA  
CENTRAL BOARD OF EXAMINATIONS  
BSS NATIONAL VOCATIONAL EDUCATION MISSION  
Paper-I  
COMMUNICATIVE ENGLISH AND COMPUTER FUNDAMENTALS (MS-OFFICE)**

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**TIME : 3 HOURS**

**MARKS: 100**

**INSTRUCTIONS:-**

- Write answer to each question in proportion to the marks allotted
- During the first 15 minutes read the questions carefully

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**I. Fill in the blanks:**

**10 x 1 = 10**

1. The police booked \_\_\_\_\_ F.I.R. (a , an, the )
2. It is \_\_\_\_\_ operation theatre (a, an, the )



3. Put \_\_\_\_\_ sugar in this cup. (have , some, many)
4. \_\_\_\_\_ Taj Mahal is in Agra (a , an, the )
5. I \_\_\_\_\_ not found any inquiries useful. (have to, has, have)
6. \_\_\_\_\_ provides the facility to find and replace specific in worksheet
7. www stands for \_\_\_\_\_
8. \_\_\_\_\_ is used to create charts and graphs
9. \_\_\_\_\_ is the shortcut command of “select all”
10. \_\_\_\_\_ is the shortcut command of copy the selected portion

**II. Write short notes on following**

**10 x 2 = 20**

1. CPU
2. Software
3. Noun
4. Verb
5. Discipline
6. Biodata
7. Phrase
8. Article A and An
9. My computer
10. Face book

**III. Write brief answers for 5 questions**

**5 x 5 = 25**

1. Why English is known as link language?
2. Explain article “the”
3. Write about internet explorer
4. Explain kinds of computers
5. Explain importance of hardware and software
6. What is the importance of page setup?
7. Explain copying cutting and renaming files
8. Prepare your detailed biodata

**IV. Write long answers for 3 questions**

**15x 3 = 45**

1. What is the importance of preparing presentation in power point? Explain some important commands to prepare powerpoint presentation
2. Explain simple and continuous present tense with examples.

3. Explain “WH” questions
4. Write an essay on (nb>F IKi[  
A hospital and medical – paramedical staff hi[(ApTI an[ m[(Dkl, p[rिम[(Dkl ATif
5. Explain what is the importance of internet? e°Trn[Tn& mhRv smjivi[
6. Describe use of computer in now a days world. aiF&n)k jgtmi> ki[À¼y&Trni upyi[g smjivi[  
  
mi> kiml si]n& kÃyiN kr[

## PAPER-2 HOSPITAL PLANNING AND FUNCTIONS

### SYLLABUS:

mT)r)yl kv[Snb[>k bid sim[I C[

### QUESTION BANK:

#### Define:

hospital	planning	management
Hospital administration	Housekeeping department	Accounts department
Medical social service	budgeting	Medical record
PRO	Nursing department	Indoor pt
OPD	Ancillary services	Multispecialty hospital
Market development	Product promotion	Public sector hospitals
Private sector hospitals	MHFW	NCAER
TIFAC	promoter	Feasibility report
Market survey	Long term funds	Short term funds
Environmental impact analysis	Critical zone of hospital	CSSD
causality	Human resources	Formalization
centralization	specification	Complexity
configuration	strategic apex	Governing body
RMO	HOD	Authority
delegation	accountability	Gestation stage
Operational stage	Expiration stage	Retention of earning
Debt capital	Debentures and bonds	Risk capital assistant
Inventory	ALS	Bad bebts
Free patient ratio	Profitability ratio	Pretax profit to sales
Pretax profit to investment		

#### Detailed questions:

1. List main function of hospital
2. Explain measure function of the administrative service and department wise functions.
3. Explain function of the nursing service.
4. Explain function of the medical service.
5. Explain classification of hospital.
6. Explain professional role of hospital administrator. (page no: 1)
7. Write notes on future of health care in India (general)
8. Discuss hospital-beds ratio in terms of 1. Population 2. Ownership & 3. Area basis
9. Explain predictions by TIFAC in healthcare development (page no:12)
10. Importance of market survey in planning for new hospital(page no:22)
11. Which are the points (over) in feasibility reports for planning new hospital(page no:21)
12. Explain technical planning of new hospital(page no:24)
13. Explain basic minimum requirements for a hospital of 30 beds in terms:
  - i. Facilities(page no:28)
  - ii. OPD (page no:36)
  - iii. IPD (page no:39)
  - iv. staff requirement (page no:44)
14. Which are unique features of hospitals & health care organization(page no:49)
15. Write brief notes on structural dimensions of an organization(page no:51)
16. Explain various forms of organizational designs(page no:56)
17. Explain configuration of 1000 bedded gov hospital(page no:61)
18. Explain consideration of design ship organization for long term growth & stability(page no:70)
19. Explain the concept of “end is profit”(page no:77)
20. Which are the features to be considered while investing for hospital(page no:78)
21. Explain financial planning for projected hospital(page no:83)
22. Dr. Berman’s observations (page no:10)

### **FUNCTIONS OF THE HOSPITAL**

Hospital administrative functions can be classified into three broad categories:

1. Medical - which involves the treatment and management of patients through the staff of physicians
2. Patient Support - which relates directly to patient care and includes nursing, dietary diagnostic, therapy, pharmacy and laboratory services
3. Administrative - which concerns the execution of policies and directions of the hospital governing discharge of support services in the area of finance, personnel, materials and property, housekeeping, laundry, security, transport, engineering and board and the maintenance.

## **MAJOR FUNCTIONS OF THE ADMINISTRATIVE SERVICE**

1. Provide service related to accounting, billing, budget, cashiering, housekeeping, laundry, personnel, property and supply, security, transport, engineering, and maintenance; and
2. Render support services to hospital care providers, clients, other government, and private agencies, and professional groups.

## **RESPONSIBILITIES**

1. To plan, direct and coordinate financial operations of the hospital;
2. To prepare work and financial plan and provide fund estimates for programs and projects;
3. To manage the receipt and disbursement of cash/ collections;
4. To administer personnel development programs, policies and standards;
5. To give advice on matters affecting policies, enforcement and administration of laws, rules and regulations;
6. To procure, store, manage and issue the inventory and disposal of unserviceable hospital equipment and materials; and
7. To provide general services such as repairs and maintenance, housekeeping, laundry, transport and security.

## **FUNCTIONS OF DIFFERENT DEPARTMENTS UNDER THE ADMINISTRATIVE SERVICE**

**ADMINISTRATIVE OFFICE** – Directs and supervises the activities and functions of administrative units to effectively deliver quality support services.

1. **PERSONNEL SECTION** - Development and administration of a comprehensive manpower development program which includes recruitment and selection, promotion, training, employee welfare and benefits, manpower planning and research.
2. **PROPERTY AND SUPPLY SECTION** - Procurement, storage, inventory, distribution and disposition of hospital supplies, materials, and equipment.
3. **HOUSEKEEPING SECTION** - Develop and maintain clean, safe and sanitary environment for patients and hospital personnel.

**4. LINEN AND LAUNDRY SECTION** - Ensure adequate supply of clean linens for patients and hospital units.

**5. ENGINEERING AND MAINTENANCE SECTION** - Installation, operation and maintenance of electrical, mechanical and communication equipment and allied facilities including buildings and vehicles.

**6. MOTOR POOL SECTION (TRANSPORT)** - Convey transport patients, hospital officials and personnel to their destination.

**7. SECURITY FORCE** - Ensure safety of hospital patients, facilities and personnel, maintain peace and order, and enforce hospital rules and regulations.

**8. MEDICAL SOCIAL SERVICE** -The Medical Social Service function is to see to it that patients attain emotional equilibrium as they are assisted with other needs which interfere in hospitalization and treatment.

**9. MEDICAL RECORDS** - Process, maintain, analyze and safe keep all medical records created in this hospital; prepares hospital statistical reports; and formulate and develop effective policies, systems and procedures for the efficient operations of the section.

**10. PHARMACY SECTION** - Ensures continuous supply of drugs and medicines to patients by maintaining an adequate quantity in stocks of those approved by the Pharmacy Therapeutic Committee. Dispenses, compound drugs for in and out patients. Controls the purchasing, requisitioning, safekeeping and issuing of drugs. Maintains records and files of dangerous drugs and other pharmaceuticals as required by law. Serves as the Drug Informant Center

**11. DIETARY SERVICE** – Maintain or enhances the health of the patients and personnel by providing them with high quality and nutritious food through an efficient Dietary Service; Provides or serves safe, nutritious and attractive food through careful planning, wise procurement and proper preparation of balanced and satisfying meals within budgetary limits; Implements diet prescription in coordination with physician and nurse; Provides nutrition consultation and education services to patients as well as in-service training to both dietary personnel and other related fields; Promotes and maintains cooperation with other department in the hospital towards total patient care.

**12. ACCOUNTING SECTION** - Systematic recording of all financial transactions, preparation of financial statements and relevant reports, and maintenance and safekeeping of the hospital's Book of Accounts.

**13. BUDGET SERVICE** - Prepares the Work and Financial Plan and provision of fund estimates for hospital programs and projects.

**14. CASHIER SERVICE** - Receipt, deposit, custody and disbursement of cash/collection of the hospital (Cash Management)

**15. MEDICARE AND BILLING SECTION** - Admits, classifies Pay and Medicare Patients, orients patient with regard to privileges, obligations, responsibilities during the course of confinement. Prepares statement of account on service and bills rendered to patient. File records, bills and statement of account.

## **16. INFORMATION AND ADMITTING SECTION**

### **FUNCTIONS OF THE NURSING SERVICE**

1. Plans, organizes, and directs the overall nursing service activities in all clinical and special areas in the health fields of maternal and child nursing, medical and surgical nursing.
2. Defines the philosophy, goals, objectives and policies of the hospital, and interprets them to the nursing staff, patients, and the community.
3. Develops the basic, functional and position organization chart that will allow for an open communication horizontally and vertically to ensure smooth operations of the service.
4. Develop program methods of the major functions of the service.
5. Formulates qualification standards, job specifications and job descriptions of various categories of nursing personnel in line with the hospital policies and Civil Service Commission rules and regulations and the Nursing Law.
6. Delegates assignments with commensurate authority to ward supervisors and follows this up.
7. Determines and makes recommendations concerning hospital wards' facilities, equipment and surgical supplies affecting nursing care, and plans for allocation and utilization of space and equipment to ensure safe environment for patients and working personnel.
8. Formulates and implements nursing care policies and standards operating procedures as guides for the nursing personnel and initiates periodic revision of some as need arises.
9. Determines the staffing needs based on patients' conditions ranging from the minimally-ill, moderately-ill or critically-ill to ensure smooth operations of the service.
10. Makes general nursing rounds weekly and as the need arises and look into patients nursing needs and ward conditions to ensure safe environment and safe care.

11. Cooperates in providing referral system between the hospital and community health centers and other agencies. Assigns and re-assigns nursing personnel periodically to meet the needs of nursing service. Provides opportunities for growth and development of personnel-recognizes personnel and professional abilities, maintains continuing staff development program. Develops and carries guidance and counseling program.
12. Cooperates with individual/group in other departments or services in carrying forward the work of the hospital as a whole.
13. Supervises and coordinates activities of nursing personnel engaged in specific nursing services such as Obstetrics, Pediatrics, Surgical or Medical, or from two or more clinical nursing divisions.
14. Supervises Senior Nurse in carrying out their responsibilities in the management of nursing care. Evaluates performance of Senior Nurse and nursing care as a whole. Inspects clinical nursing division to verify that patient needs are met.
15. Plans and organizes orientation for clinical nursing division staff members and participates in guidance and education programs. Interviews pre-screened applicants and makes recommendations for employing or for terminating employees.
16. Visit clinical nursing divisions to oversee nursing care and to ascertain condition of patients. Gives advice for treatments medications, and narcotics, in accordance with medical staff policies in absence of physician. Arranges for emergency operations and relocations of personnel during emergencies. Admits or delegates admissions of new patients.
17. Assigns duties to professional and ancillary nursing personnel based on patients' needs, available staff, and service needs. Supervises and evaluates work performance in terms of patient care, staff relations and efficiency of service. Provides for nursing care and cooperates with other members of medical care team in coordinating patients' total needs. Identifies and studies nursing service problems and assists in their solutions. Observes nursing care and visits patients to insure that nursing care is carried out as directed and treatment is administered in accordance with physician's instructions and to ascertain needs for additional or modified services. Maintains safe environment for patients. Operates or supervises operation of specialized equipment assigned to unit and provides assistance and guidance to nursing team as required.
18. Accompanies physician on rounds to answer questions, receives instructions and notes patients' care requirements. Reports to replacement on next tour on condition of patients or of any untoward or unusual actions taken. May render professional nursing care and instruct patients and members of their families in techniques and methods of home care after discharge.
19. Collects clinical data thru the process of interviewing observations using all senses and clinical instruments and utilization of diagnostic examination reports.

20. Implement nursing actions and legal orders of the physician.
21. Evaluates results of interventions and revise plan to cope with changing conditions of the patient.
22. Endorse patients and give attention to patients' comfort and safety.
23. Assists the midwife in maintaining cleanliness and orderliness of the unit.
24. Delivers clean medical supplies to patient care units and collect used supplies, instrument sets, rubber goods, etc.
25. Reviews patient's pre-operative preparation including spiritual.
26. Assists in emergency operations when other professional staff are not available.
27. Makes general assessment of patients in the recovery room and confers with head nurse nursing management of each patient.

### **FUNCTIONS OF THE MEDICAL SERVICE**

#### **TRAINING SERVICE:**

1. Provides qualified individuals with practical and scientific knowledge in the diagnosis and treatment of diseases.
2. Installs a sense of responsibility, discipline and compassion in the management of surgical patients.
3. Develops adequate administrative ability and leadership qualities.
4. Trains qualified individuals to practice various clinical disciplines in areas where their expertise are needed within the context of national dispersal program.
5. Develops and implements a training strict and fair selection process the admission of resident physicians.
6. Maintains a good atmosphere for teaching and learning in the different clinical departments.

### **ANCILLARY SERVICE**

#### **Laboratory:**



1. Prepares the medical graduate in the specialized practice of Clinical and Anatomic Pathology.
2. Prepares future teachers of Clinical and Anatomic Pathology.
3. Gives the physician sufficient skill and experience to practice the science and art of Clinical Pathology Independently and proficiently.
4. Supports the spirit of keeping abreast with the current trends of concepts and practice by reading, experience and research.
5. Imparts to the trainee the role of Clinical Pathology in relation to other fields of medicine.
6. Inculcates the ethic practice of Clinical Pathology.

### **Radiology**

Develops knowledge, attitudes, and skills of professional radiologist at par with the standards of the Department of Health and Philippine College of Radiology and responsive to the country's needs

### **OUT-PATIENT SERVICE**

1. Provides quality medical care services to as many out- patient as possible.
2. Provides the widest coverage of quality health care for the people not for curative only but also promotive and preventive health care to minimize the development of diseases.
3. Ensures that health services are always available to the people.
4. Provides health services that are within the financial capability of the people.
5. Provides health services based on what the people really needs and what the hospital can provide.
6. Provides facilities for training of health workers and initiate medical research for the improvement of the quality of health care.

### **EMERGENCY SERVICE**

1. Provides a plan for the reception area and treatment of patients who need emergency services.
2. Provides a well organized with adequate facilities, adequate enough to assure prompt diagnosis and the institution of appropriate emergency attendance for care and management.

3. Checks the medicine cabinet in the Emergency Room if the necessary emergency medicines are available for the next 24 hrs.

### **IN-PATIENT SERVICE**

1. Provides, develops and adopts a patient care system of its own befitting appropriately its particular needs.

### **CASE STUDY: BUSINESS REPORT OF HOSPITAL & HEALTH CARE INDUSTRY.**

#### **LILAVATI HOSPITAL**

1. INTRODUCTION
2. HISTORY
3. BACKGROUND
4. 7 P'S OF MARKETING MIX
5. CONCLUSION.

#### **LILAVATI HOSPITAL**

- **NAME:** LILAVATI HOSPITAL
- **ADDRESS:** Lilavati Hospital & Research Center.

791 Bandra Reclamation, Bandra (W).

TOWN: Mumbai

STATE: Maharashtra

COUNTRY: India

POST: 400 050

PHONE: 2642 1111, 2655 2222

#### **INTRODUCTION OF LILAVATI HOSPITAL**

- In 1978 the Lilavati Kirtilal Mehta medical trust opened the Lilavati Hospital Research Center in Bombay.
- Their goal is to provide quality and affordable health care to all need of medical prevention, diagnosis and treatment.
- The hospital mantra is "More than Health care, Human Care".
- Lilavati Hospital prides itself on providing humane and reasonably priced service and care.
- Hospital located in the heart of Mumbai, which is very close to the domestic and international airport.
- Lilavati Hospital is a multi-specialty hospital with a variety of departments such as Cardiology, Dermatology, Psychiatry and Pediatrics.
- Being a center of medical excellence where technology meets international norms and

standard we have got what it takes to be a Pioneering Quality Health Care institute that is also one of the most sought after and “Patient Friendly” hospitals.

### **HISTORY OF LILAVATI HOSPITAL.**

- Formed in 1978, the Lilavati Kirtilal Mehta Medical Trust has engaged in charitable endeavors across India.
- The trust now broadens its sphere of activity by addressing one of the most fundamental rights of every human being- the right to live in a good health.
- The combination of research and education with out patient and hospital care distinguishes the lilavati hospital as a concerned non profit health care organization.
- The hospital maintain team of doctors, well trained in multi-disciplinary areas of medicine and surgery.
- The hospital will continuously strive to improve the lines of the present and future generations through application of medical technology.
- The Lilavati Kirtilal Mehta Medical Trust is helping to spark a new confidence in India’s ability to deliver a humane and affordable health care system.

### **BACKGROUND OF LILAVATI HOSPITAL.**

- Their goal is to provide quality and affordable health care to all need of medical prevention, diagnosis and treatment.
- The hospital mantra is “More than Health care, Human Care”.
- Hospital located in the heart of Mumbai, which is very close to the domestic and international airport.
- The combination of research and education with out patient and hospital care distinguishes the lilavati hospital as a concerned non profit health care organization.

### **CONSTITUENTS**

- Patient space
- Nursing space
- Corridors

### **Types of wards**

- General wards
- Speciality wards

### **Factors to be kept in mind while designing a ward**

- Movement space
- Number of beds in a room
- Bed spacing

- Position of nursing station
- Category of the ward
- Ancillary rooms
- Ratio of toilet accommodation

### **PLANNING AND DESIGNING-PHYSICAL FACILITIES**

- AREA
- LOCATION
- SIZE
- SHAPE
- ANCILLARY ACCOMODATION
- WATER AMD ELECTRICITY SUPPLIES
- COMMUNICATION
- AIR-CONDITIONING

#### **Physical facilities**

- Area requirement per bed= 70-90 sq. feet
- Area separated from noise and disturbances
- Approachable from support services like- CSSD, Blood Bank, imaging and laboratory
- Movement space
- Wards can be T-shaped, L-shaped, Rectangular shaped
- Can have single/double corridor
- Nightingale pattern, Riggs pattern

#### **Riggs pattern**

Modern trend is to have cubicles of 1, 2, 3, 4, 5 beds in each cubicle

#### **Advantages**

1. Patient beds not visible to outside visitors except for visiting hours
2. Gives a more clean and tidy look
3. It provides as a barrier against psychological shock for other patients during emergency situations.
4. More privacy

#### **Disadvantages**

1. Communication between nurses and patient becomes more difficult
2. Patients deprived of direct observation from nurses
3. Wards become longer, consequently nurses have to run more
4. More nurses are required
5. Costly to build and maintain

#### **Staffing pattern**

- Norms for nursing staffs

NS Nursing staff	1 per hospital
DNS Deputy nursing staff	1 for 400beds
ANS Assistant nursing staff	1 for 25-30 beds
Teaching hospital	1 for every 3 beds
Non-teaching hospital	1 for every 3 beds
ICU/ITU	1 for each bed

FOR EVERY 250 BEDS THERE SHOULD BE ONE INFECTION CONTROL NURSE.

Provisions for ward coordinator for controlling ward functions in each ward

### **Norms for nursing aids**

30-50 beds	15-25 gr D staffs(1 employee for 02 beds)
100 beds	50 gr D staffs(1 employee for 02 beds)

### **Correlation with bed space and hospital engineering grid**

- Door 1.2m or 3/4th grids
- Veranda 1.5 grids
- Windows 1.2-1.6m
- Corridors 2.4m
- Distance between bed centers 7 ft/8 ft
- Clearance between wall and side of bed in respect of bed
- Closer to wall: 2 ft
- Isle between two row of beds: 5 ft
- Area per bed within the ward therefore need not be more than 70 sq ft

**\* 1 grid 1.6x1.6=2.56 sq m**

### **Hospital Types Classified.**

For the purposes of administration, all hospitals shall be classified by the Bureau of Health in accordance with the following descriptive titles. Each title shall be selected and applied with due regard to the nature and purpose of the hospital and the definition applicable thereto. No hospital shall operate in any capacity beyond that indicated by the definition of its title:

**A. General hospital.** To operate as a general hospital, an institution must provide complete medical and surgical care to the sick and injured, and maternity care, and have:

1. An organized staff of qualified professional, technical and administrative personnel, with a chief or chairman of the attending staff, and appropriate hospital department heads;
2. An approved laboratory with standardized equipment necessary for the performance of biochemical, bacteriological, serological and parasitological tests, and the services of a consulting clinical pathologist. Necessary equipment should be available for the preparation of pathological specimens. Housing and lighting facilities for the laboratory must be adequate for the accurate performance of all the required tests;
3. X-ray facilities with the services of a consulting radiologist. These facilities shall include, as a minimum, a complete radiographic unit, consisting of a transformer, tube stand, table with a stereoscopic attachment, fluoroscopic equipment adjustable to horizontal and vertical positions, a viewing box, a stereoscope, and a dark room equipped for the development of films;
4. A separate surgical unit, with the following as minimum facilities: An operating room, a sterilizing room, a work room, a scrub room and a dressing room;
5. A separate isolation unit, consisting of sufficient number of rooms, according to the size and needs of the hospital, located either in a separate building or in a location that may be isolated as a separate Section, with separate lavatory and toilet facilities;
6. Separate maternity facilities, preferably a separate maternity unit with a separate entrance, including as minimum requirements wards or rooms for patients, labor rooms and delivery room, all exclusively designated and used for maternity patients, and a nursery;
7. **Mental unit.** In the case of all general hospitals, hereafter constructed, provision shall be made for a mental unit, consisting of an adequate number of soundproofed rooms with adequate safeguards for the patients, and in case of all other general hospitals such facilities should be provided at their earliest convenience;
8. **Dental unit.** In the case of general hospitals, with 100 or more beds, hereafter constructed, it is recommended that consideration be given to the inclusion of a separate dental unit, in charge of a duly licensed dental surgeon, with standardized equipment for the diagnosis and treatment of diseases of the teeth, performance of orthodontia, and rehabilitation of the defective teeth and oral surgery, including all necessary anesthetic and sterilization equipment.

**B. Intermediate general hospital.** To operate as an intermediate general hospital, an institution must have not less than 16 nor more than 75 beds for patients, provide medical and surgical care to the sick and injured, and maternity care, and have:

1. A staff of qualified personnel;
2. The services of an approved laboratory, such as required for a general hospital, readily available, in addition to which hospitals in this classification with 30 or more beds shall have suitable space, laboratory equipment and supplies for the performance of urinalyses, blood counts, blood cross-matching and serological tests for syphilis, as minimum facilities within the institution; and those having less than 30 beds shall have, as an absolute minimum, laboratory facilities for blood counts and urinalyses within the institution.
3. X-ray facilities, such as required for a general hospital, conveniently available with portable x-ray facilities as minimum equipment within the institution.
4. An operating room with standard equipment, in addition to which there shall be adequate provision for sterilization of equipment and supplies.
5. Isolation facilities, with adequate and proper procedures for the care and control of infectious, contagious and communicable disease, and for the prevention of cross infections.
6. Maternity facilities, consisting of wards or rooms a delivery room, all exclusively designated and used for maternity patients, and a nursery.

**C. Contagious disease hospital.** To operate as a contagious disease hospital, an institution must be maintained in a separate building, be devoted exclusively to the care of persons who have, or are suspected of having, infectious, contagious, or communicable disease, and meet the requirements for an intermediate general hospital, except for the isolation facilities required of such hospitals.

**D. Convalescent hospital.** To operate as a convalescent hospital, an institution must have at least 20 beds for patients, provide medical and nursing care for persons afflicted with a chronic illness, or a chronic disability resulting from injury, or are convalescing from illness or injury, and exclude the acutely ill, the acutely injured, and persons who are surgical or maternity patients. Persons with tuberculosis shall not be admitted unless they are in a noninfectious stage, and are admitted primarily for the care of another chronic disease, or will be cared for in an isolation unit under strict isolation procedures, conforming to Section B of Regulations VII in the booklet "Rules and Regulations of the State Board of Health for the Control of Communicable Diseases." The institution shall have:

1. A staff of qualified personnel, including a dietitian on a consultative basis;
2. The services of an approved laboratory readily available;



3. The X-ray facilities conveniently available, with portable X-ray facilities within the institution;
4. Isolation facilities, with adequate and proper procedures, for the care and control of infectious, contagious and communicable diseases, and for the prevention of cross infections, sufficient to care for such illnesses as may occur in persons being cared for within the institution until such persons can be transferred to an institution equipped to care for acute illness. If persons suffering from infectious, contagious or communicable disease are to be admitted, a separate isolation unit as required for a general hospital must be provided;
5. **Mental unit.** If mentally disturbed patients are to be admitted to the institution, provision must be made for a mental unit as required for a general hospital. A convalescent hospital shall have at least one room equipped as a psychiatric unit in which patients who may become mentally disturbed may be cared for until such time as they may be transferred to a mental disease hospital;
6. Physical therapy facilities. Reasonable physical therapy facilities and equipment adequate to meet the needs of those patients requiring physical therapy are to be provided, including as a minimum wheel chairs, walkers, crutches, walking bars, suspended bar over beds and heat therapy equipment and are to be under the supervision of a physician and qualified physical therapist on a consultative basis;
7. The building shall have adequate space to use the physical therapy equipment and room or rooms in which the physical therapist may carry out procedures and direct the recreational activities of patients;
8. Adequate provision shall be made for immediate removal of acutely ill patients to a general hospital or intermediate general hospital.

**E. Maternity hospital.** To operate as a maternity hospital, an institution must be in a separate building, provide service for maternity patients exclusively, have on the staff professional personnel especially qualified in obstetrics, meet the requirements for a general hospital except that when the hospital is operated in connection with a general hospital the requirements for a laboratory, X-ray, surgical and isolation facilities may be met through appropriate technique by the use of those in the general hospital, and in addition all special regulations governing maternity hospitals and maternity units in general hospitals must be carefully observed.

**F. Medical hospital.** To operate as a medical hospital, an institution must provide special facilities for diagnosis and drug therapy; meet all minimum requirements for an intermediate general hospital except those pertaining to the operating room, delivery room and nursery; have on its staff professional personnel especially qualified in internal medicine, including one or more physicians qualified by training and experience for certification by the American Board of Internal Medicine; have an approved laboratory under the direct supervision of a physician qualified by training and experience for certification by the American Board of Pathology; have an X-ray

department directly under the supervision of a physician qualified by training and experience for certification by the American Board of Radiology; exclude surgical and maternity patients; and have an enforceable agreement in writing with a licensed general hospital or intermediate general hospital permitting the prompt transfer to and admission by the latter of any patients requiring surgical or maternity service.

**G. Mental hospital.** To operate as a mental hospital, an institution must be devoted exclusively to the care of mental patients, have on the staff professional personnel especially qualified in the diagnosis and treatment of mental illness, have adequate facilities for the protection of the patients and staff against physical injury by patients becoming violent, and meet the requirements for an intermediate general hospital, except that maternity facilities need not be provided as part of the mental hospital service if provision is made for adequate prenatal care at the institution and for the delivery and postpartum care of the mother and infant at some readily available licensed hospital that does provide the service.

**H. Orthopedic hospital.** To operate as an orthopedic hospital an institution must be devoted exclusively to the care of orthopedic patients, have on the staff professional personnel especially qualified in the diagnosis and treatment of orthopedic conditions, and meet the requirements for a general hospital, except that maternity facilities are not required and isolation facilities may be substituted for separate isolation unit.

**I. Pediatric hospital.** To operate as a pediatric hospital, an institution must be devoted exclusively to the diagnosis and treatment of pediatric patients, have on the staff professional personnel especially qualified in the diagnosis and treatment of diseases of children, and meet the requirements for a general hospital, except that maternity facilities are not required.

**J. Tuberculosis hospital.** To operate as a tuberculosis hospital, an institution must be devoted exclusively to the care of tuberculosis patients, have on the staff professional personnel especially qualified in the diagnosis and treatment of tuberculosis, and meet the requirements for a general hospital, except that maternity facilities need not be provided as a part of the tuberculosis hospital service if provision is made for adequate prenatal care at the institution, and for the delivery and postpartum care of the mother and infant at some readily available licensed hospital that does provide the service.

**K. Chiropractic facility.** To operate as a chiropractic facility, an institution must be devoted exclusively to treatment by adjustment with the hand or hands of the bony framework of the human body and the employment and practice of physiotherapy, electrotherapy, and

hydrotherapy; exclude all persons requiring surgical, maternity, or drug therapy; comply with the requirements for an intermediate general hospital except those for a laboratory, an operating room, X-ray and maternity facilities; except that a registered nurse is not required if the nursing personnel is under the direct supervision of one or more licensed chiropractic physicians constantly on call and available in an emergency.

**L. Community health facility.** To operate as a community health facility, an institution must have not more than 15 beds for patients, provide medical and surgical care to the sick and injured, and maternity care, and meet the requirements for an intermediate general hospital, including minimum laboratory equipment for urinalyses and blood counts.

**M. Facility for the treatment of alcoholism.** To operate as a facility for the treatment of alcoholism, an institution must be maintained in a separate building, provide facilities and services for the treatment of patients suffering from acute alcoholism exclusively, and meet the requirements for a mental hospital, except that surgery and maternity facilities are not required.

**N. College infirmary.** To operate as a college infirmary a facility must be part of a college or university, provide care primarily for college students, have registered nurses and other qualified personnel, and the facility shall be directed by a physician licensed by the State Board of Medical Examiners, provide nursing care, diagnosis and treatment of illness and injury, post-operative care, perform minor surgery; and meet the regulation governing communicable diseases, and those pertaining to the general sanitary regulations of the State Board of Health.

### **PAPER-3 HOSPITAL SERVICES**

SYLLABUS: given after question bank

#### **Question bank**

#### **Define**

INTANGIBILITY	SEPARABILITY	VARIABILITY
HEALTH SERVICE QUALIT	TANGIBLES	RELIABILITY
EMPATHY:	ASSURANCE	RESPONSIVENESS
RATER	PROMOTION	MORTURY
MEDICAL INSORNCE	PHC	HRM
EXPOLOYEE TURN OVER INDEX(PAGE NO:104)	MBO(PAGE NO:111)	FACTORIES AT 1948

HRIS	A-B-C CLASSIFICATION	INSPECTION REPORT
BIOMEDICAL DEPARTMENT	M BASIC SYSTEM	TPA(PAGE NO:174)
CEM(PAGE NO.185)	MEDICAL RECORD	QUALITY ASSURENCE
MEDICAL RECORD COMMITTEE		

### **Descriptive questions**

1. Explain classification of hospital
2. Explain importance of marketing in hospital services
3. Explain 7pls of marketing mix
4. Explain risk in health care industry and their ways over the drawbacks
5. Write notes on market segmentation for hospital
6. Explain regarding various hospital services
  1. Medical services
  2. Supportive services
  3. Auxiliary services
7. Objectives at HRM(page no:100)
8. Write notes on HRM(page no:100)
9. Different usages of development of human resources (page no:109)
10. Importance of safety and welfare in HRM(page no:119)
11. Write notes on HRM(page no:121)
12. Explain A,B,C classification & analysis(page no:127)
13. What is HML classification?
14. Make list of various material management's classification of systems.
15. Make list of various store in hospital.
16. Make list of various files-reports-register in store.
17. Classification of drug with ABC method.
18. Classification of drugs with MBASIC system
19. explain customer experience management model
20. Explain role and responsibility of medical record committee
21. Legal importance aspects of medical record.
22. Explain characteristics of health care industry

### **INTRODUCTION**

1. Hospital is an integral part of a social and medical organisation.

2. The health care industry has various streams like Allopathy, Homeopathy, Ayurveda, Nature care etc.
3. A Hospital where large number of professionally & technically skilled people apply their skill and knowledge with the help of advanced equipment and appliances.
4. The basic function of a hospital is to give proper treatment to the patients.
5. Medical services are primarily provided by the central & state government. In the Indian environment majority of the government hospitals are found to be reduced.

### **CHARACTERISTICS OF HEALTH CARE INDUSTRY.**

A service industry like hospital has to offer the best of services to a patient. A hospital has the following service characteristics.

1. **INTANGIBILITY**: Hospital & Health care services are highly intangible.
2. **SEPARABILITY**: Health services are produced & consumed at the same time & cannot be separated from their providers.
3. **VARIABILITY**: Variability tries to reduce the variability factor in order to standardise the quality of services.
4. **HEALTH SERVICE QUALITY**: Word of mouth is the best form of publicity and it also play an important role in service quality.

### **The following are the Principles dimensions. (RATER).**

- **1) TANGIBLES**: The physical facilities, equipment, personnel & communication facilities.
- **2) RELIABILITY**: It is the ability to perform the promised service dependently and accurately.
- **3) RESPONSIVENESS**: The willingness to help patients and to provide prompt service.
- **4) ASSURANCE**: The knowledge & courtesy of the employees and their abilities to convey trust & confidence.
- **5) EMPATHY**: The provision of caring individualized attention to patient.

### **HOSPITAL SERVICES**

- In an increasingly competitive health care market place, marketing has become important for hospitals.
- Most of the hospitals in India are of a world class stature.
- Today most of the hospitals are equipped with the most advanced diagnostic and treatment facilities.
- Some of the hospitals have even obtained ISO 9002 certification. Ex. LILAVATI HOSPITAL, APOLLO HOSPITAL, MALLYA HOSPITAL.

### **IMPORTANCE OF MARKETING IN HOSPITAL SERVICES.**

- The management of a non profit making institution or a social service institution is difficult.
- If we want qualitative and quantitative improvement in the hospital services the principles

of marketing management be applied.

- 1) Creation of additional services.
- 2) Maintaining economy in cost.
- 3) Maintaining financial viability.
- 4) Making refined treatment available.
- 5) Motivating potential users.

## **7P'S OF MARKETING MIX**

- Hospital is a non profit making organisation. Marketing management helps an organisation in raising its potentiality and assist the users by making goods or services.
- 1) PRODUCT
- 2) PRICE
- 3) PROMOTION
- 4) PLACE
- 5) PEOPLE
- 6) PROCESS
- 7) PHYSICAL EVIDENCE

### **1) PRODUCT**

The main product of the hospital is the medical services. The services in a hospital differ from one hospital to another.

There are three categories of services in a hospital.

#### **A) LINE SERVICES:**

**1) Emergency Services:** This department is specially meant for patients having sickness of grave nature requiring immediate treatment.

**2) Out Patient Services (OPD):** In the OPD all patients are examined irrespective of the degree of illness.

**3) In Patient Services:** After the patient is examined in the OPD they are advised admission to the inpatient ward if necessary.

**4) Intensive Care Unit (ICU):** The ICU is considered to be the heart of the hospital. It is meant for those patients who require special treatment.

**5) Operation Theatres:** Sophisticated equipments and appliances should be made available in an operation theatres of a hospital.

#### **B) SUPPORTIVE SERVICES:**

Sterilization, supply & maintenance of instruments, materials, garments are some of the supportive services that enriches the hospital services such as: Hospital medication, Official laundry, Laboratories, Clinical pathology, Blood bank, Nursing services.

#### **C) AUXILLARY SERVICES:**

The auxillary services consist of:

- 1) Registration & Indoor case records

- 2) Store management
- 3) Transportation management
- 4) Mortuary management
- 5) Security arrangement.

## **2) PRICE**

- Price is an important element in the marketing mix. Prices charged by a hospital depends on the treatment and facilities given to the patient.
- The basic objective of hospital is not profit maximization but to provide quality service at a reasonable price.
- The pricing strategy adopted by a hospital does not depend on the price offered by competitors but the nature of facilities & services offered.
- The Government hospitals adopt cost free pricing strategy.
- Where as trust & private hospitals adopt subsidized or cost based pricing strategy.

## **3) PROMOTION**

- In the hospital marketing the promotion strategy also need a careful approach. The promotion in the hospital services can be personal & impersonal promotion.
- The promotion can be through advertising, publicity, and sales promotion measures.
- In hospital services impersonal promotion is important as advertising and publicity. There is also a growing need for effective public relations.
- The major difference between marketing of hospital services and other service is that the other services are required to expand the market by transforming the potential users into actual users.

## **4) PLACE**

- The selection of place is very important in order to avoid the inconvenience to the users in reaching the hospital in time.
- Adequate transport & communication facilities should be available where the hospitals are located.
- While selecting a suitable site for the location of a hospital, the management should see that a infrastructural facilities are available.

## **5) PEOPLE**

- People are also an important element in the marketing mix. They play an important role in the provision of services.
- A satisfied customer is a source of influencing other customers.
- It is necessary that the staff in the hospital be trained to provide quality patient care with in

a touch. This can be done by-

- Use of latest technology.
- Motivating the employees to be efficient, dedicated and loyal.
- Providing continuous on job training to the employees.

## **6) PROCESS**

Process has been the subject to study in the manufacturing but of late it has been given much attention in the service sector.

In a hospital the process is divided into three phases. They are:

### **1) The joining phase: which includes-**

Patients Arrival

Registration & case paper preparation.

### **2) The Intensive consumption phase: which includes-**

Patients diagnosis

Treatment

### **3) The detachment phase: which includes-**

Discharge of the patient

Payment of the bill at the billing counter.

## **7) PHYSICAL EVIDENCE**

- The environment in which the service is delivered with physical or tangible commodities and where the firm and the customer interact is called the physical evidence.
- Physical evidence plays a very important role in the hospital services.
- In a hospital there is a dress code for the staff which indicates professionalism and to maintain discipline.
- It is necessary for hospital to be well organized and special care should be taken to maintain hygiene, cleanliness and whole hospital should be well it.

## **THE STATE GOVERNMENT AND HEALTH PROGRAMMES**

- Maharashtra state has always remained on the forefront in successful implementation of various health programmes.
- National Health Programmes like malaria, Eradication, Leprosy control, Tuberculosis control etc are implemented successfully so as to control and eradicate the diseases.
- The progress has been made in creation of network health infrastructures for preventive, promotive, curative and rehabilitative services that are rendered even to the remote corner of the state.

## **HOSPITAL MARKETING MANAGEMENT IN THE INDIAN ENVIRONMENT**

- The development of the health care facilities are influenced not only by the opening of



hospitals or health care center but more by their effective management.

- The Indian market offers huge opportunity for the service providers to make an impact on the quality of the Indian health care services.
- In the hospital services the public relation department play an important role in raising the creativity and acceptability of the hospital services.

### **OPPORTUNITIES OF HEALTH CARE INDUSTRY IN INDIA**

- In India 12% of the national expenditure is on health care.
- India's expenditure on health is relatively high as compared to the other developing countries.
- A World Health Organisation (WHO) report states that India needs to add 80,000 hospital beds each year to meet the demand of its population.
- In the last 50 years, India's hospital care facilities are improving rapidly.

### **CHALLENGES OF HEALTH CARE INDUSTRY IN INDIA**

- The Indian market is very price conscious. Nearly 60 to 70% of the health care expenditure comes from the self paid category.
- In Indian the health care industry is expected to grow more than double with in the next decade.
- The hospitals can use various strategies to retain its clients as well as increase the number of patients such as-
- 1) Developing Infrastructure
- 2) Getting new technology
- 3) Promoting the service to customer.

### **SOCIAL MARKETING PRINCIPLES IN HOSPITALS**

- Social marketing is used by organisation which market services rather than tangible goods.
- Non profit and non business organisation need effective marketing but their goal is not profit maximization.
- Social marketing uses the following principles:
- 1) Market Segmentation
- 2) Consumer Research
- 3) Concept Development
- 4) Communication
- 5) Facilities

## **SECTOR 1: HOSPITAL AND HEALTHCARE SERVICES**

### **INTRODUCTION:**

Healthcare industry is a wide and intensive form of services which are related to well being of human beings. Health care is the social sector and it is provided at State level with the help of Central Government. Health care industry covers hospitals, health insurances, medical software, health equipments and pharmacy in it. Right from the time of Ramayana and Mahabharata, health care was there but with time, Health care sector has changed substantially. With improvement in Medical Science and technology it has gone through considerable change and improved a lot.

The major inputs of health care industries are as listed below:

- I. Hospitals
- II. Medical insurance
- III. Medical software
- IV. Health equipments

Health care service is the combination of tangible and intangible aspect with the intangible aspect dominating the tangible aspect. In fact it can be said to be completely intangible, in that, the services (consultancy) offered by the doctor are completely intangible. The tangible things could include the bed, the décor, etc. Efforts made by hospitals to tangiblize the service offering would be discussed in details in the unique characteristics part of the report.

### **Risks in healthcare industries**

**1) Intangibility:** Health care services being highly intangible, to beat this intangibility the irony of modern marketing takes place such as use of more tangible features to make things real and believable.

#### **Ways to overcome this drawback:**

**Visualization:** The industry has to make available visualization so that, search and experience qualities are crystallized.

**E.g.** Press releases, distribution of brochures and leaflets, newsletters, digital marketing and media campaigning.

**Physical representations:** To overcome these more tangible features such as logos, colors are needed to be used.

**E.g.** Apollo hospital logo – A lady with a torch

**Documentation:** Quality assurance certificates by service institutions and publishing of annual reports, balance sheets, publishing of customer satisfaction index and ranking numerations.

**2) Inconsistency:** Quality of service offered differs from one extreme to another. This is because of total dependence on human interactivity or playing human nature, i.e. because human beings can never mechanize or replicate themselves.

**Ways to overcome this drawback:**

**Training:** A scheduled Training of the employees in respect of the work/service can prove to be the best solution to this drawback.

**E.g.** American Medical Association makes it mandatory for its member doctors to undergo 6 weeks of training every year or 6 month of training every 6 years.

**Automation:** The service providers analyze that, human quality deteriorates with repetition of work; this has an ill effect during the final delivery of the service.

**E.g.** Automatic blood testing equipments ensuring safety and accuracy

**3) Inseparability:** Service transaction becomes unique because it mandates, during transaction, the physical presence of the provider and the consumer.

**Ways to overcome this drawback:**

**Training:** This is the best way out for the setback. As the provider of one service can not be made available at two different places at the same time if the situation demands so, unlike, in the case of products where the producer of the same need not be present at all times where the transaction takes place.

**E.g.** Wockhardt & Duncans Gleneagles International as set up a dedicated teaching centre for paramedics, particularly, nurses and also provide higher-end courses for doctors.

**4) Perishability:** Services are intangible, they cannot be packed & neither can be stored nor can they be inventoried. The implication is that the service has to be produced and consumed instantly; there is no scope of storage.

**Ways to overcome this drawback:**

**Managing demand & supply:** That is to say that, there has to be provision for all sorts of stipulations at all times to the greatest possible extent.

**E.g.** Service developments according to market needs.

### **INNOVATIONS IN HOSPITAL INDUSTRY**

- Auto check-in and check out
- Specialty hospitals
- Aromatherapy at Apollo.
- Biventricular pacing.
- Bone bank at AIIMS.
- Hospital administration.
- Medical records management.
- Oxygen under pressure treatment at Apollo.
- Waste management.
- Telemedicine.
- Virtual Hospitals

### **TECHNOLOGIES IN HOSPITAL INDUSTRY**

- Same day OPD
- Online reports
- Imaging/ MRI Scan
- Key Hole Surgery
- Medical transcription
- Biotechnology
- Nanotechnology
- SST: Self checking Machines/ equipments

### **CLASSIFICATION OF HOSPITALS**

The classification of Hospitals on the basis of objective, ownership, path and size.

#### **1) On the basis of the OBJECTIVE there are three types:**

- **Teaching cum research** for developing medicines and promoting research to improve the quality of medical aid.
- **General hospital** for treating general ailments.
- **Special hospitals** for specialized services in one or few selected areas.

2) On the basis of the **OWNERSHIP**, there are four types:

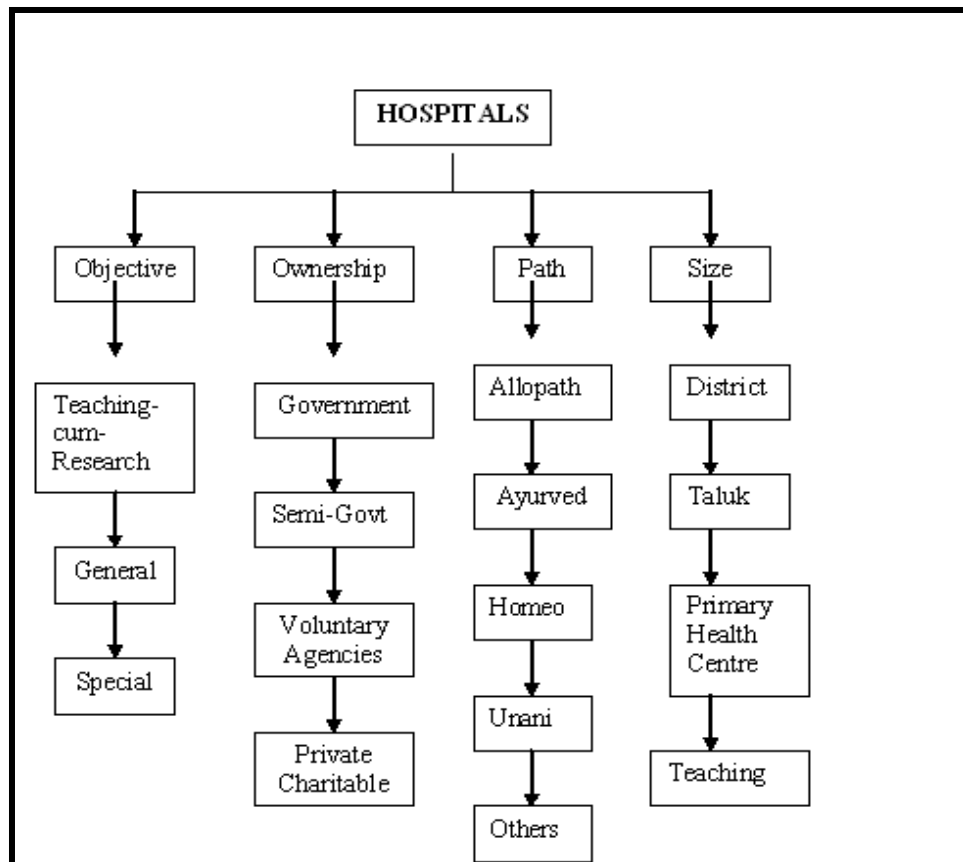
- **Government hospital**, which is owned, managed and controlled by government
- **Semi-government hospital**, which is partially shared by the government.
- **Voluntary organisations** also run hospitals.
- **Charitable trusts** also run hospitals.

3) On the basis of **PATH OF TREATMENT**, there are:

- **Allopath** which is the system promoted under the English system.
- **Ayurved**, which is based on the Indian system where herbals are used for preparing medicines.
- **Unani**
- **Homeopath**
- **Others**

4) On the basis of the **SIZE**, there are:

- **Teaching hospitals** – generally have 500 beds, which can be adjusted in tune with number of students.
- **District hospital** – generally have 200 beds, which can be raised to 300 in contingencies.
- **Taluka hospital** – generally have 50 beds that can be raised to 100 depending on the requirement.
- **Primary health centers** – generally have 6 beds, which can be raised to 10.



## **PAPER-4 PATIENT CARE MANAGEMENT**

### **SYLLABUS:**

#### **Question bank**

Clinical governance	Evidence base medicine	Clinical audit
Patient attendant	organization	Line organization
Democratic organization	Division of work	Centrazation of authority
Scalar chart	Stability of tenure	Classification of management
Leading	motivating	Job description
Case method	Team method	Orientation program
Continued education program	Clinical teaching	supervision
Anectol report	Rating form	

1. Explain clinical governance
2. Explain clinical audit.
3. Method of different adverse events & risks.
4. Importance of pt relationship practice in hospital administration.
5. Define: organization its importance & principal.
6. General principals of management (Feyol principles)
7. Explain various management levels.
8. Explain various skills.
9. Four main fn of management formulated by Mr. Louis allen.
10. Explain interpersonal relationship.
11. Write note on various factor to consider during patient care i.e environment, cleanliness, noise etc.
12. Explain timetable management.
13. Important of records and reports.
14. Write notes on various method of assigning of nursing duty.
15. Explain in-service education program.
16. Explain purpose, principles and techniques of supervision.

### **MATERIAL:**

Duties and responsibilities of personnel for effective functioning of wards

- Nursing personnel
- Endorse patients and give attention to patients' comfort and safety
- Delivers clean medical supplies to patient care units and collect used supplies, instrument sets, rubber goods, etc.

- Makes general assessment of patients in the recovery room and confers with head nurse nursing management of each patient
- Accompanies physician on rounds to answer questions, receives instructions and notes patients' care requirements. Reports to replacement on next tour on condition of patients or of any untoward or unusual actions taken. May render professional nursing care and instruct patients and members of their families in techniques and methods of home care after discharge

## Introduction

Health care is primarily about improving the quality of patients' lives, but its delivery can be a complicated process that requires the use of many complex systems. The treatments available for providing patient care are becoming increasingly more effective and complex, with an increased risk *at* errors occurring. Demand for health services is usually high, and advances in knowledge and technology are rapidly and continuously being made, while the resources available to provide services remain limited. As well as "a complex environment with multiple stakeholders, [there are] conflicting objectives and considerable restraints".<sup>1</sup>

Much of the care provided to patients is not supported by scientific evidence. There is wide variation in the treatment being given to patients with the same clinical conditions, and a significant proportion of the care recommended for the leading causes of death and disability are not being provided.<sup>2</sup> Further, some care that is provided causes preventable harm to patients,<sup>3</sup> and most errors are thought to be undetected and unreported.<sup>11</sup> Considerable cost is being incurred and valuable resources expended in providing suboptimal care.

There is an expectation by the community that health care will be of high quality, that people receiving health care will be safe while it is being delivered, and that errors in providing care are "neither acceptable nor inevitable".<sup>4</sup> Consequently, if the anticipated outcome of care is not achieved, retribution is often sought; hence, litigation by patients against clinicians and health services is increasing.<sup>4</sup> At the same time, health professionals and management are being held increasingly accountable for the quality and safety of the care they provide, not only by patients and their relatives, but also by governments and regulatory and funding bodies. Despite these conditions, the management of many health services still predominantly emphasises the service's financial situation and patient throughput targets, rather than the quality of care and the level of patient safety within the health service.

In our experience, most health care professionals want to provide the best possible care for their patients. However, even with the very best of intentions and the greatest vigilance, suboptimal care and errors in patient management occur frequently. Given the conditions under which health care is currently provided, how can health services and the professionals working within them ensure that they consistently provide a high-quality, safe service to their patients? The structures, processes and systems of health care delivery are created under the influence of leadership. Culture and performance need to be effectively monitored, and systems appropriately changed in response to the quality and safety of the care that is being provided.



There is now a great deal written about the quality of care provided to patients and the level of patient safety in health services. Twenty years ago, the occasional article about quality or safety would appear in major clinical journals. Now, whole journals are devoted to these topics, and the volume of literature is considerable. The terminology used in these publications has expanded, and can be confusing. There has been much activity being undertaken aimed at improving the quality and safety of clinical care, but there are still significant gaps in the quality of care provided to patients, and the number of adverse events experienced by patients while receiving care is still substantial. Health services need a simple, clear-cut and practical approach to delivering high-quality and safe health care to assist with their quality improvement and risk management programs.

This book has been written to assist the many health care professionals and health services who are strongly committed to providing high-quality, safe care to their patients, and who are searching for the best way to provide such care. It is written from the perspective of a health service that independently wishes to improve the quality of care it provides for its patients and raise the level of patient safety in their facility, without these requirements being imposed on the service by external regulatory, accreditation and funding bodies. We have found that in most health services, there are individual clinicians and managers with a genuine passion and internal drive to provide the best care possible for their patients — without having this forced upon them as a requirement of their senior management or from external bodies.

Much of what is written about quality of care and patient safety is theoretical, and the evidence — especially about the effective implementation of quality and safety strategies — is limited. Relatively little is written of practical value to individual health services trying to satisfactorily address these important issues in their facilities. The task can be overwhelming for clinicians charged with the responsibility of developing, implementing and maintaining a quality and safety program for their individual health services. Without clear overall direction from a comprehensive organisation-wide quality and safety program, individual health services may move in many directions simultaneously, with little overall integration and coordination. The next practical steps that individual health services should undertake in their quality and safety programs are often not clearly visible.

To fill this gap, we describe a simple and practical framework that can act as a signpost for health services wishing to establish a quality and safety program (or enhance an existing program) to effectively monitor and improve quality and safety in all the clinical areas of their health service. The framework is:

- logical
- fully integrated
- easy to understand
- based on relevant theory, evidence, and 19 years of practical experience in designing and implementing a comprehensive clinical quality improvement and risk management program at the Wimmera Health Care Group in Horsham, Victoria.

**Clinical Governance:**

The first step to getting patient care right is, most often, knowing the right thing to do. The right thing to do for a patient may need to be determined according to the best available evidence of an intervention's effectiveness, the appropriateness of that intervention for that patient, the safety of the intervention, the overall health needs of the health service's target population, and the resource constraints under which the health service is functioning. Whether the intervention represents value for money and whether it provides the greatest benefit for the health service's population may also need to be determined. To ensure that the right thing is consistently and increasingly well undertaken in a health service, staff require appropriate training and adequate resources need to be provided. Ensuring that the right thing is done at the right time for a patient will also require attention when health care delivery systems are being developed.

- Evaluation of the quality of care provided to patients requires that a standard of clinical performance be set. Best practice in a particular clinical area may be determined from sources external to the health service, such as scientific evidence from research studies published in medical journals, national and international clinical guidelines, or clinical practices at health services that are regarded as exemplars in providing care in that clinical area. The health service's actual performance in providing care for patients in this clinical area is then measured. If the actual performance deviates significantly from what is regarded as best practice, the deviation is analysed and appropriate corrective action is taken to close the gap between the actual performance and the desired standard. Importantly, ongoing monitoring of the health service's performance should continue to determine whether the action taken has successfully closed the gap.

- The process of closing the gap between the clinical care that is being provided and best practice is referred to as quality improvement. In some instances, it may not be possible to achieve completely, and the cycle perpetuates indefinitely in a process of "continuous quality improvement", where performance continues to improve and gaps continue to narrow. It is also important to recognise that what constitutes best practice in a particular clinical area will change with time, and therefore should be regularly redefined to incorporate advances in medical knowledge.

**Patient safety**

The second major component of clinical governance in a health service is patient safety.<sup>13</sup> The Agency for Healthcare Research and Quality in the US defines patient safety as "the absence of the potential for, or the occurrence of, health care-associated injury to patients created by avoiding medical errors as well as taking action to prevent errors from causing injury".<sup>15</sup> Patient safety can be simply defined as ensuring that the wrong things happen to patients less frequently.<sup>13</sup> This component of clinical governance concentrates on the negative things that happen to patients and taking action to ensure they occur less frequently.

The level of patient safety in a health service can be assessed reactively or proactively. Using the reactive approach, clinical activity is continuously

## **Evidence based medicine**

To know the right thing to do for a patient requires that the clinical care provided is based on the best available scientific evidence about which interventions provide the best chance of obtaining the most favourable outcome for patients (eg, which investigations will provide the most useful information for medical staff, and which medications will provide the greatest probability of improving a patient's outcome). Such information is obtained from the results of clinical trials. The highest quality information is obtained from systematic reviews of multiple randomised controlled trials (RCTs); single RCTs may also provide high-quality evidence. Observational studies and expert consensus provide weaker evidence. The stronger the evidence, the more likely the intervention studied will improve the patient's outcome.<sup>18</sup>

Importantly, despite the increasing number of interventions demonstrated to be effective by RCTs,<sup>19</sup> the answers to many questions that commonly arise when providing medical care have not been determined in such trials. In these situations, information from non-randomised trials or expert consensus opinion is viewed as representing best practice in those clinical areas, and this information is used to provide care.

Using information from the best available clinical trials or expert opinion in providing care to patients is known as practising evidence-based medicine. Evidence-based medicine has been defined as

the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence based medicine means integrating individual clinical expertise with the best available external evidence from systematic research.<sup>20</sup>

## **Clinical audit**

Health services can monitor the degree of compliance with evidence-based medicine in clinical practice using clinical audit. Clinical audit systematically reviews the care provided to patients against explicit criteria of the structure, process and outcome of care. If gaps in care are detected, appropriate action is taken aimed at closing the gaps and thereby improving the quality of care. Ideally, the audit process will then continue to monitor the care to determine whether the actions taken have been successful in achieving the improvement. The data obtained must be reliable, and audits should therefore be undertaken using high standards of design, measurement, data collection and analysis. Clinical audits should have a multidisciplinary clinical audit should be comprehensive and a routine part of clinical practice in a health service.

## **Health care delivery as a system**

The second major component of clinical governance is risk management. Unless adequate barriers are in place, accidents will occur.' In health care, an accident that causes harm to a patient is called an adverse patient event. When looking at why adverse patient events happen, it is useful to view health care delivery as a system. This systems approach helps develop models to explain how adverse events occur. The factors contributing to the event are determined, and this

information helps develop strategies to make the system safer by reducing the probability of adverse events recurring.

### **Methods of detecting adverse events and risk**

O

As has been discussed previously, clinical risk management is about ensuring that adverse patient events occur less frequently. The first step in reducing the frequency of adverse events is to identify when such events have occurred. Such information is available to health services from two important sources:

- Adverse events that have occurred to patients within the health service. This method is referred to as reactive risk management. No single method has been developed to detect all adverse events that occur, so multiple, diverse methods are used.
- Adverse events that have occurred in other health services should be obtained from many sources and used to examine the health service's relevant delivery systems to identify areas of risk within the service. This method is referred to as proactive risk management.

The benefits of this second approach are numerous. Lessons can be learnt and applied from a much larger pool of adverse events than those that might occur in an individual health service. Information about adverse events that occur rarely in individual health services can also be utilised. Using information about adverse events that have occurred elsewhere, weaknesses in health care delivery systems can be proactively identified without patients being harmed or staff in the health service having to experience the psychological trauma of a serious adverse event.

There are four basic methods that can be used to detect the adverse events that have occurred to patients in a health service:

- directly observing an adverse event
- receiving a legal claim made by a patient concerning an adverse event
- reading the details of an adverse event in the patient medical record
- being told the details of an adverse event by a clinician or patient.

Information about adverse events at other health services is available from:

- legislative requirements to report specific clinical events (eg, consultative committees in specific clinical areas, coroners' inquests)
- voluntary and mandatory reporting of clinical incidents and specific events (eg, national databases of clinical incidents and sentinel events)
- commercial requirements to report adverse events or risks to the health care field (eg. drug and equipment alerts from pharmaceutical companies and medical equipment manufacturers)
- media reports of adverse events
- clinical journal articles in which adverse events are described
- the findings of inquiries into individual health services or specific clinical areas in those health services.

# DIPLOMA IN HOSPITAL MANAGEMENT

## Second year

**PAPER-1      HOSPITAL MANAGEMENT**  
**PAPER-2      QUALITY ASSURANCE**  
**PAPER-3      HOSPITAL LAWS**

### Paper-1 Hospital management

Full syllabus of first year

#### QUESTION BANK:

##### Define:

hospital	Planning	management
Hospital administration	Housekeeping department	Accounts department
Medical social service	budgeting	Medical record
PRO	Nursing department	Indoor pt
OPD	Human resources	Multispecialty hospital
Market development	Product promotion	Public sector hospitals
Private sector hospitals	HOD	Formalization
causality	SEPARABILITY	Authority
centralization	TANGIBLES	VARIABILITY
configuration	ASSURANCE	RELIABILITY
RMO	PROMOTION	RESPONSIVENESS
INTANGIBILITY	MEDICAL RECORD	MORTUARY
HEALTH SERVICE QUALITY	Evidence base medicine	QUALITY ASSURANCE
EMPATHY:	organization	Clinical audit
RATER	Division of work	Line organization
BIOMEDICAL DEPARTMENT	Stability of tenure	Centralization of authority
MEDICAL RECORD COMMITTEE	motivating	Classification of management
Clinical governance	Clinical teaching	Orientation program
Patient attendant	Leading	supervision
Democratic organization	Continued education program	

##### Detailed questions:

1. List main function of hospital
2. Explain measure function of the administrative service and department wise functions.
3. Explain function of the nursing service.
4. Explain function of the medical service.
5. Explain classification of hospital.

6. Explain professional role of hospital administrator. (page no: 1)
7. Write notes on future of health care in India (general)
8. Which are unique features of hospitals & health care organization(page no:49)
9. Explain configuration of 1000 bedded gov hospital(page no:61)
1. Explain classification of hospital
2. Explain importance of marketing in hospital services
3. Explain 7ps of marketing mix
4. Explain regarding various hospital services
  1. Medical services
  2. Supportive services
  3. Auxiliary services
5. Objectives at HRM(page no:100)
6. Write notes on HRM(page no:100)
7. Explain A,B,C classification & analysis(page no:127)
8. Classification of drugs with MBASIC system
9. Explain customer experience management model
10. Explain role and responsibility of medical record committee
11. Legal importance aspects of medical record.
12. Explain characteristics of health care industry
13. Define: organization its importance & principal.
14. General principals of management (Feyol principles)
15. Explain various management levels.
16. Explain various skills.
17. Four main functions of management formulated by Mr. Louis allen.
18. Explain interpersonal relationship.
19. Explain timetable management.
20. Important of records and reports.
21. Explain in-service education program.
22. Explain purpose, principles and techniques of supervision.

## **Project report of hospital**

### **INTRODUCTION TO HEALTH CARE**

Health care means a wide and intensive form of services, which will be related to well being of human beings. Health Care is a social sector. Health Care services are provided at state level with the help of central government.

Health care is a wide and intensive industry, which covers Hospitals, Health Insurances, Medical software, Health- equipments and Pharmacy in it.

### **Major inputs of health care industry**

The major inputs of health care industries are as listed below:

- I. Hospitals
- II Medical insurance
- III. Medical software
- IV. Health equipments

### **Overview of health care sector in India:**

India's healthcare sector has made impressive strides in recent years. It has transformed to a US\$ 17 billion industry and is surging ahead with an **annual growth rate of 13% a year**. The healthcare industry in India expected to grow in size to Rs 270,000 core by 2012. **The healthcare industry employs over four million people, which makes it one of the largest service sectors in the economy of our country.**

Healthcare is dependent on the people served; India's **huge population** of a billion people represents a big opportunity. People are spending more on healthcare. The rise in literacy rate; the higher levels of income; and an increased awareness through the deep penetration of media, has constituted to greater attention being paid to health. India has a very low density of doctors. Infant mortality is amongst the highest in India.

Hospitals in India are running at **80-90% occupancy**. Major corporations like the **Tatas, Apollo Group, Fortis, Max, Wockhardt, Piramal, Duncan, Ispat, Escorts** have made significant investments in setting up **state-of-the-art private hospitals** in cities like Mumbai, New Delhi, Chennai and Hyderabad.

Good Healthcare in India is in extreme short supply and it is this gap that Corporate are looking to plug. Most users of healthcare prefer **private services** to government ones. The private Healthcare segment has grown into a formidable industry estimated to be Rs.8,00,000 crores. Using the latest technical equipment and the services of highly skilled medical personnel these hospitals are in a position to provide a variety of general as well as specialists' services.

*"India is well positioned to tap the top end of the \$3 trillion global healthcare industry because of the facilities and services it offers, and by leveraging the brand equity of Indian healthcare professionals across the globe",* said Vinod Khanna, Union Minister of State for External Affairs.

The **Government** of India places top priority to healthcare in the national agenda. It is very serious about encouraging indigenous R&D and creation of human capital. This would improve the quality of life of our people, leading to greater socio-economic progress of the country.

As medical costs sky rocket in the developed world, countries like India have immense potential for what is called "**Medical Tourism**", highlighted Harpal Singh, Conference Chairman, in his theme address. *"India, with outstanding human resource talent and the setting up of world class medical facilities, was now poised to take leadership in the fast emerging arena of healthcare management which is witnessing the first signs of globalization".*

## **MARKET ANALYSIS**

### **Market Overview**

India has a fairly comprehensive healthcare system comprising of government and private service providers. However, the system reaches barely fifty percent of the population – mainly on account of general infrastructure bottlenecks. The country lags behind international standards on basic healthcare infrastructure and facilities. **India has 94 beds per 100,000 population as compared to the WHO norm of 333 beds per 100,000. The density of doctors is also low. There are only 43 doctors for a population of 10,000.**



## Size of Market

India's healthcare industry is estimated at Rs 1000 billion. Of this, pharmaceuticals account for Rs 200 billion. As per some estimates, Rs 185 billion is spent on healthcare annually. On average, Indian families spend 600 per month on healthcare which is 11% of the household income, showing that they are willing to spend provided the service they get is of high standard. According to The World Health Report 2000, **India's health expenditure is 5.2% of its GDP**. Public and private health expenditure is 13% and 87% respectively.

## CII-McKinsey Study

A joint study "Healthcare in India: The Road Ahead" done by the Confederation of Indian Industry and McKinsey & Company in 2002 mentions that **India has 1.5 beds per 1000 people** while China, Brazil & Thailand have an average of 4.3 beds. **The study projects that changing demographic and disease profiles and rising treatment costs will result in healthcare spending more than doubling over the next 10 years. Private healthcare will be the largest component of this spending in 2012, rising to Rs 1560 billion from the current level of Rs 690 billion.** In addition, public spending could double from Rs 170 billion if the Government reaches its target spending level of 2% of the GDP, up from 0.9% today.

## CLASSIFICATION OF HOSPITALS

The classification of Hospitals on the basis of objective, ownership, path and size.

### **1. On the basis of the OBJECTIVE there are three types:**

↗ **Teaching cum research** for developing medicines and promoting research to improve the quality of medical aid.

↗ **General hospital** for treating general ailments.

↗ **Special hospitals** for specialized services in one or few selected areas.

### **2. On the basis of the OWNERSHIP, there are four types:**

↗ **Government hospital**, which is owned, managed and controlled by government

↗ **Semi-government hospital**, which is partially shared by the government.

↗ **Voluntary organisations** also run hospitals.

↗ **Charitable trusts** also runs hospitals.

3. On the basis of PATH OF TREATMENT, there are:

↗ **Allopath** which is the system promoted under the English system.

↗ **Ayurved**, which is based on the Indian system where herbals are used for preparing medicines.

↗ **Unani**

↗ **Homeopath**

↗ **Others**

4. On the basis of the SIZE, there are:

↗ **Teaching hospitals** – generally have 500 beds, which can be adjusted in tune with number of students.

↗ **District hospital** – generally have 200 beds, which can be raised to 300 in contingencies.

↗ **Taluka hospital** – generally have 50 beds that can be raised to 100 depending on the requirement.

↗ **Primary health centres** – generally have 6 beds, which can be raised to 10.

### Specialities

↗ **Medical speciality**

- Medicine
- Surgery
- Ophthalmology
- Dentistry
- Gastroenterology
- Dermatology
- Nephrology
- General medicine
- Neurology

- Paediatrics
- Psychiatry
- Rheumatology
- Gynecology and obstetrics.

### **Surgical speciality**

- ↯ Ophthalmology
- ↯ E.N.T
- ↯ Pediatric surgery
- ↯ Dental
- ↯ General surgery
- ↯ Orthopedic surgery
- ↯ Urology
- ↯ Nuero-surgery

### **FACILITIES/SERVICES OFFERED AT VARIOUS HOSPITALS**

- ↯ Highly qualified doctors and paramedical, friendly nurses and ward boys.
- ↯ I.C.U. and Operation theaters with latest technology.
- ↯ Blood banks.
- ↯ State of art laboratory.
- ↯ Casualty ward. Tie ups with Jaslok and Breach Candy hospital.
- ↯ 24hours chemist shop.
- ↯ Availability of stretchers and wheel chairs easily.
- ↯ Lobby on every floor with proper sleeping and sitting facilities.
- ↯ Good infrastructure facilities.
- ↯ Coffee/tea/juice vending machines on every floor.
- ↯ Dieticians and consultation.
- ↯ Library.
- ↯ Prayer room.

- Phone booth center.
- Cyber café.
- Ambulance.
- 6 lifts and 3 exits.
- Diet store.
- Cafeteria with clean and hygienic food.
- Good sanitation conditions.
- Gift shop.
- 24hours ATM facility.
- Dust bins at short distances.
- Signage.

Medical tourism can be broadly defined as provision of 'cost effective' private medical care in collaboration with the tourism industry for patients needing surgical and other forms of specialized treatment. This process is being facilitated by the corporate sector involved in medical care as well as the tourism industry - both private and public.

THE most recent trend in privatisation of health services is medical tourism, which is gaining prominence in developing countries. Corporate run institutions are seized with the necessity to maximise profits and expand their coverage. In this background, corporate interests in the Medical Care sector are looking for opportunities that go beyond the limited domestic "market" for high cost medical care. This is the genesis of the "medical tourism" industry.

The rendering of such services on payment in foreign exchange will be treated as 'deemed exports' and will be made eligible for all fiscal incentives extended to export earnings".

According to a study by McKinsey and the Confederation of Indian Industry, medical tourism in India could become a \$1 billion business by 2012. The report predicts that: "By 2012, if medical

tourism were to reach 25 per cent of revenues of private up-market players, up to Rs 10,000 crore will be added to the revenues of these players”.

### **CHRONOLOGICAL SCHEDULE OF ACTIVITIES**

A standard schedule of the day is described below.

TIME OF DAY	ACTIVITY
05.30 a.m.	Wake Up and cleaning
06.00 a.m. – 7.00 a.m.	Sponge/bath
07.30 a.m. –8..30 a.m.	Breakfast
08.30 a.m. – 09.00 a.m.	Organizing the patients charts
09.00 a.m. – 10.00 a.m.	Doctors routine check-up
10.00 a.m. – 11.00 a.m.	Medication and rest time
11.00 a.m. – 12.00 p.m.	Visiting hours
12.00 p.m. – 01.00 p.m.	Lunch time
01.00 p.m. – 04.00 p.m.	Medication and rest hours
04.00 p.m. – 04.30 p.m.	Tea/Snacks time
04.30 p.m. – 05.00 p.m.	Freshing up and Doctors routine check-up
05.00 p.m. – 07.00 p.m.	Visiting hours
07.00 p.m. – 07.30 p.m.	Dinner
07.30 p.m. – 08.00 p.m.	Medication
08.00 p.m.	sleep

### **Intensive Care Unit**

- ☞ The ICU is considered to be the heart of the hospital. It is for those patients demanding acute, multidisciplinary and special treatment.
- ☞ The staffing pattern of our ICU is planned in a scientific way so that related patients get proper medical aid without a break or gap.
- ☞ Our 10-bedded ICU is equipped with life saving and support systems handles medical as well as surgical emergencies.
- ☞ Round the clock monitoring by nursing staff ensures efficient patient care.
- ☞ There is one nurse per patient; to give the much needed care and attention.

### **Wards**

Centrally air-conditioned wards provide accommodation and services to patients.

- ☞ Least expensive are the general wards where there are 10 beds.
- ☞ The deluxe ward has 20 beds.
- ☞ The super deluxe wards include a drawing room, a kitchen, a T.V and exclusive facility. We have 2 beds.

### **Day Care Service Unit**

- ☞ Our day care services cater to those patients who require a single day stay at our hospital. Uniquely designed unit offers a comprehensive package of services offered globally.
- ☞ Equipped with sophisticated, state-of-the-art technology, it combines care with medical expertise to tender complete treatment.
- ☞ It's on the same floor of the OT, which helps us to provide both pre-op and post-op care in the same department.

### **Artificial kidney dialysis unit**

- ☛ Our 24- hour Dialysis unit is a haemodialysis one.
- ☛ Open round the clock, it is extremely feasible for office goers who can make use of this facility and then return to work
- ☛ The unit exploits the expertise of renowned specialist and the advantages of recent technology to formulate a complete treatment plan.

## **SURGICAL SUITE AND QUALITY CONTROL**

### **☛ Operation Theatres**

AT EMERALD OT comprise of 6 highly sterilized operating rooms, including one septic and one minor operation room.

- ☛ The management has made available technologically advanced and sophisticated equipment and appliances to facilitate surgeries such as diabetic foot, general surgeries, Nuerosurgeries, orthopedics, ENT, ophthalmology and non-invasive surgeries.
- ☛ The sterilized environment ensures minimal infection while trained nurse and aseptic techniques assure best care and treatment.
- ☛ Our OT also incorporates digital recording and audio-visual connectivity with the auditorium that assist information sharing with the experts during clinical meetings.
- ☛ Professionals designing it take important factors such as stand-by power arrangements, proper ventilation into consideration.
- ☛ Efficient doctors, paramedical staff and nurses are there in the OT.
- ☛ Our OT has a pre-anesthesia room and a sterilization room. There is a scrub room for nurses and doctors. The OT is in close integration with the blood bank.

### **☛ CSSD**

- ☛ CSSD uses autoclave for steel, ETO sterilization to sterilize heat sensitive reusable items and ultrasonic and water disinfectant for cleaning and disinfecting used items.

- ☞ This ensures that all surgical and other reusable equipments used in the hospital remain infection free
- ☞ Department process issues and control all professional supplies used by various medical and surgical units of the hospital to ensure our patients safety.

#### **☞ Quality Assurance And Infection Control Committee**

- ☞ It ensures good quality patient care by reducing hospitals acquired infection.
- ☞ It informs the hospital authorities about communicable/ infectious diseases
- ☞ Holds regular audits and imparts CME to staff members
- ☞ The department is also responsible for internal and external quality control procedures.

### **DIAGNOSTIC SERVICES**

#### **☞ Laboratory Services**

#### **☞ Radiology**

- ☞ We have multi slice Spiral CT scan
- ☞ Mammography (DMR plus) with stereo tactic
- ☞ X RAY with image intensifier
- ☞ Ultra sonography and color Doppler
- ☞ Per procedural counseling by well known radiologist

#### **☞ Laboratory medicine**

- ☞ Fully automated laboratory offers services in the fields of bio chemistry, clinical pathology, hematology, histopathology, immunology and sito genetics.
- ☞ Technologies like florescence and Karyotyping ensure instant and accurate results.

#### **☞ Blood Bank**

- ☞ Our blood bank is capable of providing whole blood as well as blood components.
- ☞ All prescribed tests are performed before issuing blood to patients

#### **☞ Endosonography**

Our endoscopy department is one of the only few hospitals in Mumbai that has digital Video Sono Endoscope facilities. The Facility enjoys unmatched expertise and supervision by renowned consultants.



## REHABILITATIVE AND SUPPORTIVE UNITS

### **Physiotherapy**

- ☛ It uses a combination of state – of – the –art equipment and medical expertise to provide our patients with the best possible treatment

Our treatment plan is divided into

- ☛ Exercise therapy- That includes Connective Tissue Mobilization Techniques, exercises with different gadgets that aids movement
- ☛ Electrotherapy that includes ultra sound, infrared, wax bath, stimulation, Traction.

### **Diet And Nutrition**

- ☛ Our Dieticians and other experts provide individual diet counseling to patients
- ☛ Diet consultation is available for all major and minor ailments like diabetes and other related complications
- ☛ Our cafeteria, open to all, includes an in staff dietician who keeps a check on the nutrition value of the food served
- ☛ They also provides diets for weight gain or weight loss and create awareness about importance of diet

### **Nursing**

Our nursing services are benchmarked and the best in the industry. The care and the attention provided by our nurses is so comforting that patients feel that they are recuperating at home.

### **24 Hour Pharmacy**

We have two pharmacies One in-house and one in the premise. Open round the clock our pharmacies offer invaluable services to the IP, OP, and Day Care and Emergency departments. It also ensures that medicines are purchased from authorized sources and thus guarantees the authenticity of all medical supplies.

## THE STAFF / SUPPORTIVE SERVICES

Certain supportive services are important e.g. sterilisation, supply and maintenance of instruments, materials and garments etc. At emerald these are the support services:

The **catering department** comprises the kitchen, bulk food stores and dining rooms and supplies meals in the hospital. Heated trolleys have to be used to transport meals to patients. **Pharmaceutical services** play an important role. An official **laundry** provides bacteria free garments and clothes. The patients are provided with disinfected and clean linen. The **laboratories** are properly manned and proper diagnosis is given by them to enable right medical prescription. The establishment of laboratories should be between the OPD and indoors so that both areas are covered without delay or disruption. Clinical pathology, blood bank and pathological anatomy are important areas to streamline functional management of hospital laboratories. The **radiology department** should have hi-tech facilities. Currently ultrasound scanning and CAT scanning have been found significant in improving services of the radiology department. A matron who is assisted by a sister-in –charge, manages the **Nursing services**. The norms accepted by the Indian Nursing Council should be followed. An ideal nurse-patient ratio is 1:5, however at EMERALD we ensure 2:5.

## THE AUXILIARY SERVICES

Auxiliary services consist of registration and indoor case records, stores management, transportation management, dietary services, engineering and maintenance service etc. At EMERALD these services are maintained properly which govern the successful operation of a particular department. The security arrangements, supplies, transport facilities etc are not ignored. The **central stores department** issues bulk items. There are different types of stores like pharmacy stores, chemical stores, linen stores, glassware stores, surgical stores etc. For carriage of supplies and patients, trolleys, wheelchairs and stretchers are used. The **dietics department** plays a vital role as it provides menu to meet the needs of patients. The services of well-qualified and trained dieticians help in providing nutritious diets. The **engineering and maintenance** services are concerned with hospital building, furniture and other equipment. Awe have a security force to

provide protection to the hospital property. Personnel related with defence or police are given preference while appointing the security force.

### **COMPLAINT MANAGEMENT/SERVICE RECOVERY**

Service recovery is an aspect of the total customer service strategy that is often overlooked by hospitals and health care workers. Service recovery provides the tools employees need to help customers “recover” from negative perceptions, thus becoming satisfied patients.

- EMERALD has a distinct Customer Care department. It is the duty of this department to sort out problems associated with customer satisfaction, complaints etc.
- The department takes a round of the hospital everyday between 9-12 every morning, collecting feedback and checking on the service that the patients and visitors receive.
- Feedback forms are provided by the ward sister to the patient at the time of discharge. The patient is asked to fill it and put it in the suggestion boxes before leaving. The patient is assured of his/her identity being kept secret from the hospital staff.
- Suggestion boxes are placed at the nurse’s station in each wing.
- The department acts any problems discovered on. For example, if a patient complains that a particular doctor doesn’t arrive on time etc., the doctor is made aware of the situation/ discomfort caused due to his late arrival and asked to correct his behavior.
- In the event that the patient leaves the hospital with a bad impression, a letter is seen to the patient, apologizing for the inconvenience and an assurance that it will be looked into and prevented from happening again.

The use of web technology for virtual hospital visit is said to be the first of its kind in the world. The claim may be true considering that family bonds in the country are very strong and even extends to close relatives. It may also be one of the reasons why such a facility had not been thought of in other parts of the world. Besides, scaled – down joint families are still prevalent where this technology would come in handy. The success of this facility is revealed by the fact that there were as many as 8,000 hits within two months after its introduction.

## **ADDITIONAL MATTER**

### **1) MAJOR CORPORATE PLAYERS**

**The Apollo Group of Hospitals:** The Apollo group is India's first corporate hospital, the first to set-up hospital outside the country and the first to attract foreign investment. With 2600 beds, Apollo is one of Asia's largest healthcare players. The recent merger between its 3 group companies, Indian Hospitals Corporation Ltd., Deccan Hospitals Corporation Limited and Om Sindoori Hospitals Limited, will help the group raise money at a better rate and by consolidating inventory; it will save around 10% of the material cost. The group is planning to invest Rs.2000 crore, to build around 15 new hospitals in India, Sri Lanka, Nepal and Malaysia.

**Fortis Healthcare:** Fortis is the late Ranbaxy's Parvinder Singh's privately owned company. The company is a 250 crore, 200 bed cardiac hospital, located in the town of Mohali. The company also has 12 cardiac and information centers in and around the town, to arrange travel and stay for patients and family. The company has plans of increasing the capacity to around 375 beds and also plans to tie up with an overseas partner.

**Max India:** After selling of his stake in Hutchison Max Telecom, Analjit Singh has decided to invest around 200 crores, for setting up world class healthcare services in India. Max India plans a three tier structure of medical services - Max Consultation and Diagnostic Clinics, MaxMed, a 150 bed multi-specialty hospital and Max General, a 400 bed hospital. The company has already tied up with Harvard Medical International, to undertake clinical trials for drugs, under research abroad and setting up of Max University, for education and research.

**Escorts:** EHIRC located in New Delhi has more than 220 beds. The hospital has a total 77 Critical Care beds to provide intensive care to patients after surgery or angioplasty, emergency admissions or other patients needing highly specialized management including Telecardiology (ECG transmission through telephone). The EHIRC is unique in the field of Preventive Cardiology with a fully developed programme of Monitored Exercise, Yoga and Meditation for Life style management.

**Wockhardt & Duncans Gleneagles International:** They are South Asia's first Journal of Clinical Investigation accredited super specialty hospitals. Have associations with Harvard Medical International, which gives them access to the best hospitals in the US for knowledge and research. Leader in medical tourism in India

**2) MEDICAL TOURISM:** Medical tourism (also called medical travel, health tourism or global healthcare) is a term initially coined by travel agencies and the mass media to describe the rapidly-growing practice of traveling across international borders to obtain health care. Such services typically include elective procedures as well as complex specialized surgeries such as joint replacement (knee/hip), cardiac surgery, dental surgery, and cosmetic surgeries. As a practical matter, providers and customers commonly use informal channels of communication-connection-contract, and in such cases this tends to mean less regulatory or legal oversight to assure quality and less formal recourse to reimbursement or redress, if needed.

Leisure aspects typically associated with travel and tourism may be included on such medical travel trips. Prospective medical tourism patients need to keep in mind the extra cost of travel and accommodations when deciding on treatment locations.

Factors that have led to the increasing popularity of medical travel include the high cost of health care, long wait times for certain procedures, the ease and affordability of international travel, and improvements in both technology and standards of care in many countries.

### **3) PROBLEMS FACED BY THE INDUSTRY**

- Low public spending on health
  - Lack of adequate beds in the hospitals
  - Lack of emphasis on prevention
  - Enforcing standards of medical care rendered by hospitals and private health practitioners
  - Extremely low bed : people ratio
  - Dominated by Government and Charitable Hospitals
  - Excessive overlap across primary, secondary and tertiary care
  - Skewed towards urban populace
  - Lack of adequate corporatization
  - Insurance to provide financial protection from catastrophic events
  - More research, awareness and communication and greater public involvement in understanding health issues.
-

**Second year paper-2**  
**Quality assurance**

**Question bank**

**Define:**

Operation research	Model building	Model transportation method
Code change system	TAC(page no:242)	CPM
PERT(page no:245)	Network analysis	Expert system
Verification and validation	Bio medical waste	Hazardous waste
Radio active waste	Infectious waste	sterilization
incineration	Central pollution board	Medical audit
Case audit	Random table method	Audit monitoring
ISO 9002	BIS	

**Descriptive questions:**

1. Explain main future of operation research
2. Write notes on operation researching hospital management
3. Explain the code change system
4. CPM & PERT method
5. Write notes on expert system
6. Classification of waste in hospital
7. Stages of waste management in hospital
8. Category A-B-C-D-E of bio medical waste
9. Method of waste collection in hospital
10. Method of waste disposal in hospital
11. Write notes an waste minimization options in hospital
12. Write notes on medical audit
13. Write notes on element of audit
14. Various audit methods
15. Importance of ISO9002 certification of hospital
16. Implementation of ISO in hospital

**Second year paper-3**  
**Hospital Laws**  
**Question bank:**

**Define:**

MTP act	PNDT act	MTP	lunatic
PNDT	Genetic counseling center	Genetic clinic	Genetic laboratory
Medical geneticist	Chromosomal abnormality	Congenital anomalies	offences
Indian penal code	bail able	Protection of action taken in good faith	Prenatal diagnosis
prohibition	declaration	consent	Rehabilitation
Locomotor disability	Visually handicap	constitution	Central government
State government	NHFDC	Insecticide rules 1971	Expiry date
pests	narcotic	psychotropic	addict
amendment	Bio-medical waste	segregation	Pharmacy act 1948
transplantation			

**Descriptive questions:**

1. Make list of various acts rules (Indian laws) related to health.
2. When pregnancy is may be terminated by registered medical practices.
3. Write notes on maintain register under MTP act.
4. Write notes on PNDT act and rules.
5. Write notes on regulation of genetic counseling center, genetic laboratory & genetic clinics.
6. Which are the offences and penalties under PNDT act
7. Explain prohibition of sex-selection under PNDT act.
8. Explain rehabilitation council act of India act 1992
9. Which person is considered as persons disabilities under act 1995?
10. Explain national policy for person of disabilities
11. What is insecticide act 1968.
12. Explain maternity benefit act 1961.
13. What is narcotic drug & psychotropic substance act 1985.
14. Explain in brief prevention of food adulteration act 1954.
15. Drug and cosmetic act 1940.
16. Write notes on bio medical act, rules 1998.
17. Notes pharmacy act 1948.

### **Indian Laws and Regulations Related to Health**

- The Medical Termination of Pregnancy Act and Rules
- The Pre-Natal Diagnostic Techniques (PNDT) Act and Rules
- Acts in Disability
- Insecticides Act and Rules
- Maternity Benefit Act and Rules
- Narcotic Drugs and Psychotropic Substances Act and Rules
- The Prevention of Food Adulteration Act, 1954
- Drugs and Cosmetics Act, 1940
- Bio-Medical Waste (Management and Handling) Rules, 1998
- The Pharmacy Act, 1948
- The Transplantation of Human Organs Act and Rules

### **Medical Termination of Pregnancy, 1971**

(Act No. 34 of 1971)

(10th August 1971)

An Act to provide for the termination of certain pregnancies by registered Medical Practitioners and for matters connected therewith or incidental thereto.

Be it enacted by Parliament in the Twenty-second Year of the Republic of India as follows :-

#### **Short title, extent and commencement –**

(1) This Act may be called the Medical Termination of Pregnancy Act, 1971.

(2) It extends to the whole of India except the State of Jammu and Kashmir.

(3) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

**Definitions** - In this Act, unless the context otherwise requires, -

(a) “guardian” means a person having the care of the person of a minor or a lunatic;



(b)“lunatic” has the meaning assigned to it in section 3 of the Indian Lunatic Act, 1912 ( 4 of 1912);

(c)“minor” means a person who, under the provisions of the Indian Majority Act, 1875 ( 9 of 1875), is to be deemed not to have attained his majority;

(d)“registered medical practitioner” means a medical practitioner who possesses any recognized medical qualification as defined in clause (h) of section 2 of the Indian Medical Council Act, 1956, (102 of 1956), whose name has been entered in a State Medical Register and who has such experience or training in gynaecology and obstetrics as may be prescribed by rules made under this Act.

**When pregnancies may be terminated by registered medical practitioners -**

(1) Notwithstanding anything contained in the Indian Penal Code (45 of 1860), a registered medical practitioner shall not be guilty of any offence under that Code or under any other law for the time being in force, if any pregnancy is terminated by him in accordance with the provisions of this Act.

(2) Subject to the provisions of sub-section (4), a pregnancy may be terminated by a registered medical practitioner, -

(a) here the length of the pregnancy does not exceed twelve weeks if such medical practitioner is, or

(b) Where the length of the pregnancy exceeds twelve weeks but does not exceed twenty weeks, if not less than two registered medical practitioners are, of opinion, formed in good faith, that -

(i) the continuance of the pregnancy would involve a risk to the life of the pregnant woman or of grave injury to her physical or mental health; or

(ii) there is a substantial risk that if the child were born, it would suffer from such physical or mental abnormalities to be seriously handicapped.

**Explanation 1** - Where any pregnancy is alleged by the pregnant woman to have been caused by rape, the anguish caused by such pregnancy shall be presumed to constitute a grave injury to the mental health of the pregnant woman.

**Explanation 2** - Where any pregnancy occurs as a result of failure of any device or method used by any married woman or her husband for the purpose of limiting the number of children, the anguish caused by such unwanted pregnancy may be presumed to constitute a grave injury to the

mental health of the pregnant woman.

(3) In determining whether the continuance of a pregnancy would involve such risk of injury to the health as is mentioned in sub-section (2), account may be taken of the pregnant woman's actual or reasonable foreseeable environment.

(4)(a) No pregnancy of a woman, who has not attained the age of eighteen years, or, who, having attained the age of eighteen years, is a lunatic, shall be terminated except with the consent in writing of her guardian.

(b) Save as otherwise provided in clause (a), no pregnancy shall be terminated except with the consent of the pregnant woman.

**4. Place where pregnancy may be terminated** - No termination of pregnancy shall be made in accordance with this Act at any place other than -

(a) a hospital established or maintained by Government, or

(b) a place for the time being approved for the purpose of this Act by Government.

**Sections 3 and 4 when not to apply -**

(1) The provisions of section 4, and so much of the provisions of sub-section (2) of section 3 as relate to the length of the pregnancy and the opinion of not less than two registered medical practitioners, shall not apply to the termination of a pregnancy by a registered medical practitioner in a case where he is of opinion, formed in good faith, that the termination of such pregnancy is immediately necessary to save the life of the pregnant woman.

(2) Notwithstanding anything contained in the Indian Penal Code (45 of 1860), the termination of a pregnancy by a person who is not a registered medical practitioner shall be an offence punishable under that Code, and that Code shall, to this extent, stand modified.

**Explanation** - For the purposes of this section, so much of the provisions of clause (d) of section (2) as relate to the possession, by a registered medical practitioner, of experience or training in gynaecology and obstetrics shall not apply.

### **Medical Termination of Pregnancy Amendment Act, 2002 - Introduction**

#### **Introduction**

Be it enacted by Parliament in the Fifty-third Year of the Republic of India as follows :-

***Short title and commencement:***

(1) This Act may be called the Medical Termination of Pregnancy (Amendment) Act, 2002.

(2) It shall come into force on such date as the Central Government may, by notification in

### **Amendment of section 2.**

In section 2 of the Medical Termination of Pregnancy Act,-34 of 1971, (hereinafter referred to as the principal Act), --

(i) in clause (a), for the word "lunatic", the words 'mentally ill person' shall be substituted.

(ii) For clause (b), the following clause shall be substituted, namely :-

'(b) "mentally ill person" means a person who is in need of treatment by reason of any mental disorder other than mental retardation;'

### **Amendment of section 3**

In section 3 of the principal Act, in sub-section (4), in clause (a), for the word "lunatic", the words "mentally ill person" shall be substituted.

### **Substitution of new section for section 4. - Place where pregnancy may be terminated**

For section 4 of the principal Act, the following section shall be substituted, namely :-

"No termination of pregnancy shall be made in accordance with this Act at any place other than –

(a) a hospital established or maintained by Government, or

(b) a place for the time being approved for the purpose of this Act by Government or a District Level Committee constituted by that Government with the Chief Medical Officer or District Health Officer as the Chairperson of the said Committee :

Provided that the District Level Committee shall consist of not less than three and not more than five members including the Chairperson, as the Government may specify from time to time:"

### **Amendment of section 5**

In section 5 of the principal Act, for sub-section (2) and the Explanation thereto, the following shall be substituted, namely :-

'(2) Notwithstanding anything contained in the Indian Penal Code, the termination of pregnancy by a person who is not a registered medical practitioner shall be an offence punishable with rigorous

imprisonment for a term which shall not be less than two years but which may extend to seven years under that Code, and that Code shall, to this extent, stand modified. (3) Whoever terminates any pregnancy in a place other than that mentioned in section 4, shall be punishable with rigorous imprisonment for a term which shall not be less than two years but which may extend to seven years. (4) Any person being owner of a place which is not approved under clause (b) of section 4 shall be punishable with rigorous imprisonment for a term which shall not be less than two years but which may extend to seven years.

**Explanation 1.** – For the purposes of this section, the expression “owner” in relation to a place means any person who is the administrative head or otherwise responsible for the working or maintenance of a hospital or place, by whatever name called, where the pregnancy may be terminated under this Act.

**Explanation 2.** – For the purposes of this section, so much of the provisions of clause (d) of section 2 as relate to the possession, by registered medical practitioner, of experience or training in gynaecology and obstetrics shall not apply’.

#### **Maintenance of Admission Register, -**

(1) every head of the hospital or owner of the approved place shall maintain a register in form III for recording there in the details of the admissions of women for the termination of their pregnancies and keep such register for a period of five years from the end of the calendar year it relates to.

(2) The entries in the Admission Register shall be made serially and a fresh serial shall be started at the commencement of each calendar year and the serial number of the particular year shall be distinguished from the serial number of other years by mentioning the year against the serial number, for example, serial number 5 of 1972 and serial number 5 of 1973 shall be mentioned as 5/1972 and 5/1973.

(3) Admission Register shall be a secret document and the information contained therein as to the name and other particulars of the pregnant woman shall not be disclosed to any person.

#### **Admission Register not to be open to inspection, -**

The Admission Register shall be kept in the safe custody of the head of the hospital or owner of the approved place, or by any person authorized by such head or owner and save as otherwise provided in sub-regulation (5) of regulation 4 shall not be open for inspection by any person except under the authority of law :-

Provided that the registered medical practitioner on the application of an employed woman whose pregnancy has been terminated, grant a certificate for the purpose of enabling her to obtain leave from her employer ;

Provided further that any such employer shall not disclose this information to any other person.

**Entries in registers maintained in hospital or approved place, -**

No entry shall be made in any case-sheet, operation theater register, follow-up card or any other document or register other than the admission Register maintained at any hospital or approved place indicating therein the name of the pregnant woman and reference to the pregnant woman shall be made therein by the serial number assigned to the woman in the Admission Register.

**Medical Termination of Pregnancy Rules, 2003 - Introduction**

**Introduction**

G.S.R. 485(E) - In exercise of powers conferred by section 6 of the Medical Termination of Pregnancy Act, 1971 (34 of 1971), the Central Government hereby makes the following rules, namely :-

***Short title and commencement –***

- (1) These rules may be called the Medical Termination of Pregnancy Rules, 2003.
- (2) They shall come into force on the date of their publication in the Official Gazette.

**Definitions** - In this rules, unless the context otherwise requires,

(a) “Act” means the Medical Termination of Pregnancy Act, 1971 (34 of 1971) and the Medical Termination of Pregnancy (Amendment) Act, 2002 (64 of 2002).

(b) “Chief Medical Officer of the District” means the Chief Medical Officer of a District, by whatever name called;

(c) “Form” means a form appended to these rules;

(d) “owner” in relation to a place means any person who is the administrative head or otherwise responsible for the working or maintenance of a hospital or place, by whatever name called, where the pregnancy may be terminated under this Act.

(g) “Committee” means a committee constituted at the district level under the proviso to clause (b) of section 4 read Rule 3.

## **Review :-**

(1) The owner of a place, who is aggrieved by an order made under rule 7, may make an application for review of the order to the Government within a period of sixty days from the date of such order:

Provided that the Government may condone any delay in case it is satisfied that applicant was prevented by sufficient cause to make application within time.

(2) The Government may, after giving the owner an opportunity of being heard, confirm, modify or reverse the order.

## **The Pre-Natal Diagnostic Techniques (PNDT) Act and Rules**

### **Introduction**

The Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994, was enacted and brought into operation from 1st January, 1996, in order to check female foeticide. Rules have also been framed under the Act. The Act prohibits determination and disclosure of the sex of foetus . It also prohibits any advertisements relating to pre-natal determination of sex and prescribes punishment for its contravention. The person who contravenes the provisions of this Act is punishable with imprisonment and fine.

Recently, PNDT Act and Rules have been amended keeping in view the emerging technologies for selection of sex before and after conception and problems faced in the working of implementation of the ACT and certain directions of Hon'ble Supreme Court after a PIL was filed in May, 2000 by CEHAT and Ors, an NGO on slow implementation of the Act. These amendments have come into operation with effect from 14th February, 2003

- The PNDT (PRINCIPAL) ACT 1994
- The PNDT (PRINCIPAL) RULES 1996
- The PNDT Advisory Committee Rules, 1996
- The PNDT Amendment Act, 2002
- The PNDT Amendment Rule, 2003

### **Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994**

An Act to provide for the regulation of the use of pre-natal diagnostic techniques for the purpose of detecting genetic or metabolic disorders or chromosomal abnormalities or certain congenital malformations or sex linked disorders and for the prevention of the misuse of such techniques for the purpose of pre-natal sex determination leading to female foeticide; and, for matters connected there with or incidental thereto.

BE it enacted by Parliament in the Forty-fifth Year of the Republic of India as follows:--

**Short title, extent and commencement.-**

(1) This Act may be called the Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994.

(2) It shall extend to the whole of India except the State of Jammu and Kashmir.

(3) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

**Definitions.-** In this Act, unless the context otherwise requires,--

(a) "Appropriate Authority" means the Appropriate Authority appointed under section 17;

(b) "Board" means the Central Supervisory Board constituted under section 7;

(c) "Genetic Counseling Centre" means an institute, hospital, nursing home or any place, by whatever name called, which provides for genetic counselling to patients;

(d) "Genetic Clinic" means a clinic, institute, hospital, nursing home or any place, by whatever name called, which is used for conducting pre-natal diagnostic procedures;

(e) "Genetic Laboratory" means a laboratory and includes a place where facilities are provided for conducting analysis or tests of samples received from Genetic Clinic for pre-natal diagnostic test;

(f) "Gynecologist" means a person who possesses a post- graduate qualification in gynecology and obstetrics;

(g) "Medical geneticist" means a person who possesses a degree or diploma or certificate in medical genetics in the field of pre-natal diagnostic techniques or has experience of not less than two years in such field after obtaining--

(i) any one of the medical qualifications recognised under the Indian Medical Council Act, 1956 (102 of 1956); or

(ii) a post-graduate degree in biological sciences;

(h) "Pediatrician" means a person who possesses a post- graduate qualification in pediatrics;

(i) "pre-natal diagnostic procedures" means all gynecological or obstetrical or medical procedures such as ultrasonography foetoscopy, taking or removing samples of amniotic fluid, chorionic villi, blood or any tissue of a pregnant woman for being sent to a Genetic Laboratory or Genetic Clinic for conducting pre-natal diagnostic test;

(j) "pre-natal diagnostic techniques" includes all pre-natal diagnostic procedures and pre-natal diagnostic tests;

(k) "pre-natal diagnostic test" means ultrasonography or any test or analysis of amniotic fluid, chorionic villi, blood or any tissue of a pregnant woman conducted to detect genetic or metabolic disorders or chromosomal abnormalities or congenital anomalies or haemoglobinopathies or sex-linked diseases;

(l) "prescribed" means prescribed by rules made under this Act;

(m) "registered medical practitioner" means a medical practitioner who possesses any recognised medical qualification as defined in clause (h) of section 2 of the Indian Medical Council Act, 1956, (102 of 1956.) and whose name has been entered in a State Medical Register;

(n) "regulations" means regulations framed by the Board under this Act.

## **CHAPTER II - REGULATION OF GENETIC COUNSELLING CENTRES, GENETIC LABORATORIES AND GENETIC CLINICS**

Regulation of Genetic Counselling Centres, Genetic Laboratories and Genetic Clinics.- On and from the commencement of this Act,--

(1) no Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic unless registered under this Act, shall conduct or associate with, or help in, conducting activities relating to pre-natal diagnostic techniques;

(2) no Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic shall employ or cause to be employed any person who does not possess the prescribed qualifications;

(3) no medical geneticist, gynaecologist, paediatrician, registered medical practitioner or any other person shall conduct or cause to be conducted or aid in conducting by himself or through any other person, any pre-natal diagnostic techniques at a place other than a

## **CHAPTER III - REGULATION OF PRE-NATAL DIAGNOSTIC TECHNIQUES**

Regulation of pre-natal diagnostic techniques.- On and from the commencement of this Act,--



(1) no place including a registered Genetic Counselling Centre or Genetic Laboratory or Genetic Clinic shall be used or caused to be used by any person for conducting pre-natal diagnostic techniques except for the purposes specified in clause (2) and after satisfying any of the conditions specified in clause (3);

(2) no pre-natal diagnostic techniques shall be conducted except for the purposes of detection of any of the following abnormalities, namely:--

- (i) chromosomal abnormalities;
- (ii) genetic metabolic diseases;
- (iii) haemoglobinopathies;
- (iv) sex-linked genetic diseases;
- (v) congenital anomalies;
- (vi) any other abnormalities or diseases as may be specified by the Central Supervisory Board;

(3) no pre-natal diagnostic techniques shall be used or conducted unless the person qualified to do so is satisfied that any of the following conditions are fulfilled, namely:--

- (i) age of the pregnant woman is above thirty-five years;
- (ii) the pregnant woman has undergone of two or more spontaneous abortions or foetal loss;
- (iii) the pregnant woman had been exposed to potentially teratogenic agents such as drugs, radiation, infection or chemicals;
- (iv) the pregnant woman has a family history of mental retardation or physical deformities such as spasticity or any other genetic disease;
- (v) any other condition as may be specified by the Central Supervisory Board;

(4) no person, being a relative or the husband of the pregnant woman shall seek or encourage the conduct of any pre-natal diagnostic techniques on her except for the purpose specified in clause (2).

(5) Written consent of pregnant woman and prohibition of communicating the sex of foetus.

(1) No person referred to in clause (2) of section 3 shall conduct the pre-natal diagnostic procedures unless—

(a) he has explained all known side and after effects of such procedures to the pregnant woman concerned;

(b) he has obtained in the prescribed form her written consent to undergo such procedures in the language which she understands; and

(c) a copy of her written consent obtained under clause (b) is given to the pregnant woman.

(2) No person conducting pre-natal diagnostic procedures shall communicate to the pregnant woman concerned or her relatives the sex of the foetus by words, signs or in any other manner.

(6) Determination of sex prohibited.- On and from the commencement of this Act,--

(a) no Genetic Counselling Centre or Genetic Laboratory or Genetic Clinic shall conduct or cause to be conducted in its Centre, Laboratory or Clinic, pre-natal diagnostic techniques including ultrasonography, for the purpose of determining the sex of a foetus;

(b) no person shall conduct or cause to be conducted any pre-natal diagnostic techniques including ultrasonography for the purpose of determining the sex of a foetus.

## **CHAPTER VI - REGISTRATION OF GENETIC COUNSELLING CENTRES, GENETIC LABORATORIES AND GENETIC CLINICS**

### **Registration of Genetic Counselling Centres, Genetic Laboratories or Genetic Clinics.**

(1) No person shall open any Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic after the commencement of this Act unless such Centre, Laboratory or Clinic is duly registered separately or jointly under this Act.

(2) Every application for registration under sub-section (1), shall be made to the Appropriate Authority in such form and in such manner and shall be accompanied by such fees as may be prescribed.

(3) Every Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic engaged, either partly or exclusively, in counselling or conducting pre-natal diagnostic techniques for any of the purposes mentioned in section 4, immediately before the commencement of this Act, shall apply for registration within sixty days from the date of such commencement.

(4) Subject to the provisions of section 6, every Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic engaged in counselling or conducting pre-natal diagnostic techniques shall cease to

conduct any such counselling or technique on the expiry of six months from the date of commencement of this Act unless such Centre, Laboratory or Clinic has applied for registration and is so registered separately or jointly or till such application is disposed of, whichever is earlier.

(5) No Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic shall be registered under this Act unless the Appropriate Authority is satisfied that such Centre, Laboratory or Clinic is in a position to provide such facilities, maintain such equipment and standards as may be prescribed.

#### **Certificate of registration.-**

(1) The Appropriate Authority shall, after holding an inquiry and after satisfying itself that the applicant has complied with all the requirements of this Act and the rules made thereunder and having regard to the advice of the Advisory Committee in this behalf, grant a certificate of registration in the prescribed form jointly or separately to the Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic, as the case may be.

(2) If, after the inquiry and after giving an opportunity of being heard to the applicant and having regard to the advice of the Advisory Committee, the Appropriate Authority is satisfied that the applicant has not complied with the requirements of this Act or the rules, it shall, for reasons to be recorded in writing, reject the application for registration.

(3) Every certificate of registration shall be renewed in such manner and after such period and on payment of such fees as may be prescribed.

(4) The certificate of registration shall be displayed by the registered Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic in a conspicuous place at its place of business.

#### **Cancellation or suspension of registration.-**

(1) The Appropriate Authority may suo moto, or on complaint, issue a notice to the Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic to show cause why its registration should not be suspended or cancelled for the reasons mentioned in the notice.

(2) If, after giving a reasonable opportunity of being heard to the Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic and having regard to the advice of the Advisory Committee, the Appropriate Authority is satisfied that there has been a breach of the provisions of this Act or the rules, it may, without prejudice to any criminal action that it may take against such Centre, Laboratory or Clinic, suspend its registration for such period as it may think fit or cancel its registration, as the case may be.

(3) Notwithstanding anything contained in sub-sections (1) and (2), if the Appropriate Authority is, of the opinion that it is necessary or expedient so to do in the public interest, it may, for reasons to

be recorded in writing, suspend the registration of any Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic without issuing any such notice referred to in sub-section (1).

**Appeal.** The Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic may, within thirty days from the date of receipt of the order of suspension or cancellation of registration passed by the Appropriate Authority under section 20, prefer an appeal against such order to—

(i) the Central Government, where the appeal is against the order of the Central Appropriate Authority; and

(ii) the State Government, where the appeal is against the order of the State Appropriate Authority, in the prescribed manner.

## **CHAPTER VII - OFFENCES AND PENALTIES**

### **Prohibition of advertisement relating to pre-natal determination of sex and punishment for contravention.-**

(1) No person, organisation, Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic shall issue or cause to be issued any advertisement in any manner regarding facilities of pre-natal determination of sex available at such Centre, Laboratory, Clinic or any other place.

(2) No person or organisation shall publish or distribute or cause to be published or distributed any advertisement in any manner regarding facilities of pre-natal determination of sex available at any Genetic Counselling Centre, Genetic Laboratory, Genetic Clinic or any other place.

(3) Any person who contravenes the provisions of sub-section (1) or sub-section (2) shall be punishable with imprisonment for a term which may extend to three years and with fine which may extend to ten thousand rupees.

**Explanation.**--For the purposes of this section, "advertisement" includes any notice, circular, label wrapper or other document and also includes any visible representation made by means of any light, sound, smoke or gas.

### **Offences and penalties.-**

(1) Any medical geneticist, gynaecologist, registered medical practitioner or any person who owns a Genetic Counselling Centre, a Genetic Laboratory or a Genetic Clinic or is employed in such a Centre, Laboratory or Clinic and renders his professional or technical services to or at such a Centre, Laboratory or Clinic, whether on an honorary basis or otherwise, and who contravenes any of the provisions of this Act or rules made thereunder shall be punishable with imprisonment for a term which may extend to three years and with fine which may extend to ten thousand rupees and

on any subsequent conviction, with imprisonment which may extend to five years and with fine which may extend to fifty thousand rupees.

(2) The name of the registered medical practitioner who has been convicted by the court under sub-section (1), shall be reported by the Appropriate Authority to the respective State Medical Council for taking necessary action including the removal of his name from the register of the Council for a period of two years for the first offence and permanently for the subsequent offence.

(3) Any person who seeks the aid of a Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic or of a medical geneticist, gynaecologist or registered medical practitioner for conducting pre- natal diagnostic techniques on any pregnant woman (including such woman unless she was compelled to undergo such diagnostic techniques) for purposes other than those specified in clause (2) of section 4, shall, be punishable with imprisonment for a term which may extend to three years and with fine which may extend to ten thousand rupees and on any subsequent conviction with imprisonment which may extend to five years and with fine which may extend to fifty thousand rupees.

**Presumption in the case of conduct of pre-natal diagnostic techniques.-** Notwithstanding anything in the Indian Evidence Act, 1872 (1 of 1872), the court shall presume unless the contrary is proved that the pregnant woman has been compelled by her husband or the relative to undergo pre-natal diagnostic technique and such person shall be liable for abetment of offence under sub-section (3) of section 23 and shall be punishable for the offence specified under that section.

**Penalty for contravention of the provisions of the Act or rules for which no specific punishment is provided.-** Whoever contravenes any of the provisions of this Act or any rules made thereunder, for which no penalty has been elsewhere provided in this Act, shall be punishable with imprisonment for a term which may extend to three months or with fine, which may extend to one thousand rupees or with both and in the case of continuing contravention with an additional fine which may extend to five hundred rupees for every day during which such contravention continues after conviction for the first such contravention.

#### **Offences by companies.-**

(1) Where any offence, punishable under this Act has been committed by a company, every person who, at the time the offence was committed was in charge of, and was responsible to the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable to any punishment, if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where any offence punishable under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

**Explanation.**--For the purposes of this section,--

(a) "company" means any body corporate and includes a firm or other association of individuals, and

(b) "director", in relation to a firm, means a partner in the firm.

**Offence to be cognizable, non-bailable and non-compoundable.**--Every offence under this Act shall be cognizable, non-bailable and non-compoundable.

**Cognizance of offences.**

(1) No court shall take cognizance of an offence under this Act except on a complaint made by--

(a) the Appropriate Authority concerned, or any officer authorised in this behalf by the Central Government or State Government, as the case may be, or the Appropriate Authority; or

(b) a person who has given notice of not less than thirty days in the manner prescribed, to the Appropriate Authority, of the alleged offence and of his intention to make a complaint to the court.

**Explanation.**--For the purpose of this clause, "person" includes a social organisation.

(2) No court other than that of a Metropolitan Magistrate or a Judicial Magistrate of the first class shall try any offence punishable under this Act.

(3) Where a complaint has been made under clause (b) of subsection (1), the court may, on demand by such person, direct the Appropriate Authority to make available copies of the relevant records in its possession to such person.

## **CHAPTER VIII - MISCELLANEOUS**

**Maintenance of records.**

(1) All records, charts, forms, reports, consent letters and all other documents required to be maintained under this Act and the rules shall be preserved for a period of two years or for such period as may be prescribed:

Provided that, if any criminal or other proceedings are instituted against any Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic, the records and all other documents of such Centre, Laboratory or Clinic shall be preserved till the final disposal of such proceedings.

(2) All such records shall, at all reasonable times, be made available for inspection to the Appropriate Authority or to any other person authorised by the Appropriate Authority in this behalf.

**Power to search and seize records, -**

(1) If the Appropriate Authority has reason to believe that an offence under this Act has been or is being committed at any Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic, such Authority or any officer authorised thereof in this behalf may, subject to such rules as may be prescribed, enter and search at all reasonable times with such assistance, if any, as such authority or officer considers necessary, such Genetic Counselling Centre, Genetic Laboratory or Genetic Clinic and examine any record, register, document, book, pamphlet, advertisement or any other material object found therein and seize the same if such Authority or officer has reason to believe that it may furnish evidence of the commission of an offence punishable under this Act.

(2) The provisions of the Code of Criminal Procedure, 1973 (2 of 1974) relating to searches and seizures shall, so far as may be, apply to every search or seizure made under this Act.

**Protection of action taken in good faith.-** No suit, prosecution or other legal proceeding shall lie against the Central or the State Government or the Appropriate Authority or any officer authorised by the Central or State Government or by the Authority for anything which is in good faith done or intended to be done in pursuance of the provisions of this Act.

**SCHEDULE I - REQUIREMENTS FOR REGISTRATION OF A GENETIC COUNSELLING CENTRE**

[See Rule 3 (1)]

**A.PLACE**

A room with an area of seven (7) square meters.

**B.EQUIPMENT**

Educational charts/models.

**C.EMPLOYEES**

Any one of the following-

- (1) Medical Geneticist.
- (2) Gynaecologist with 6 months' experience, in genetic counseling, or having completed 4 weeks' training in genetic counseling.
- (3) Paediatrician with 6 months' experience in genetic counseling, or having completed 4 weeks' training in genetic counseling.

**SCHEDULE II - REQUIREMENTS FOR REGISTRATION OF A GENETIC LABORATORY**  
[See Rule 3(1)]

**A.PLACE**

A room with adequate space for carrying out tests.

**B.EQUIPMENT**

These are categorized separately for each of the under-mentioned studies.

***Chromosomal studies:***

- (1) Laminar flow-hood with ultraviolet and fluorescent light or other suitable culture hood.
- (2) Photo-microscope with fluorescent source of light.
- (3) Inverted microscope.
- (4) Incubator and oven.
- (5) Carbon-dioxide incubator or closed system with 5% CO<sub>2</sub> atmosphere.
- (6) Autoclave.
- (7) Refrigerator.
- (8) Water bath.
- (9) Centrifuge.
- (10) Vortex mixer.
- (11) Magnetic stirrer.
- (12) PH meter.
- (13) A sensitive balance (preferable electronic) with sensitivity of 0.1 milligram.



(14) Double distillation apparatus (glass).

**Biochemical studies:** (requirements according to tests to be carried out)

(1) Laminar flow-hood with ultraviolet and fluorescent light or other suitable culture hood.

(2) Inverted microscope.

(3) Incubator and oven.

(4) Carbon-dioxide incubator or closed system with 5% CO<sub>2</sub> atmosphere.

(5) Autoclave.

(6) Refrigerator.

(7) Water bath.

(8) Centrifuge.

(9) Electrophoresis apparatus and power supply.

(10) Chromatography chamber.

(11) Spectro-photometer and Elisa reader or Radio-immunoassay system (with gamma betacounter) or fluorometer for various biochemical test.

(12) Vortex mixer.

(13) Magnetic stirrer.

(14) PH meter.

(15) A sensitive balance (preferable electronic) with sensitivity of 0.1 milligram.

(16) Double distillation apparatus (glass).

(17) Liquid nitrogen tank.

**Molecular studies:**

(1) Inverted microscope.

(2) Incubator.

- (3) Oven.
- (4) Autoclave.
- (5) Refrigerators (4 degree and minus 20 degree Centigrade).
- (6) Water bath.
- (7) Microcentrifuge.
- (8) Electrophoresis apparatus and power supply.
- (9) Vortex mixer.
- (10) Magnetic stirrer.
- (11) PH meter.
- (12) A sensitive balance (preferable electronic) with sensitivity of 0.1 milligram.
- (13) Double distillation apparatus (glass).
- (14) P.C.R. machine.
- (15) Refrigerated centrifuge.
- (16) U.V. Illuminator with photographic attachment or other documentation system.
- (17) Precision micropipettes.

#### C.EMPLOYEES

- (1) A Medical Geneticist.
- (2) A laboratory technician having a B.Sc. degree in Biological Sciences or a degree or a diploma in medical laboratory course with at least one year's experience in conducting appropriate pre-natal diagnostic tests.

### **SCHEDULE III - REQUIREMENTS FOR REGISTRATION OF A GENETIC CLINIC**

[See Rule 3(1)]

#### A.PLACE

A room with an area of twenty (20) square metres with appropriate aseptic arrangements.

## B.EQUIPMENT

(1) Equipment and accessories necessary for carrying out clinical examination by an obstetrician/gynaecologist.

(2) Equipment, accessories necessary for other facilities required for operations envisaged in the Act.

(a) An ultra-sonography machine.\*

(b) Appropriate catheters and equipment for carrying out chorionic villi aspirations per vagina or per abdomen.\*

(c) Appropriate sterile needles for amniocentesis or cordocentesis.\*

(d) A suitable foetoscope with appropriate accessories for foetoscopy, foetal skin or organ biopsy or foetal blood sampling shall be optional.

\* These constitute the minimum requirement of equipment for conducting the relevant procedure)

(3) Equipment for dry and wet sterilization.

(4) Equipment for carrying out emergency procedures such as evacuation of uterus or resuscitation in case of need.

## C.EMPLOYEES

(1) A gynaecologist with adequate experience in pre-natal diagnostic procedures (should have performed at least 20 procedures under supervision of a gynaecologist experienced in the procedure which is going to be carried out, for example chorionic villi biopsy, amniocentesis, cordocentesis and others indicated at B above).

(2) A Radiologist or Registered Medical Practitioner for carrying out ultrasonography. The required experience shall be 100 cases under supervision of a similarly qualified person

### **Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Amendment Act, 2002**

No. 14 of 2003 [17th January, 2003]

#### ***Introduction***

An Act further to amend the Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994.

BE it enacted by Parliament in the Fifty-third year of the Republic of India as follows:-

***Short title and commencement***

(1) This Act may be called the Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Amendment Act, 2002.

(2) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

***Substitution of long title***

In the Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 (hereinafter referred to as the principal Act), for the long title, the following long title shall be substituted, namely:-

"An Act to provide for the prohibition of sex selection, before or after conception, and for regulation of pre-natal diagnostic techniques for the purposes of detecting genetic abnormalities or metabolic disorders or chromosomal abnormalities or certain congenital malformations or sex-linked disorders and for the prevention of their misuse for sex determination leading to female foeticide and for matters connected therewith or incidental thereto."

**Amendment of section 1**

In section 1 of the principal Act, in sub-section (1), for the words and brackets "the Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse)", the words and brackets "the Pre-conception and Pre-natal Diagnostic Techniques (Prohibition of Sex Selection)" shall be substituted.

**Amendment of section 2**

In section 2 of the principal Act, -

(i) after clause (b), the following clauses shall be inserted, namely:-

“(ba) “conceptus” means any product of conception at any stage of development from fertilisation until birth including extra embryonic membranes as well as the embryo or foetus;

(bb) “embryo” means a developing human organism after fertilisation till the end of eight weeks (fifty-six days);

(bc) “foetus” means a human organism during the period of its development beginning on the fifty-seventh day following fertilisation or creation (excluding any time in which its development has been suspended) and ending at the birth;’

(ii) in clause(d), the following Explanation shall be added, namely:-

**‘Explanation** – For the purpose of this clause, “Genetic Clinic” includes a vehicle, where ultrasound machine or imaging machine or scanner or other equipment capable of determining sex of the foetus or a portable equipment which has the potential for detection of sex during pregnancy or selection of sex before conception, is used;’;

(iii) in clause (e), the following Explanation shall be added, namely:-

**‘Explanation:-** For the purposes of this clause “Genetic Laboratory” includes a place where ultrasound machine or imaging machine or scanner or other equipment capable of determining sex of the foetus or a portable equipment which has the potential for detection of sex during pregnancy or selection of sex before conception, is used;’;

(iv) for clause(g), the following clause shall be substituted, namely:-

‘(g) “medical geneticist” includes a person who possesses a degree or diploma in genetic science in the fields of sex selection and pre-natal diagnostic techniques or has experience of not less than two years in any of these fields after obtaining –

(i) any one of the medical qualifications recognised under the Indian Medical Council Act, 1956; or

(ii) a post-graduate degree in biological sciences;’;

(v) for clause (i), the following clause shall be substituted, namely:-

‘(i) “pre-natal diagnostic procedures” means all gynaecological or obstetrical or medical procedures such as ultrasonography, foetoscopy, taking or removing samples of amniotic fluid, chorionic villi, embryo, blood or any other tissue or fluid of a man, or of a woman before or after conception, for being sent to a Genetic Laboratory or Genetic Clinic for conducting any type of analysis or pre-natal diagnostic tests for selection of sex before or after conception;’;

(vi) for clause (k), the following clause shall be substituted, namely:-

‘(k) “pre-natal diagnostic test” means ultrasonography or any test or analysis of amniotic fluid, chorionic villi, blood or any tissue or fluid of a pregnant woman or conceptus conducted to detect genetic or metabolic disorders or chromosomal abnormalities or congenital anomalies or haemoglobinopathies or sex-linked diseases;’;

(vii) after clause (n), the following clauses shall be inserted, namely:-

‘(o) “sex selection” includes any procedure, technique, test or administration or prescription or provision of anything for the purpose of ensuring or increasing the probability that an embryo will be of a particular sex;

(p) “sonologist or imaging specialist” means a person who possesses any one of the medical qualifications recognised under the Indian Medical Council Act, 1956 or who possesses a post-graduate qualification in ultrasonography or imaging techniques or radiology ;

(q) “State Board” means a State Supervisory Board or a Union territory Supervisory Board constituted under section 16 A;

(r) “State Government” in relation to Union territory with Legislature means the Administrator of that Union territory appointed by the President under article 239 of the Constitution.’.

### **Amendment of section 3**

In section 3 of the principal Act, for clause (2), the following clause shall be substituted, namely: -

“(2) no Genetic Counselling Center or Genetic Laboratory or Genetic Clinic shall employ or cause to be employed or take services of any person, whether on honorary basis or on payment who does not possess the qualifications as may be prescribed.”.

### **Prohibition of sex-selection.**

“3A. No person, including a specialist or a team of specialists in the field of infertility, shall conduct or cause to be conducted or aid in conducting by himself or by any other person, sex selection on a woman or a man or on both or on any tissue, embryo, conceptus, fluid or gametes derived from either or both of them.

### **Prohibition on sale of ultrasound machine etc. to persons, laboratories, clinics etc. not registered under the Act.**

3B. No person shall sell any ultrasound machine or imaging machine or scanner or any other equipment capable of detecting sex of foetus to any Genetic Counselling Centre, Genetic Laboratory, Genetic Clinic or any other person not registered under the Act.”.

### **Amendment of section 4**

In section 4 of the principal Act, for clauses (3) and (4), the following clauses shall be substituted, namely:-

“(3) no pre-natal diagnostic techniques shall be used or conducted unless the person qualified to do so is satisfied for reasons to be recorded in writing that any of the following conditions are fulfilled namely:-

- (i) age of the pregnant woman is above thirty-five years,
- (ii) the pregnant woman has undergone two or more spontaneous abortions or foetal loss;
- (iii) the pregnant woman had been exposed to potentially teratogenic agents such as, drugs, radiation, infection or chemicals;
- (iv) the pregnant woman or her spouse has a family history of mental retardation or physical deformities such as, spasticity or any other genetic disease;
- (v) any other condition as may be specified by the Board:

Provided that the person conducting ultrasonography on a pregnant woman shall keep complete record thereof in the clinic in such manner, as may be prescribed, and any deficiency or inaccuracy found therein shall amount to contravention of the provisions of section 5 or section 6 unless contrary is proved by the person conducting such ultrasonography;

(4) no person including a relative or husband of the pregnant woman shall seek or encourage the conduct of any pre-natal diagnostic techniques on her except for the purposes specified in clause (2);

(5) no person including a relative or husband of a woman shall seek or encourage the conduct of any sex-selection technique on her or him or both.”.

#### **Amendment of section 5**

In section 5 of the principal Act, for sub-section (2), the following sub-section shall be substituted, namely:-

“(2) No person including the person conducting pre-natal diagnostic procedures shall communicate to the pregnant woman concerned or her relatives or any other person the sex of the foetus by words, signs, or in any other manner.”.

#### **Amendment of section 6**

In section 6 of the principal Act, after clause (b), the following clause shall be inserted, namely :-

“(c) no person shall, by whatever means, cause or allow to be caused selection of sex before or after conception”.

#### **Amendment of Section 7**

In section 7 of the principal Act,-

(i) in sub-section (2), for clause (c), the following clause shall be substituted, namely:-

“(c) three members to be appointed by the Central Government to represent the Ministeries of Central Government in charge of Women and Child Development, Department of Legal Affairs or Legislative Department in the Ministry of Law, Justice, and Indian System of Medicine and Homeopathy, ex officio;”;

(ii) in clause (e), for sub-clause (ii), the following sub-clause shall be substituted, namely:-

(iii) "eminent gynaecologist and obstetrician or expert of stri-roga or prasuti-tantra."

#### **Amendment of section 14**

In section 14 of the principal Act, for clause (f), the following clause shall be substituted, namely:-

“(f) has, in the opinion of the Central Government, been associated with the use or promotion of pre-natal diagnostic technique for determination of sex or with any sex selection technique.”.

#### **Amendment of section 15**

In section 15 of the principal Act, the following proviso shall be inserted, namely: -

“Provided that no member other than an ex-officio member shall be appointed for more than two consecutive terms.”.

#### **Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse)**

#### **Amendment Rules, 2003**

##### ***Description***

G.S.R.109(E).- In exercise of the powers conferred by section 32 of the Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 (57 of 1994), the Central Government hereby makes the following amendments to the Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Rules, 1996.



## **DECLARATON OF DOCTOR/PERSON CONDUCTING ULTRASONOGRAPHY/IMAGE SCANNING**

I, \_\_\_\_\_ (name of the person conducting ultrasonography/image scanning) declare that while conducting ultrasonography/image scanning on Ms. \_\_\_\_\_ (name of the pregnant woman), I have neither detected nor disclosed the sex of her foetus to any body in any manner.

Name and signature of the person conducting ultrasonography/image scanning/

Director or owner of genetic clinic/ultrasound clinic/imaging centre.

### **Important Note:**

(i) Ultrasound is not indicated/advised/performed to determine the sex of foetus except for diagnosis of sex-linked diseases such as Duchenne Muscular Dystrophy, Haemophilia A & B etc.

(ii) During pregnancy Ultrasonography should only be performed when indicated. The following is the representative list of indications for ultrasound during pregnancy.

(1) To diagnose intra-uterine and/or ectopic pregnancy and confirm viability.

(2) Estimation of gestational age (dating).

(3) Detection of number of foetuses and their chorionicity.

(4) Suspected pregnancy with IUCD in-situ or suspected pregnancy following contraceptive failure/MTP failure.

(5) Vaginal bleeding / leaking.

(6) Follow-up of cases of abortion.

(7) Assessment of cervical canal and diameter of internal os.

(8) Discrepancy between uterine size and period of amenorrhoea.

(9) Any suspected adenexal or uterine pathology / abnormality.

(10) Detection of chromosomal abnormalities, foetal structural defects and other abnormalities and their follow-up.

(11) To evaluate foetal presentation and position.

(12) Assessment of liquor amnii.

(13) Preterm labour / preterm premature rupture of membranes.

(14) Evaluation of placental position, thickness, grading and abnormalities (placenta praevia, retroplacental haemorrhage, abnormal adherence etc.).

(15) Evaluation of umbilical cord – presentation, insertion, nuchal encirclement, number of vessels and presence of true knot.

(16) Evaluation of previous Caesarean Section scars.

(17) Evaluation of foetal growth parameters, foetal weight and foetal well being.

(18) Colour flow mapping and duplex Doppler studies.

(19) Ultrasound guided procedures such as medical termination of pregnancy, external cephalic version etc. and their follow-up.

(20) Adjunct to diagnostic and therapeutic invasive interventions such as chorionic villus sampling (CVS), amniocenteses, foetal blood sampling, foetal skin biopsy, amnio-infusion, intrauterine infusion, placement of shunts etc.

(21) Observation of intra-partum events.

(22) Medical/surgical conditions complicating pregnancy.

(23) Research/scientific studies in recognised institutions.

Person conducting ultrasonography on a pregnant women shall keep complete record thereof in the clinic/centre in Form – F and any deficiency or inaccuracy found therein shall amount to contravention of provisions of section 5 or section 6 of the Act, unless contrary is proved by the person conducting such ultrasonography.

#### **FORM G**

[See Rule 10]

#### **FORM OF CONSENT**

(For invasive techniques)

I, ..... wife/daughter of ..... Age ..... years residing at ..... hereby state that I have been explained fully the probable side effects and after effects of the pre-natal diagnostic procedures.

I wish to undergo the preimplantation/pre-natal diagnostic technique/test/procedures in my own interest to find out the possibility of any abnormality (i.e. disease/deformity/disorder) in the child I am carrying.

I undertake not to terminate the pregnancy if the pre-natal procedure/technique/test conducted show the absence of disease/deformity/disorder.

I understand that the sex of the foetus will not be disclosed to me.

I understand that breach of this undertaking will make me liable to penalty as prescribed in the Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 (57 of 1994) and rules framed thereunder.

Date ..... Signature of the pregnant woman.

Place .....

I have explained the contents of the above to the patient and her companion (Name ..... Address ..... Relationship ..... ) in a language she/they understand.

Name, Signature and/Registration number of  
Gynaecologist/Medical Geneticist/Radiologist/Paediatrician/  
Director of the Clinic/Centre/Laboratory

**Date ,Name,Address and Registration number of Genetic Clinic/Institute**

**SEAL**

**Rehabilitation Council Act of India Act 1992**

No. 34 of 1992

(1st September, 1992)

An Act to provide for the constitution of Rehabilitation Council of India for regulating the training of rehabilitation professionals and the maintenance of a Central Rehabilitation Register and for Matters connected therewith or incidental thereto.

Be it enacted by Parliament in the Forty-third Year of the Republic of India as follows:-

## **CHAPTER I - Preliminary**

### ***Short title and Commencement***

This Act may be called the Rehabilitation Council of India Act,1992 It shall come into force on such date as the Central

### ***Definition***

**In this Act, unless the context otherwise requires,-**

1. "Chairperson" means the Chairperson of the Council appointed under sub-section (3) section 3;
2. "Council" means the Rehabilitation Council of India constituted under section 3;
3. "handicapped" means a person-
  - \* visually handicapped;
  - \* hearing handicapped ;
  - \* suffering from locomotor disability; or
  - \* suffering from mental retardation;
4. "hearing handicapped" means with hearing impairment of 70 decibels and above, in better ear or total loss of hearing in both ears;
5. "locomotor disability" means a person's inability to execute distinctive activities associated with moving, both himself and objects from place to place and such inability resulting from affliction of either bones joints muscles or nerves;
6. "member" means a member appointed under sub-section (3) of section 3 and includes the Chairperson;
7. "Member-Secretary" means the Member-Secretary appointed under sub-section (1) of section 8;

8. "mental retardation" means a condition of arrested or incomplete development of mind of person which is specially characterized by sub-normality of intelligence;

9. "notification means" a notification published in the Official Gazette;

10. "prescribed" means prescribed by regulation;

11. "recognized rehabilitation qualifications" means any of the qualifications included in the Schedule;

12. "Register" means the Central Rehabilitation Register maintained under sub-section (1) of section 23;

13. "regulation" means regulation made under the Act; "rehabilitation professional" means-

1. audiologists and speech therapists; clinical psychologists;
2. hearing aid and ear mould technicians;
3. rehabilitation engineers and technicians;
4. special teachers for educating and training the handicapped;
5. vocational counselors, employment officers and placement officers dealing with handicapped;
6. multi-purpose rehabilitation therapists, technicians; or
7. such other category of professionals as the Central Government may, in consultation with the Council, notify from time to time;

14. "visually handicapped" means a persons who suffers from any of the following conditions namely -

1. total absence of sight;
2. visual acuity not exceeding 6/60 or 20/200(snellen) in the better eye with the correcting lenses; or
3. limitation of the field of vision subtending and angle of degree or worse.

Any reference in this Act to any enactment or any provision thereof shall, in relation to an area in which such enactment or such provision is not in force, be construed as a reference to the corresponding law or the relevant provision of the corresponding law is any in force is that area.

## **CHAPTER II - The Rehabilitation Council of India**

### **Constitution and incorporation of Rehabilitation Council of India**

With effect from such date as the Central Government may, by notification, appoint in this behalf, there shall be constituted for the purposes of this Act a Council to be called the Rehabilitation Council of India.

The Council shall be a body corporate by the name aforesaid, having perpetual succession and a common seal, with power, subject to the provisions of this Act, to acquire, hold and dispose of property both movable and immovable and to contract and shall by the said name sue and be sued

**The Council shall consist of the following members, namely:-**

1. a Chairperson, from amongst the persons having experience in social work or rehabilitation, to be appointed by the Central Govt.;

2. three members to be appointed by the Central Government to represent respectively the Ministers of the Central Government dealing with -

- \* Welfare
- \* Health and
- \* Finance

3. one member to be appointed by the Central Government to represent the University Grants Commission;

4. one member to be appointed by the Central Government to represent the Directors General of Indian Council of Medical Research;

5. two members to be appointed by the Central Government to represent the Ministry or department of the States or the Union territories dealing with Social Welfare by rotation in alphabetical order.

6. such number of members not exceeding six as many be appointed by the Central Government from amongst the rehabilitation professionals representatives working in voluntary organization;

7. such number of members not exceeding six as many be appointed by the Central Government from amongst the medical practitioners enrolled under the Indian Medical Council Act 1956 and engaged in rehabilitation of the handicapped;

8. Three members of Parliament of whom two shall be elected by the house of the People and one by the Council of States;

1. such number of members not exceeding three as may be nominated by the Central Government from amongst the social workers who are actively engaged in assisting the disabled;

2. The Members-Secretary ex-officio

9. The office of member of the board all not disqualify its holder for being chosen as, or for being a Member of either House of Parliament

**Persons with Disabilities (Equal Opportunities, protection of Rights and Full Participation), Act 1995**

**Preliminary**

1. This Act may be called the Persons With Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.
2. It extends to the whole of India except the State of Jammu and Kashmir.
3. It shall come into force on such date as the Central Government may, by notification, appoint.

In this Act, unless the context otherwise requires,

1. "appropriate Government" means,
  - i. in relation to the Central Government or any establishment wholly or substantially financed by that Government, or a Cantonment Board constituted under the Cantonment Act, 1924, the Central Government;
  - ii. in relation to a State Government or any establishment wholly or substantially financed by that Government, or any local authority, other than a Cantonment Board, the State Government;
  - iii. in respect of the Central Coordination Committee and the Central Executive Committee, the Central Government;
  - iv. in respect of the State Coordination Committee and the State Executive Committee, the State Government;
2. "blindness" refers to a condition where a person suffers from any of the following conditions, namely:-
  - i. total absence of sight; or
  - ii. visual acuity not exceeding 6/60 or 20/200 (snellen) in the better eye with correcting lenses; or
  - iii. Limitation of the field of vision subtending an angle of 20 degree or worse;

3. "Central Coordination Committee" means the Central Coordination Committee constituted under sub-section (1) of section 3;

4. "Central Executive Committee" means the Central Coordination Committee constituted under sub-section (1) of section 9;

5. "cerebral palsy" means a group of non-progressive conditions of a person characterised by abnormal motor control posture resulting from brain insult or injuries occurring in the pre-natal, peri-natal or infant period of development;

6. "Chief Commissioner" means the Chief Commissioner appointed under sub-section (1) of section 57;

7. "Commissioner" means the Commissioner appointed under sub-section (1) of section 60;

8. "competent authority" means the authority appointed under section 50;

9. "disability" means -

1. blindness;
2. low vision;
3. leprosy-cured;
4. hearing impairment;
5. locomotor disability;
6. mental retardation;
7. mental illness;

10. "employer" means,

- i. in relation to a Government, the authority notified by the Head of the Department in this behalf or where no such authority is notified, the Head of the Department; and
- ii. in relation to an establishment, the chief executive officer of that establishment;

11. "establishment" means a corporation established by or under a Central, Provincial or State Act, or an authority or a body owned or controlled or aided by the Government or a local authority or a Government company as defined in section 617 of the Companies Act, 1956 and includes Departments of a Government;

12. "hearing impairment" means loss of sixty decibels or more in the better ear in the conversational range of frequencies;

13. "institution for persons with disabilities" means an institution for the reception, care, protection, education, training, rehabilitation or any other service of persons with disabilities;



14. "leprosy cured person" means any person who has been cured of leprosy but is suffering from -

i. loss of sensation in hands or feet as well as loss of sensation and paresis in the eye and eye-lid but with no manifest deformity;

ii. manifest deformity and paresis but having sufficient mobility in their hands and feet to enable them to engage in normal economic activity;

iii. extreme physical deformity as well as advanced age which prevents him from undertaking any gainful occupation, and the expression "leprosy cured" shall be construed accordingly;

15. "locomotor disability" means disability of the bones, joints or muscles leading to substantial restriction of the movement of the limbs or any form of cerebral palsy;

16. "medical authority" means any hospital or institution specified for the purposes of this Act by notification by the appropriate Government;

17. "mental illness" means any mental disorder other than mental retardation;

18. "mental retardation" means a condition of arrested or incomplete development of mind of a person which is specially characterised by subnormality of intelligence;

19. "notification" means a notification published in the Official Gazette;

20. "person with disability" means a person suffering from not less than forty per cent of any disability as certified by a medical authority;

21. "person with low vision" means a person with impairment of visual functioning even after treatment or standard refractive correction but who uses or is potentially capable of using vision for the planning or execution of a task with appropriate assistive device;

22. "prescribed" means prescribed by rules made under this Act;

23. "rehabilitation" refers to a process aimed at enabling persons with disabilities to reach and maintain their optimal physical, sensory, intellectual, psychiatric or social functional levels;

24. "special Employment Exchange" means any office or place established and maintained by the Government for the collection and furnishing of information, either by keeping of registers or otherwise, respecting -

1. persons who seek to engage employees from amongst the persons suffering from disabilities;

2. persons with disability who seek employment;
3. vacancies to which person with disability seeking employment may be appointed;

25. "state Coordination Committee" means the State Coordination Committee constituted under sub-section (1) of section 13;

26. "state Executive Committee" means the State Executive Committee constituted under sub-section (1) of section 19.

### **National Policy for Persons with Disabilities**

Ministry of Social Justice and Empowerment  
Government of India  
No.3-1/1993-DD.III

#### **Introduction**

1. The Constitution of India ensures equality, freedom, justice and dignity of all individuals and implicitly mandates an inclusive society for all including persons with disabilities. In the recent years, there have been vast and positive changes in the perception of the society towards persons with disabilities. It has been realized that a majority of persons with disabilities can lead a better quality of life if they have equal opportunities and effective access to rehabilitation measures.

2. According to the Census 2001, there are 2.19 crore persons with disabilities in India who constitute 2.13 percent of the total population. This includes persons with visual, hearing, speech, locomotor and mental disabilities. Seventy five per cent of persons with disabilities live in rural areas, 49 per cent of disabled population is literate and only 34 per cent are employed. The earlier emphasis on medical rehabilitation has now been replaced by an emphasis on social rehabilitation. There has been an increasing recognition of abilities of persons with disabilities and emphasis on mainstreaming them in the society based on their capabilities. The Government of India has enacted three legislations for persons with disabilities viz.

(i) Persons with Disability (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, which provides for education, employment, creation of barrier free environment, social security, etc.

(ii) National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disability Act, 1999 has provisions for legal guardianship of the four categories and creation of enabling environment for as much independent living as possible.

(iii) Rehabilitation Council of India Act, 1992 deals with the development of manpower for providing rehabilitation services.

3. In addition to the legal framework, extensive infrastructure has been developed. The following seven national Institutes are working for development of manpower in different areas, namely:

- \* Institute for the Physically Handicapped, New Delhi.
- \* National Institute of Visually Handicapped, Dehradun
- \* National Institute for Orthopaedically Handicapped, Kolkata
- \* National Institute for Mentally Handicapped, Secunderabad.
- \* National Institute for Hearing Handicapped, Mumbai
- \* National Institute of Rehabilitation Training & Research, Cuttack.
- \* National Institute for Empowerment of Persons with Multiple Disabilities, Chennai.

4. There are five Composite Rehabilitation Centres, four Regional Rehabilitation Centres and 120 District Disability Rehabilitation Centres (DDRCs) providing various kinds of rehabilitation services to persons with disabilities. There are also several national institutions under the Ministry of Health & Family Welfare working in the field of rehabilitation, like National Institute of Mental Health and Neuro Sciences, Bangalore; All India Institute of Physical Medicine and Rehabilitation, Mumbai; All India Institute of Speech and Hearing, Mysore; Central Institute of Psychiatry, Ranchi, etc. In addition, certain State Government institutions also provide rehabilitation services. Besides, 250 private institutions conduct training courses for rehabilitation professionals.

5. National Handicapped and Finance Development Corporation (NHFDC) has been providing loans on concessional terms for undertaking self-employment ventures by the persons with disabilities through State Channelizing Agencies.

6. Panchayati Raj Institutions at Village level, Intermediary level and District level have been entrusted with the welfare of persons with disabilities.

7. India is a signatory to the Declaration on the Full Participation and Equality of People with Disabilities in the Asia Pacific Region. India is also a signatory to the Biwako Millennium Framework for action towards an inclusive, barrier free and rights based society. India is currently participating in the negotiations on the UN Convention on Protection and promotion of the Rights and Dignity of Persons with Disabilities.

Insecticides Act and Rules

### **Insecticides Act, 1968**

[46 of 1968, Dt. 2-9-1968]

An Act to regulate the import, manufacture, sale, transport, distribution and use of insecticides with a view to prevent risk to human beings or animals, and for matters connected therewith.

Be it enacted by parliament in the nineteenth year of the republic of India as follows :-

## **1. Short title, extent and commencement**

- a. This Act may be called the Insecticide Act, 1968.
- b. It extends to the whole of India.
- c. It shall come into force on such date as the central Government may, by notification in the Official Gazette, appoint and different dates may be appointed for different states and for different provision of this Act.

## **2. Application of other laws not barred**

The provisions of this Act shall be in addition to, and not in derogation of, any other law for the time being in force.

### **Insecticides Rules, 1971**

(GSR 1650, DT. 9-10-1971)

In exercise of the powers conferred by section 36 of the Insecticides Act, 1968 (46 of 1968), the Central Government, after consultation with the Central Insecticides Board, hereby makes the following rules, namely :-

## **CHAPTER I - PRELIMINARY**

### *1. Short title and commencement*

- 1. These rules may be called the Insecticides Rules, 1971/
- 2. They shall come into force on the 30th day of October, 1971.

### *2. Definition - In these rules, unless the context otherwise requires :-*

- a. "Act" means the Insecticides Act, 1968 (46 of 1968);
- b. [\*\*\*]
- c. "expiry date" means the date that is mentioned on the container, label or wrapper against the column 'date of expiry';]
- d. "form" means a form set out in the First Schedule;
- e. "laboratory" means the Central Insecticides Laboratory;]
- f. "schedule" means a schedule annexed to these rules;
- g. [\*\*\*]
- h. "pests" means any insects, rodents, fungi, weeds and other forms of plant or animal life not useful to human beings;]
- i. "primary package" means the immediate package containing the insecticides;
- j. "principal" means the importer or manufacturer of insecticides, as the case may be;

- k. "registration" includes provisional registration;
- l. "rural area" means an area which falls outside the limits of any Municipal Corporation or Municipal Committee or a Notified Area Committee or a Notified Area Committee or a Cantonment;
- m. "Schedule" means a Schedule annexed to these ruled;
- n. "secondary package" means a package which is neither a primary package nor a transportation package;
- o. "section" means a section of the Act;
- p. "testing facility" means an operational unit where the experimental studies are being carried out or have been carried out in relation to submission of data on product quality or on safety or on efficacy, or on residues or on stability in storage of the insecticides for which the application for registration is made.
- q. "transportation package" means the outermost package used for transportation of insecticides.)
- r. 'Commercial Pest Control Operation' means any application or dispersion of Insecticide(s) including fumigants in household or public or private premises or land and includes pest control operations in the field including aerial applications for commercial purposes but excludes private use;
- s. 'Pest Control Operators' means any person who undertakes pest control operations and includes the person or the firm or the company or the organization under whose control such a person(s) is operating.

## **Maternity Benefit Act and Rules**

### **Maternity Benefit Act, 1961**

(53 of 1961)  
[12th December, 1961]

### **INTRODUCTION**

The object of maternity leave and benefit is to protect the dignity of motherhood by providing for the full and healthy maintenance of women and her child when she is not working. With the advent of modern age, as the number of women employees is growing, the maternity leave and other maternity benefits are becoming increasingly common. But there was no beneficial piece of legislation in the horizon which is intended to achieve the object of doing social justice to women workers employed in factories, mines and plantation.

### **ACT 53 OF 1961**

With the object of providing maternity leave and benefit to women employee the Maternity Benefit Bill was passed by both the Houses of Parliament and subsequently it received the assent

of President on 12th December, 1961 to become an Act under short title and numbers "THE MATERNITY BENEFIT ACT, 1961 (53 OF 1961)".

An Act to regulate the employment of women in certain establishments for certain period before and after child-birth and to provide for maternity benefit and certain other benefits

Be it enacted by Parliament in the Twelfth Year of the Republic of India as follows:-

**1. *Short title, extent and commencement.***

(1) This Act may be called the Maternity Benefit Act, 1961.

(2) It extends to the whole of India <sup>1</sup>[\* \* \*].

(3) It shall come into force on such date <sup>2</sup>as may be notified in this behalf in the Official Gazette,-

<sup>3</sup>[(a) in relation to mines and to any other establishment wherein persons are employed for the exhibition of equestrian, acrobatic and other performances, by the Central Government; and]

(b) in relation to other establishments in a State, by the State Government.

**2. *Application of Act.***

(1) It applies, in the first instance,-

(a) <sup>4</sup>[to every establishment being a factory, mine or plantation including any such establishment belonging to Government and to every establishment wherein persons are employed for the exhibition of equestrian, acrobatic and other performances;

(b) to every shop or establishment within the meaning of any law for the time being in force in relation to shops and establishments in a State, in which ten or more persons are employed, or were employed, on any day of the preceding twelve months:]

Provided that the State Government may, with the approval of the Central Government, after giving not less than two month's notice of its intention of so doing, by notification in the Official Gazette, declare that all or any of the provisions of this Act shall apply also to any other establishment or class of establishments, industrial, commercial, agricultural or otherwise.

(2) <sup>5</sup>[Save as otherwise provided in <sup>6</sup>[sections 5A and 5B] nothing contained in this Act] shall apply to any factory or other establishment to which the provisions of the Employees, State Insurance Act, 1948 (34 of 1948), apply for the time being.

**Narcotic Drugs and Psychotropic Substances Act and Rules**

**Narcotic Drugs and Psychotropic Substances Act 1985**

Act No. 61 of 1985

[16th September, 1985.]

An Act to consolidate and amend the law relating to narcotic drugs, to make stringent provisions for the control and regulation of operations relating to narcotic drugs and psychotropic substances 1\* [ to provide for the forfeiture of property derived from, or used in, illicit traffic in narcotic drugs and psychotropic substances, to implement the provisions of the International Conventions on Narcotic Drugs and Psychotropic Substances].and for matters connected therewith.

BE it enacted by Parliament in the Thirty-sixty Year of the Republic of India as follows –

## **CHAPTER I - PRELIMINARY**

### **1. *Short title, extent and commencement.***

(1) This Act may be called the Narcotic Drugs and Psychotropic Substances Act, 1985.

(2) It extends to the whole of India.

(3) It shall come into force on such date 2\* as the Central Government may, by notification in the Official Gazette, appoint, and different dates may be appointed for different provisions of this Act and for different States and any reference in any such provision to the commencement of this Act shall be construed in relation to any State as a reference to the coming into force of that provision in that State.

### **2. Definitions.** In this Act, unless the context otherwise requires

(i) "addict" means a person addicted to any narcotic drug or psychotropic substance;

(ii) "Board" means the Central Board of Excise and Customs constituted under the Central Boards of Revenue Act, 1963 (54 of 1963),

(iii) "cannabis (hemp)" means –

(a) charas, that is, the separated resin, in whatever form, whether crude or purified, obtained from the cannabis plant and also includes concentrated preparation and resin known as hashish oil or liquid hashish;

(b) ganja, that is, the flowering or fruiting tops of the cannabis plant (excluding the seeds and leaves when not accompanied by the tops), by whatever name they may be known or designated; and

(c) any mixture, with or without any neutral material, of any of the above forms of cannabis or any drink prepared there from;

- cultivating any coca plant or gathering any portion of coca plant;
- cultivating the opium poppy or any cannabis plant;
- engaging in the production, manufacture, possession, sale, purchase, transportation, warehousing, concealment, use or consumption, import inter-State, export inter-State, import into India, export from India or transshipment, of narcotic drugs or psychotropic substances;
- dealing in any activities in narcotic drugs or psychotropic substances other than those referred to in sub-clauses (i) to (ii); or
- handling or letting out any premises for the carrying on of any of the activities referred to in sub-clauses (i) to (iv), other than those permitted under this Act, or any rule or order made, or any condition of any licence, term or authorisation issued, there under, and includes –

(1) financing, directly or indirectly, any of the aforementioned activities;

(2) abetting or conspiring in the furtherance of or in support of doing any of the aforementioned activities; and

(3) harbouring persons engaged in any of the aforementioned activities;

(ix) "International Convention" means –

(a) the Single Convention on Narcotic Drugs, 1961 adopted by the United Nations Conference at New York in March, 1961;

(b) the Protocol, amending the Convention mentioned in sub-clause (a), adopted by the United Nations Conference at Geneva in March, 1972;

(c) the Convention on Psychotropic Substances, 1971 adopted by the United Nations Conference at Vienna in February, 1971; and

(d) any other international convention, or protocol or other instrument amending an international convention, relating to narcotic drugs or psychotropic substances which may be ratified or acceded to by India after the commencement of this Act;

(x) "manufacture", in relation to narcotic drugs or psychotropic substances, includes –

(1) all processes other than production by which such drugs or substances may be obtained;

(2) refining of such drugs or substances;

(3) transformation of such drugs or substances; and



(4) making of preparation (otherwise than in a pharmacy on prescription) with or containing such drugs or substances;

(xi) "manufactured drug" means –

(a) all coca derivatives, medicinal cannabis, opium derivatives and poppy straw concentrate;

(b) any other narcotic substance or preparation which the Central Government may, having regard to the available information as to its nature or to a decision, if any, under any International Convention, by notification in the Official Gazette, declare not to be a manufactured drug;

(xii) "medicinal cannabis", that is, medicinal hemp, means any extract or tincture of cannabis (hemp);

(xiii) "Narcotics Commissioner" means the Narcotics Commissioner appointed under section 5;

(xiv) "narcotic drug" means coca leaf, cannabis (hemp), opium, poppy straw and includes all manufactured drugs;

### **PROHIBITION, CONTROL AND REGULATION**

8. Prohibition of certain operations. No person shall –

(a) cultivate any coca plant or gather any portion of coca plant; or

(b) cultivate the opium poppy or any cannabis plant; or

(c) produce, manufacture, possess, sell, purchase, transport, warehouse, use, consume, import inter-State, export inter-State, import into India, export from India or tranship any narcotic drug or psychotropic substance, except for medical or scientific purposes and in the manner and to the extent provided by the provisions of this Act or the rules or orders made there under and in a case where any such provision, imposes any requirement by way of licence, permit or authorisation also in accordance with the terms and conditions of such licence, permit or authorisation:

Provided that, and subject to the other provisions of this Act and the rules made thereunder, the prohibition against the cultivation of the cannabis plant for the production of ganja or the production, possession, use, consumption, purchase, sale, transport, warehousing, import inter-State and export inter-State of ganja for any purpose other than medical and scientific

purpose shall take effect only from the date which the Central Government may, by notification in the Official Gazette, specify in this behalf.

2\*[Provided further that nothing in this section shall apply to the export of poppy straw for decorative purposes.]

#### **CHAPTER IV - OFFENCES AND PENALTIES**

##### **15. Punishment for contravention in relation to poppy straw.**

Whoever, in contravention of any provision of this Act or any rule or order made or condition of a licence granted there under, produce, possesses, transports, imports inter-State, exports inter-State, sells, purchases, uses or omits to warehouse poppy straw or removes or does any act in respect of warehoused poppy straw, shall be punishable with rigorous imprisonment for a term which shall not be less than ten years but which may extend to twenty years and shall also be liable to fine which shall not be less than one lakh rupees but which may extend to two lakh rupees:

Provided that the court may, for reasons to be recorded in the judgment, impose a fine exceeding two lakh rupees.

Such type of punishments are available for coca plant, coca leaves, opium, cannabis etc

##### **24. Punishment for external dealings in narcotic drugs and psychotropic substances in contravention of section 12.**

Whoever engages in or controls any trade whereby a narcotic drug or psychotropic substance is obtained outside India and supplied to any person outside India without the previous authorisation of the Central Government or otherwise than in accordance with the condition (if any) of such authorisation granted under section 12, shall be punishable with rigorous imprisonment for a term which shall not be less than ten years but which may extend to twenty years and shall also be liable to fine which shall not be less than one lakh rupees but may extend to two lakh rupees:

Provided that the court may, for reasons to be recorded in the judgment, impose a fine exceeding two lakh rupees.

##### **25. Punishment for allowing premises, etc., to be used for commission of an offence.**

Whoever, being the owner or occupier or having the control or use of any house, room, enclosure, space, place, animal or conveyance, knowingly permits it to be used for the commission by any other person of an offence punishable under any provision of this Act, shall be punishable with rigorous imprisonment for a term which shall not be less than ten years but which may

extend to twenty years and shall also be liable to fine which shall not be less than one lakh rupees but which may extend to two lakh rupees:

Provided that the court may, for reasons to be recorded in the judgment, impose a fine exceeding two lakh rupees.

## **THE PREVENTION OF FOOD ADULTERATION ACT, 1954**

### **INTRODUCTION –**

Food is one of the basic necessities for sustenance of life. Pure, fresh and healthy diet is most essential for the health of the people. It is no wonder to say that community health is national wealth.

Adulteration of food-stuffs was so rampant, widespread and persistent that nothing short of a somewhat drastic remedy in the form of a comprehensive legislation became the need of the hour. To check this kind of anti-social evil a concerted and determined onslaught was launched by the Government by introduction of the Prevention of Food Adulteration Bill in the Parliament to herald an era of much needed hope and relief for the consumers at large.

### **STATEMENT OF OBJECTS AND REASONS**

Laws existed in a number of States in India for the prevention of adulteration of food- stuffs, but they lacked uniformity having been passed at different times without mutual consultation between States. The need for Central legislation for the whole country in this matter has been felt since 1937 when a Committee appointed by the Central Advisory Board of Health recommended this step. 'Adulteration of food-stuffs and other goods' is now included in the Concurrent List (III) in the Constitution of India. It has, therefore, become possible for the Central Government to enact an all India legislation on this subject. The Bill replaces all local food adulteration laws where they exist and also applies to those States where there are no local laws on the subject. Among others, it provides for —

- (i) a Central Food Laboratory to which food samples can be referred to for final opinion in disputed cases (clause 4),
- (ii) a Central Committee for Food Standards consisting of representatives of Central and State Governments to advise on matters arising from the administration of the Act (clause 3), and
- (iii) the vesting in the Central Government of the rule-making power regarding standards of quality for the articles of food and certain other matters (clause 22).

## **ACT 37 OF 1954**

The Prevention of Food Adulteration Bill was passed by both the house of Parliament and received the assent of the President on 29th September, 1954. It came into force on 1st June, 1955 as THE PREVENTION OF FOOD ADULTERATION ACT, 1954 (37 of 1954).

### **LIST OF ADAPTATION ORDER AND AMENDING ACTs**

1. The Adaptation of Laws (No.3) Order, 1956.
2. The Prevention of Food Adulteration (Amendment) Act, 1964 (49 of 1964).
3. The Prevention of Food Adulteration (Amendment) Act, 1971 (41 of 1971).
4. The Prevention of Food Adulteration (Amendment) Act, 1976 (34 of 1976).
5. The Prevention of Food Adulteration (Amendment) Act, 1986 (70 of 1986).

## **Drugs and Cosmetics Act, 1940**

### **INTRODUCTION**

In 1937 a Bill was introduced in the Central Legislative Assembly to give effect to the recommendations of the Drugs Enquiry Committee to regulate the import of drugs into British India. This Bill was referred to the Select Committee and the Committee expressed the opinion that a more comprehensive measure for the uniform control of manufacture and distribution of drugs as well as of imports was desirable. The Central Government suggested to the Provincial Governments to ask the Provincial Legislatures to pass resolutions empowering the Central Legislature to pass an Act for regulating such matters relating to control of drugs as fall within the Provincial sphere. Provincial Governments got the resolution passed from the Provincial Legislatures and sent them to the Central Government for getting through the Bill to regulate the import, manufacture, distribution and sale of Drugs and Cosmetics. Thereupon the Drugs and Cosmetics Bill was introduced in the Central Legislative Assembly.

## **ACT 23 OF 1940**

The Drugs and Cosmetics Bill was passed by the Central Legislative Assembly and it received the assent of the Governor General on 10th April, 1940 and thus became the Drugs and Cosmetics Act, 1940 (23 of 1940).

### **LIST OF AMENDING ACTS AND ADAPTATION ORDERS**

1. The Repealing and Amending Act, 1949 (40 of 1949).
2. The Adoption of Laws Order, 1950

3. The part B States (Laws) Act, 1951 (3 of 1951).
4. The Drugs (Amendment) Act, 1955 (11 of 1955).
5. The Drugs (Amendment) Act, 1960 (35 of 1960).
6. The Drugs (Amendment) Act, 1962 (21 of 1962).
7. The Drugs and Cosmetics (Amendment) Act, 1964 (13 of 1964).
8. The Drugs and Cosmetics (Amendment) Act, 1972 (19 of 1972).
9. The Drugs and Cosmetics (Amendment) Act, 1982 (68 of 1982).
10. The Drugs and Cosmetics (Amendment) Act, 1986 (71 of 1986).

### **Bio-Medical Waste (Management and Handling) Rules, 1998**

#### **Bio-Medical Waste (Management and Handling) Rules, 1998**

New Delhi, 20th July, 1998

S.O. 630 (E).-Whereas a notification in exercise of the powers conferred by Sections 6, 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986) was published in the Gazette vide S.O. 746 (E) dated 16 October, 1997 inviting objections from the public within 60 days from the date of the publication of the said notification on the Bio-Medical Waste (Management and Handling) Rules, 1998 and whereas all objections received were duly considered..

Now, therefore, in exercise of the powers conferred by section 6, 8 and 25 of the Environment (Protection) Act, 1986 the Central Government hereby notifies the rules for the management and handling of bio-medical waste.

#### **1. SHORT, TITLE AND COMMENCEMENT:**

- (1) These rules may be called the Bio-Medical Waste (Management and Handling) Rules, 1998.
- (2) They shall come into force on the date of their publication in the official Gazette.

#### **2. APPLICATION:**

These rules apply to all persons who generate, collect, receive, store, transport, treat, dispose, or handle bio medical waste in any form.

### **3. DEFINITIONS:** In these rules unless the context otherwise requires

- (1) "Act" means the Environment (Protection) Act, 1986 (29 of 1986);
- (2) "Animal House" means a place where animals are reared/kept for experiments or testing purposes;
- (3) "Authorisation" means permission granted by the prescribed authority for the generation, collection, reception, storage, transportation, treatment, disposal and/or any other form of handling of bio-medical waste in accordance with these rules and any guidelines issued by the Central Government.
- (4) "Authorised person" means an occupier or operator authorised by the prescribed authority to generate, collect, receive, store, transport, treat, dispose and/or handle bio-medical waste in accordance with these rules and any guidelines issued by the Central Government;
- (5) "Bio-medical waste" means any waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or in research activities pertaining thereto or in the production or testing of biologicals, and including categories mentioned in Schedule I;
- (6) "Biologicals" means any preparation made from organisms or micro-organisms or product of metabolism and biochemical reactions intended for use in the diagnosis, immunisation or the treatment of human beings or animals or in research activities pertaining thereto;
- (7) "Bio-medical waste treatment facility" means any facility wherein treatment. disposal of bio-medical waste or processes incidental to such treatment or disposal is carried out;
- (8) "Occupier" in relation to any institution generating bio-medical waste, which includes a hospital, nursing home, clinic dispensary, veterinary institution, animal house, pathological laboratory, blood bank by whatever name called, means a person who has control over that institution and/or its premises;
- (9) "Operator of a bio-medical waste facility" means a person who owns or controls or operates a facility for the collection, reception, storage, transport, treatment, disposal or any other form of handling of bio-medical waste;
- (10) "Schedule" means schedule appended to these rules;

### **4. DUTY OF OCCUPIER:**

It shall be the duty of every occupier of an institution generating bio-medical waste which includes a hospital, nursing home, clinic, dispensary, veterinary institution, animal house, pathological laboratory, blood bank by whatever name called to take all steps to ensure that such waste is

handled without any adverse effect to human health and the environment.

## **5. TREATMENT AND DISPOSAL**

(1) Bio-medical waste shall be treated and disposed of in accordance with Schedule I, and in compliance with the standards prescribed in Schedule V.

(2) Every occupier, where required, shall set up in accordance with the time-schedule in Schedule VI, requisite bio-medical waste treatment facilities like incinerator, autoclave, microwave system for the treatment of waste, or, ensure requisite treatment of waste at a common waste treatment facility or any other waste treatment facility.

## **6. SEGREGATION, PACKAGING, TRANSPORTATION AND STORAGE**

(1) Bio-medical waste shall not be mixed with other wastes.

(2) Bio-medical waste shall be segregated into containers/bags at the point of generation in accordance with Schedule II prior to its storage, transportation, treatment and disposal. The containers shall be labeled according to Schedule III.

(3) If a container is transported from the premises where bio-medical waste is generated to any waste treatment facility outside the premises, the container shall, apart from the label prescribed in Schedule III, also carry information prescribed in Schedule IV.

(4) Notwithstanding anything contained in the Motor Vehicles Act, 1988, or rules thereunder, untreated biomedical waste shall be transported only in such vehicle as may be authorised for the purpose by the competent authority as specified by the government.

(5) No untreated bio-medical waste shall be kept stored beyond a period of 48 hours

Provided that if for any reason it becomes necessary to store the waste beyond such period, the authorised person must take permission of the prescribed authority and take measures to ensure that the waste does not adversely affect human health and the environment.

## **7. PRESCRIBED AUTHORITY**

(1) The Government of every State and Union Territory shall establish a prescribed authority with such members as may be specified for granting authorisation and implementing these rules. If the prescribed authority comprises of more than one member, a chairperson for the authority shall be designated.

(2) The prescribed authority for the State or Union Territory shall be appointed within one month of

the coming into force of these rules.

(3) The prescribed authority shall function under the supervision and control of the respective Government of the State or Union Territory.

(4) The prescribed authority shall on receipt of Form 1 make such enquiry as it deems fit and if it is satisfied that the applicant possesses the necessary capacity to handle bio-medical waste in accordance with these rules, grant or renew an authorisation as the case may be.

(5) An authorisation shall be granted for a period of three years, including an initial trial period of one year from the date of issue. Thereafter, an application shall be made by the occupier/operator for renewal. All such subsequent authorisation shall be for a period of three years. A provisional authorisation will be granted for the trial period, to enable the occupier/operator to demonstrate the capacity of the facility.

(6) The prescribed authority may after giving reasonable opportunity of being heard to the applicant and for reasons thereof to be recorded in writing, refuse to grant or renew authorisation.

(7) Every application for authorisation shall be disposed of by the prescribed authority within ninety days from the date of receipt of the application.

(8) The prescribed authority may cancel or suspend an authorisation, if for reasons, to be recorded in writing, the occupier/operator has failed to comply with any provision of the Act or these rules :

Provided that no authorisation shall be cancelled or suspended without giving a reasonable opportunity to the occupier/operator of being heard.

## **8. AUTHORISATION**

(1) Every occupier of an institution generating, collecting, receiving, storing, transporting, treating, disposing and/or handling bio-medical waste in any other manner, except such occupier of clinics, dispensaries, pathological laboratories, blood banks providing treatment/service to less than 1000 (one thousand) patients per month, shall make an application in Form 1 to the prescribed authority for grant of authorisation.

(2) Every operator of a bio-medical waste facility shall make an application in Form 1 to the prescribed authority for grant of authorisation.

(3) Every application in Form 1 for grant of authorisation shall be accompanied by a fee as may be prescribed by the Government of the State or Union Territory.

## **The Pharmacy Act, 1948**



## **The Pharmacy Act, 1948**

(8 of 1948)<sup>1</sup>

[4th March, 1948.]

An Act to regulate the profession of pharmacy.

Whereas it is expedient to make better provision for the regulation of the profession and practise of pharmacy and for that purpose to constitute Pharmacy Councils;

It is hereby enacted as follows: —

### **CHAPTER 1 - INTRODUCTORY**

#### **1. *Short title, extent and commencement.* —**

(1) This Act may be called the Pharmacy Act, 1948.

<sup>2</sup>[(2) It extends to the whole of India except the State of Jammu and Kashmir.]

(3) It shall come into force at once, but Chapters III, IV and V shall take effect in a particular State from such date <sup>3</sup>[\*\*\*] as the State Government may, by notification in the Official Gazette, appoint in this behalf:

<sup>4</sup>[Provided that where on account of the territorial changes brought about by the reorganisation of States on the 1st day of November, 1956, Chapters III, IV and V have effect only in a part of a State, the said Chapters shall take effect in the remaining part of that State from such date as the State Government may in like manner appoint.]

#### **2. *Interpretation.* — In this Act, unless there is anything repugnant in the subject or context, —**

(a) “agreement” means an agreement entered into under section 20;

(b) “approved” means approved by the Central Council under section 12 or section 14;

(c) “Central Council” means the Pharmacy Council of India constituted under section 3;

(d) “Central Register” means the register of pharmacists maintained by the Central Council under section 15 A;

(da) “Executive Committee” means the Executive Committee of the Central Council or of the State Council, as the context may require;

(e) “Indian University” means a University within the meaning of section 3 of the University Grants Commission Act, 1956, (3 of 1956) and includes such other institutions, being institutions established by or under a Central Act, as the Central Government may, by notification in the Official Gazette, specify in this behalf;]

(f) “medical practitioner” means a person—

(i) holding a qualification granted by an authority specified or notified under section 3 of the Indian Medical Degrees Act, 1916 (7 of 1916), or specified in the Schedules to the Indian Medical Council Act, 1956 (102 of 1956); or

(ii) registered or eligible for registration in a medical register of a State meant for the registration of persons practising the modern scientific system of medicine; or

(iii) registered in a medical register of a State, who, although not falling within sub-clause(i) or sub-clause (ii) is declared by a general or special order made by the State Government in this behalf as a person practising the modern scientific system of medicine for the purposes of this Act; or

(iv) registered or eligible for registration in the register of dentists for a State under the Dentists Act, 1948 (16 of 1948); or

(v) who is engaged in the practise of veterinary medicine and who possesses qualifications approved by the State Government;]

(g) “prescribed” means in Chapter II prescribed by regulations made under section 18, and elsewhere prescribed by rules made under section 46;

<sup>7</sup>[(h) “register” means a register of pharmacists prepared and maintained under Chapter IV;

(i) “registered pharmacist” means a person whose name is for the time being entered in the register of the State in which he is for the time being residing or carrying on his profession or business of pharmacy;

(j) “State Council” means a State Council of Pharmacy constituted under section 19, and includes a Joint State Council of Pharmacy constituted in accordance with an agreement under section 20;

(k) “University Grants Commission” means the University Grants Commission established under section 4 of the University Grants Commission Act, 1956 (3 of 1956).]

### **The Transplantation of Human Organs Act, 1994**

### **The Transplantation of Human Organs Act, 1994**

*An Act to provide for the regulation of removal, storage and transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs and for matters connected therewith or incidental thereto.*

Whereas it is expedient to provide for the regulation of removal, storage and transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs;

And whereas Parliament has no power to make laws for the States with respect to any of the matters aforesaid except as provided in Articles 249 and 250 of the Constitution;

And whereas in pursuance of clause (1) of Article 252 of the Constitution, resolutions have been passed by all the Houses of the Legislatures of the States of Goa, Himachal Pradesh and Maharashtra to the effect that the matters aforesaid should be regulated in those States by Parliament by law;

Be it enacted by Parliament in the Forty-fifth Year of the Republic of India as follows: —

## **REGULATION OF HOSPITALS**

### **10. Regulation of hospitals conducting the removal, storage or transplantation of human organs.**

—

(1) On and from the commencement of this Act, —

(a) no hospital, unless registered under this Act, shall conduct, or associate with, or help in, the removal, storage or transplanation of any human organ;

(b) no medical practitioner or any other person shall conduct, or cause to be conducted, or aid in conducting by himself or through any other person, an activity relating to the removal, storage or transplantation of any human organ at a place other than a place registered under this Act; and

(c) no place including a hospital registered under sub-section (1) of Section 15 shall be used or cause to be used by any person for the removal, storage or transplanation of any human organ except for therapeutic purposes.

(2) Notwithstanding anything contained in sub-section (1), the eyes or the ears may be removed at any place from the dead body of any donor, for therapeutic purpose, by a registered medical practitioner.

**Explanation.** — For the purposes of this sub-section, “ears” includes ear drums and ear bones.

**11. Prohibition of removal or transplantation of human organs for any purpose other than therapeutic purposes.** — No donor and no person empowered to give authority for the removal of any human organ shall authorise the removal of any human organ for any purpose other than therapeutic purposes.

**12. Explaining effects to donor and recipient.** — No registered medical practitioner shall undertake the removal or transplanation of any human organ unless he has explained, in such manner as may be prescribed, all possible effects, complications and hazards connected with the removal and transplanation to the donor and the receipient respectively.

## **OFFENCES AND PENALTIES**

**18. Punishment for removal of human organ without authority.** —

(1) Any person who renders his services to or any hospital and who, for purposes of transplantation, conducts, associates with, or help in any manner in, the removal of any human organ without authority, shall be punishable with imprisonment for a term which may extend to five years and with fine which may extend to ten thousand rupees.

(2) Where any person convicted under sub-section (1) is a registered medical practitioner, his name shall be reported by the Appropriate Authority to the respective State Medical Council for taking necessary action including the removal of his name from the register of the Council for a period of two years for the first offence and permanently for the subsequent offence.

**19. Punishment for commercial dealings in human organs.** — Whoever —

(a) makes or receives any payment for the supply of, or for an offer to supply, any human organ;

(b) seeks to find a person willing to supply for payment any human organ;

(c) offers to supply any human organ for payment;

(d) initiates or negotiates any arrangement involving the making of any payment for the supply of, or for an offer to supply, any human organ;

(e) takes part in the management or control of a body of persons, whether a society, firm or company, whose activities consist of or include the initiation or negotiation of any arrangement referred to in clause (d); or

(f) publishes or distributes or causes to be published or distributed any advertisement, —

(a) inviting persons to supply for payment of any human organ;

(b) offering to supply any human organ for payment; or

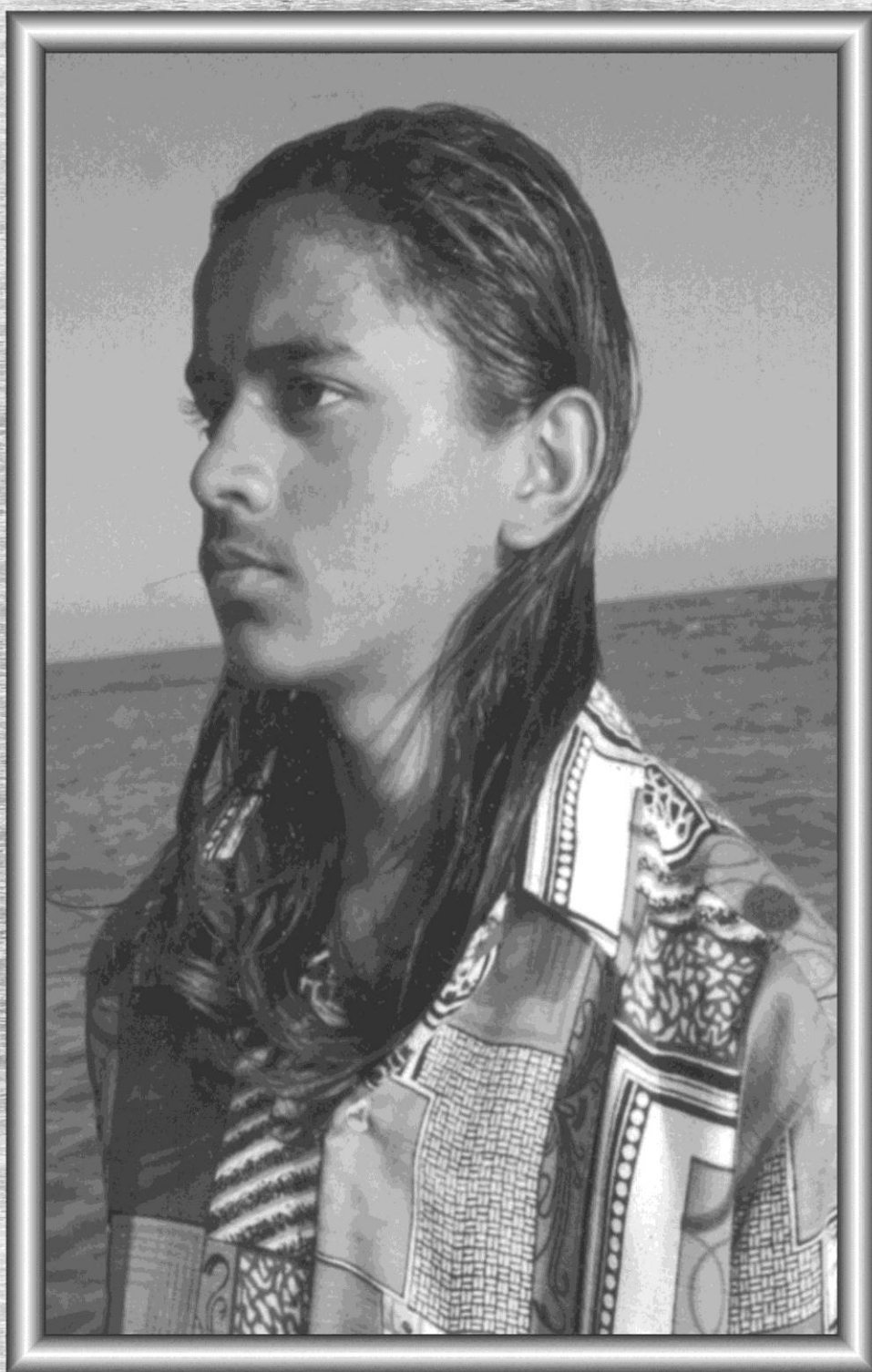
(c) indicating that the advertiser is willing to initiate or negotiate any arrangement referred to in clause (d), shall be punishable with imprisonment for a term which shall not be less than two years but which may extend to seven years and shall be liable to fine which shall not be less than ten thousand rupees but may extend to twenty thousand rupees;

Provided that the court may, for any adequate and special reason to be mentioned in the judgment, impose a sentence of imprisonment for a term of less than two years and a fine less than ten thousand rupees.

**20. Punishment for contravention of any other provision of this Act.** — Whoever contravenes any provision of this Act or any rule made, or any condition of the registration granted, thereunder for which no punishment is separately provided in this Act, shall be punishable with imprisonment for a term which may extend to three years or with fine which may extend to five thousand rupees.

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