

# International Institute of Health Management Research (IIHMR)

New Delhi

Batch 2018- 2020

Hospital Planning and Design

Total marks: 60

Time: 3:00 HR

1. Draw a properly scaled plan of any ONE of the deptts listed below 30 marks
  - OPD -- With the following area program and a max circulation of 60%.

Out Patient Department			
OPD 1	1	12	12
OPD 2	1	12	12
OPD 3	1	12	12
OPD 4	1	12	12
OPD 5	1	12	12
OPD 6	1	12	12
OPD 7	1	12	12
OPD 8	1	12	12
OPD 9	1	12	12
OPD 10	1	12	12
OPD Registration	1	20	20
Waiting lobby OPD	1	160	160
Endoscopy with change/scrub/recovery	1	80	80
ECG/ECHO/TMT	3	20	60
Pt toilet m/f	2	30	60
Staff toilet for OPD m/f	2	6	12
Dressing room	1	20	20
Plaster rm	1	20	20
Minor OT with scrub and change	1	60	60
Physiotherapy	1	60	60
Total			672

- OT complex -- With the following area program and a max circulation of 70%  
Corridors – sterile 3000/ clean 2400/dirty 1200

OT Complex			
Entry Lobby/waiting	1	60	60
Pre-op-with toilet	1	40	40
Post op with toilet	1	40	40
PAC rm	1	12	12
Stores	2	20	40
OT Incharge Rm	1	12	12
OT Asstts Rm	1	12	12
Staff toilet	2	6	12
Change Rm Doctors with toilet	1	10	10
Change Rm Female Doctors with toilet	1	10	10
Change Rm Nurses with toilet	1	10	10
Change Rm Other staff with toilet	1	10	10
Doctor's Lounge with pantry	1	30	30
Staff Lounge	1	20	20
Operating Room	4	48	192
Equipment room	1	20	20
Frozen section	1	15	15
Scrub	2	6	12
Sterile store	1	20	20
Dirty Utility Rm	1	6	6
Total			583

2. Draw the functional flow chart of any TWO of the following deptts 20 marks
  - Maternity deptt
  - Kitchen deptt
  - Emergency

3. Tick the correct choice

1. Radiology equipments are all except

- a. X Ray
- b. Mammography
- c. Ultrasonography
- d. PET Scan

2. Autoclave is used in

- a. Laboratory
- b. CSSD
- c. OR
- d. All of above

3. IF the plot size is 40\*40m and the FAR is 2 and the ground coverage is 25%, what would be the height needed to achieve this FAR

- a. 6
- b. 7
- c. 8
- d. 9

4. If the FAR is 8000 sqm and the ECS is 1/100sqm, how many cars parking area will be needed

- a. 70
- b. 80
- c. 90
- d. 60

5. How many air changes is recommended by NABH in a superspeciality OR

- a. 20
- b. 22
- c. 25
- d. 30

6. The minimum width of a staircase in a hospital as per NABH and NBC should be

- a. 1 m
- b. 1.5m
- c. 2m
- d. 2.5m

7. The gradient of a hospital ramp should be

- a. 1:20
- b. 1:10
- c. 1:12
- d. 1:15

8. Ramp should be used in case of fire in a hospital

- a. Always
- b. Never
- c. Sometimes
- d. Not significant

9. The minimum size of OR as per NABH is

- a. 350 sqft
- b. 400 sqft
- c. 420 sqft
- d. 450 sqft

10. OT Zoning – which one is incorrect

- a. Clean zone
- b. Patient zone
- c. Sterile zone
- d. Disposal zone
- e. Protective zone