

Roll. No. \_\_\_\_\_

**International Institute of Health Management Research (IIHMR), New Delhi.**

**POSTGRADUATE DIPLOMA HOSPITAL AND HEALTH MANAGEMENT  
(Hospital Management Stream)**

**(Batch 2017-2019)**

**Hospital Planning and Design**

**End Term Examination**

**Time allowed: 3 hrs**

**Max. Marks: 60**

**1. Draw a properly scaled plan of any ONE of the depts. listed below (30 marks)**

**• OPD**

**With the following area program and a max circulation of 60%.**

<b>Out Patient Department</b>			
OPD 1	1	16	16
OPD 2	1	16	16
OPD 3	1	16	16
OPD 4	1	16	16
OPD 5	1	16	16
OPD 6	1	16	16
OPD 7	1	16	16
OPD 8	1	16	16
OPD 9	1	16	16
OPD 10	1	16	16
OPD Registration	1	10	10
Waiting lobby OPD	1	160	160
Endoscopy change/scrub/recovery	with 1	60	60
ECG/ECHO/TMT	3	20	60
Pt toilet m/f	2	30	60
Staff toilet for OPD m/f	2	4	8
Dressing room	1	20	20
Plaster rm	1	20	20
Minor OT with scrub and change	1	60	60
Physiotherapy	1	60	60
<b>Total</b>			<b>678</b>

- **OT complex**  
With the following area program and a max circulation of 70%

**Corridors – sterile 3000/ clean 2400/dirty 1200**

<b>OT Complex</b>			
Entry Lobby/waiting	1	60	60
Pre-op-with toilet	4	12	48
Post op with toilet	4	12	48
PAC rm	1	12	12
Stores	2	20	40
OT In charge Rm	1	12	12
OT Asstts Rm	1	12	12
Staff toilet	2	5	10
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	3	6
Sterile store	1	20	20
Dirty Utility Rm	1	3	3
<b>Total</b>			<b>588</b>

2. Draw the functional flow chart of any TWO of the following depts. (20 marks)
- Maternity dept.
  - Kitchen dept.
  - Emergency

3. Indicate the correct choice in the answer sheets: **10 marks (1\*10)**

1. Radiology equipments are all except

- X Ray
- Mammography
- Ultrasonography
- PET Scan

2. Autoclave is used in

- Laboratory
- CSSD
- OR
- 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 super speciality 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