

Hospital Planning and Design

Instructor: Dr Ashish Roy

Semester paper 2019 Set 2

60 marks

1. Draw a properly scaled plan of any ONE of the deptts listed below

30 marks

- **OPD**

With the following area program and circulation 50%

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 50%

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

Maternity deptt

Laundry

Kitchen deptt

20 marks

3. Tick the correct choice

10 marks (1*10)

1. Radiology equipments are all except

- a. C T Scan**
- b. MRI**
- c. Ultrasound**
- d. LINAC**

2. Autoclave is NOT used in

- a. Laboratory
- b. CSSD
- c. OR
- d. Laundry

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 6000 sqm and the ECS is 1/100sqm, how many cars parking area will be needed

- a. 120
- b. 180
- c. 140
- d. 60

5. How many air changes is recommended by NABH in a General 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. Emergency should NOT be located on the rear of the hospital**
- a. Always**
 - b. Never**
 - c. Sometimes**
 - d. Not significant**
- 9. The size of CT Scan room should be**
- a. 240 sqft**
 - b. 260 sqft**
 - c. 300 sqft**
 - d. 360 sqft**
- 10. Types of ICU – which one is incorrect**
- a. Medical ICU**
 - b. Surgical ICU**
 - c. Burns ICU**
 - d. HDU**