

Hospital Management Stream: Batch 2019-2021

SUBJECT: Hospital Planning and Design

End Term Examination

Time allowed: 2 hrs

Max. Marks: 70

NOTES –

1. *Please read all the questions carefully before answering*
2. *Choose only ONE department in question 3 (a)*
3. *The layout diagram is to be uploaded as a pdf*

Part 1

1. Select the correct answer

20 marks (2marks each)

- (i). All the following are equipment for Radiology department except
 - a. C T Scan
 - b. MRI
 - c. Ultrasound
 - d. LINAC
- (ii). To ensure functional efficiency, the Accident & Emergency department in a 500-bed hospital multi-speciality hospital should be
 - a) Separate from the OPD
 - b) Part of the OPD
 - c) Depends on the distance from the road
 - d) None of the above
- (iii). Which of the following is not part of OT Zoning concept -
 - a. Clean zone
 - b. Sterile zone
 - c. Protective zone
 - d. Patient zone
- (iv). In case of fire in a hospital, the ramps should be used -
 - a. Always
 - b. Never
 - c. Sometimes
 - d. Not significant
- (v). A Pneumatic Tube Transport System in a hospital is used for transporting all except -
 - a. Medicines
 - b. Laboratory samples

- c. Laundry
- d. Patients

- (vi). For planning purposes, the average number of patients expected to visit the OPD of a general hospital are –
- a) 2 -3 for every authorised bed
 - b) 10 for every authorised bed
 - c) 10 for every 100 authorised beds
 - d) None of the above
- (vii). The following department is sometimes called the “**Shopping Window**” of the hospital –
- a) Operation Theatre
 - b) ICU
 - c) OPD
 - d) CSSD
- (viii). HEPA filters are used in several areas of hospitals, especially in the OT. In the context of filters, **HEPA** is an abbreviation of –
- a) Hospital Electric Process Assembly
 - b) High Efficiency Particulate Air
 - c) High Energy Pathway Access
 - d) None of the above
- (ix). Positive pressure is planned in all the following areas of the hospital except
- a) Operation Theatre
 - b) ICU
 - c) Burns ward
 - d) Infectious Diseases Isolation Ward
- (x). All the following are true regarding the healthcare scenario in India, except –
- a) Private sector dominates the existing bed capacity
 - b) The burden of disease is gradually shifting from communicable diseases to non-communicable diseases
 - c) The rural and urban populations have equal access to specialist care
 - d) The government plans to increase public health spending to 2.5% of the GDP by 2025.

Part 2

2. (a) What are the steps in planning of a hospital? Briefly explain the major steps. **(15 marks)**

(b) M/s Acme plan to build a hospital in a metro city on a plot of size 50m *100m. If the permitted FAR= 3, ground coverage 40%, and the maximum building height permitted is 100 feet, can the complete FAR be utilized? Briefly explain with calculations.

(Note - Consider 10 feet as the height of each floor).

(5 marks)

3. (a) Explain the planning parameters for OPD / A&E (**choose ONE of the departments**) in a multi-speciality 300-bed hospital. **(15 marks)**
- (b) Give a rough schematic diagram of the planned layout. **(5 marks)**
- (Note)** - Diagram is to be uploaded as a scanned pdf)

Part 3

4. Write short notes on **ANY TWO** **(5marks each)**
- a) Architects Brief
 - b) FAR (Floor Area Ratio)
 - c) Hospital commissioning phase

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