

GANPAT UNIVERSITY**B. Tech. Semester: VI (Biomedical & Instrumentation) Engineering****CBCS Regular Examination May/June 2014****2BM606 Hospital Management & Information System**

Time: 3 Hours

Total Marks: 70

- Instruction:**
- 1 Write each section in separate answer book.
 - 2 Answer should be brief and to the point.
 - 3 Figure to the right indicates marks.
 - 4 Assume suitable data, if necessary.

SECTION – I

- Que. – 1 12
- (a) Give the classification of healthcare organization. Explain one of the classifications in detail.
 - (b) Why proper orientation of hospital building is necessary? Explain the artificial ventilation.

OR

- Que. – 1 12
- (a) Enlist and explain in detail the factors influencing hospital utilization.
 - (b) Why hospital planning team is required? Explain this statement in detail.

- Que. – 2 (a) 11
- For the following data from WHO calculate the i) Admission/year (direct & indirect population) ii) total admission/year iii) total bed days/year iv) total bed days /year with 100% occupancy.
- i) Direct & indirect populations: 6,00,000 & 8,00,000
 - ii) Admission/year/1000 population: Direct population: 165 by WHO
 - iii) Admission/year/1000 population: Indirect population: 55 as per WHO
 - iv) Average length of stay in days: 10
- (b) Who is hospital consultant? Enlist the type of guidance provided by him in hospital planning.

OR

- Que. – 2 11
- (a) Explain the power requirement and its utilities for hospital
 - (b) Who are the prime members of hospital planning team? Explain their responsibilities for hospital planning.

- Que. – 3 12
- (a) Define "health care waste" and classify it.
 - (b) Explain the Indian Standard Codes for ward lighting.
 - (c) Enlist the equipment for a tertiary unit.

SECTION – II

Que. – 4

12

- (a) Define Outpatient? Which are the sources of origin for outpatient? Draw the flow chart of outpatient department and explain in detail.
- (b) Draw & explain the H shaped, E shaped, T shaped, Box plan and Cross type floor plans for ward floors.

OR

Que. – 4

12

- (a) Explain the cumulative input and output system at the waiting room of outpatient department of a public hospital.
- (b) Define "Ward". Explain Nightingale Ward.

Que. – 5

11

- (a) Draw & explain the different layouts for radiology department.
- (b) Define following terms:
- 1) Hospital bed,
 - 2) Bed Complement,
 - 3) Admission,
 - 4) Discharge,
 - 5) Hospital Death.

OR

Que. – 5

11

- (a) Draw the OT suite circulation pattern & explain in detail.
- (b) Which are the basic ethical principles in critical care medicine? Explain.

Que. – 6

12

- (a) Write the full form of the following:
OICU, MICU, SICU, BICU, NICU, PICU
- (b) Calculate the requirement of consulting cum examination room for the following data:

Direct Population	:	2,00,000
Indirect Population	:	50,000
Consulting per person per year (Direct)	:	3
Consulting per person per year (Indirect)	:	0.5
Average first consultations	:	30 %
Average subsequent consultations	:	70 %
Time taken for first consultation	:	20 minutes
Time taken for subsequent consultation	:	10 minutes
Scheduled hours of OPD	:	7 hours

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