

GANPAT UNIVERSITY
B. TECH SEM- V (CIVIL) REGULAR EXAMINATION- NOV-DEC 2016
2CI506: Building Services

TIME: 3 HRS

TOTAL MARKS: 60

- Instructions:** (1) This Question paper has two sections. Attempt each section in separate answer book.
 (2) Figures on right indicate marks.
 (3) Be precise and to the point in answering the descriptive questions.

SECTION: I

- Q.1 A. Explain the general considerations of the planning of distribution system observed in its design. (05)
 B. Enumerate and describe briefly the various tests to detect the wastage of water. (05)
- OR**
- Q.1 A. Distinguish between Surface reservoir and elevated reservoir (05)
 B. Write short note on Antisiphonage pipe (05)
- Q.2 A. With the help of sketches, describe the following sanitary fittings: (05)
 i) Indian type water closet
 ii) Wash basin
 B. Write short note on Intercepting trap and state its merits and demerits (05)
- OR**
- Q.2 A. Write short note on Soil pipe, waste pipe, vent pipe. (05)
 B. Write short note on Automatic flushing Cistern (05)
- Q.3 A. Design a septic tank with soak pit for 100 users. Take loading of 120 litres/capita/day for septic tank and percolation rate of 1250 litres/ cu.m/ day for soak pit. Assume suitable data if required. (05)
 B. Write Advantages and Disadvantages of septic tank. (05)

SECTION: II

- Q.4 A. A production area in a factory measures 120 metres x 48 metres. Find the number of lamps required if each lamp has a Lighting Design Lumen (LDL) output of 18,000 lumens. The illumination required for the factory area is 200 lux. Utilisation factor = 0.4 Lamp Maintenance Factor = 0.75. (10)
 With the same data show the lighting design layout if spacing to mounting height ratio is 3:2 and mounting height is 4 meters.
- OR**
- Q.4 A. State the importance and types of Earthing and discuss plate earthing with neat sketch (05)
 B. What are the advantages of Copper pipes over Plastic pipes? (05)
- Q.5 A. What are the different methods for conveyance of water? Write the lacunas of Gravity conduits. (05)
 B. Explain the working of Fluorescent tube also enumerate its types. (05)
- OR**
- Q.5 A. What is the scope of Building Services? Which services should an ideal residential building required? (05)
 B. Briefly explain the working of Air Valve and Reflux Valve. Support your answer with a neat sketch. (05)
- Q.6 **ANSWER THE FOLLOWING**
- A. Give the proper definition of Light and Luminous Intensity. (04)
 B. Explain in detail the classes of fire. (04)
 C. State to explain the necessity of ventilation. (02)