

B.Tech. Civil (Construction Management)

Term-End Examination

December, 2018

00263

ET-521(B) : BUILDING ARCHITECTURE

Time : 3 hours

Maximum Marks : 70

Note : Question no. 1 is compulsory. Attempt five questions in all. All questions carry equal marks. Supplement your answers with diagrams/sketches as much as possible.

1. (a) What are the stages of development of design by an architect ?
- (b) Describe and draw to illustrate Cavity wall and Rat trap bond in brick. $2 \times 7 = 14$
2. (a) What was the system of water supply in Roman architecture ?
- (b) Explain the system of construction in Hindu Temple architecture. $2 \times 7 = 14$

3. What is the difference between Shell structure and Tensile structure. Briefly describe two examples of tensile structures from modern architecture. 14
4. Discuss in detail the design and construction of St. Peter's Basilica in Rome (sketches are encouraged). 14
5. (a) Differentiate between the following :
- (i) Distemper and Varnish
 - (ii) Synthetic and Emulsion paints
- (b) Differentiate between floor construction methods for Commercial buildings and Residential buildings. $2 \times 7 = 14$
6. (a) Enumerate the relevance of scale and proportion of fenestrations in buildings.
- (b) Differentiate between Lattice grid and Space frame. $2 \times 7 = 14$
7. Discuss the relationship between thermal comfort and energy consumption in buildings. 14

8. Write short notes on any *two* of the following : (sketches are a must) 2×7=14

- (a) Geodesic Dome
 - (b) Gully Trap and Septic Tank
 - (c) Types of Trusses
 - (d) Golden Section and Le Corbusier Module
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