G.R. No.	

SEPTEMBER 2017 / IN - SEM Exam (T1)

F. Y. B.TECH. (COMMON) (SEMESTER - I)

COURSE NAME: Basic Civil Engineering

(2017 PATTERN)

[Time: 1 Hour]   [Max. Marks: 30]

SCHEME OF MARKING/ MODEL ANSWERS

Q.(1) (a) Half mark for each correct/ relevant basic area of Civil Engineering.
[6]

(b) 1 mark for stating the meaning of infrastructure development. Five marks for summarizing the need of development of proper transportation sector in the 21st century with appropriate examples.
Necessary points: properly designed, constructed and maintained (i)roadways – expressways, highways, rapid mass transit system; (ii)traditional, metro/ mono railways (flyovers, bridges, tunnels, walkways, sideways); (iii)smart traffic management system, (iv)Airways, (v)waterways; and allied structures.   [6]

(c)   Four points (applications) expected about role of Civil Engineer for Electronics & Telecommunication Engineering. 1 mark for correct/ relevant point. (viz. Site selection, overall campus planning, preparing plans and getting sanction/ approval, design and construction of: building, communication towers, launching pads, underground ducts/ cables, etc.)   [4]

OR

Q.(2) (a) 2 marks each for appropriate explanation of each sector of infrastructure development.   [6]

(b) Half mark each for stating relevant two basic areas of Civil Engineering (2 marks). 2 Marks each for correct explanation of these areas (4 marks).   [6]

(c) 4 marks for proper explanation of *significance* of Transportation Engineering. About 8 correct points/ statements expected.   [4]

Q.(3) (a) Six types of Concrete: ½ mark each (3 Marks), Expl. of Pre-Stressed Concrete 2 marks, Sketch 1 mark [6]

(b) Definition: 2 marks;
Four functions of foundation: ½ mark each (2 marks) [4]

(c) Four advantages and four disadvantages: 1 mark each. [4]

OR

Q.(4) (a) List of Materials (Four): ½ mark each (2 marks); two uses of each material: ½ mark each (4 marks) [6]
(b) Brief discussion of four characteristics of smart materials with examples: 1 mark each. [4]
(c) Brief explanation of four types of loads (1 mark each). [4]

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