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Total No. of Pages : 02

Total No. of Questions : 08

M.Tech (Civil Engg EL-IV) (2016 Batch) (Sem.-3)**CONSTRUCTION AND MAINTENANCE MANAGEMENT**

Subject Code : MTCE-219

M.Code : 74768

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTION TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

- Q1. (a) Why is rainwater disposal important in buildings? Discuss the provisions of rainwater harvesting as part of building construction.
- (b) How is lighting requirement of a building calculated? Explain the specific considerations to be taken for lighting stair cases and corridors.
- Q2. Discuss the different types of air conditioning systems which are commonly used in public buildings. Discuss their merits and demerits. Develop a cost comparison in respect of installation, Operation and maintenance.
- Q3. (a) Explain the term effective absorption coefficient. Discuss how this information is used for selection of building materials and construction. Explain this consideration, taking example of an auditorium for 500 capacity.
- (b) Explain the measures of reduction of noise in buildings.
- Q4. (a) "There is lots of scope in integrating lighting, air-conditioning and acoustics in a building" list out the options and opportunities.
- (b) Calculate the air conducting load for an IT office with 200 employees. (Assume suitable dimensions)
- Q5. (a) Discuss the various provisions in buildings for air conditioning plants.
- (b) Explain how the choice of building materials made based on air conditioning load using suitable examples.





- Q6. (a) Explain the various physical, social and economic factors to be addressed in regional planning.
- (b) Explain the use of :
- (i) Facade control
 - (ii) Zoning
- Q7. (a) Explain the classification of buildings according to fire load. Also, indicate the classification of materials according to fire.
- (b) Explain the typical fire fighting requirements in multistoried building as per NBC.
- Q8. Write short notes on :
- (a) Noise rating curve
 - (b) FAR
 - (c) Reverberation time
 - (d) Luminous intensity

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

