

TH3 Advance Construction Techniques & Equipments

Full Marks: 80

Time- 3 Hrs

Answer any FIVE Questions including Q No.1 & 2
Figures in the right hand margin indicates marks

Answer **All** questions

2 x 10

- a. Define prefabrication.
- b. What is artificial timber?
- c. Define hot bitumen??
- d. What is HDPE?
- e. What is retrofitting of building?
- f. What is earthing?
- g. What are geo synthetics?
- h. Define earthquake?
- i. What is the instrument used to measure intensity of earth quake?
- j. Define per capita demand?

2. Answer **Any Six** Questions

6 x 5

- a. Write short notes on glass fibre?
- b. Write pre fabrication and its necessity?
- c. Write down about ground improvement techniques?
- d. Write down the major effects of earthquake on RCC buildings?
- e. Write down about artificial system of ventilation.
- f. Write down about artificial seasoning of timber?
- g. Write down about geo textiles and geogrids.

4 Explain the classification of retrofitting system.

10

4 Write down the process of cold water distribution in high rise buildings?

10

5 Explain horizontal bands used in building.

10

Write short notes on

10

a. Wall cladding

b. Acoustic material

7 Describe about excavating equipments.

10

VI/SEM/CIVIL/2016(S)New

ADVANCE CONSTRUCTION TECH AND EQPTS

Sub Code- CET- 605(iii)

Full Marks : 70

Time : 3 hours

Answer any five questions

The figures in the right-hand margin indicate marks

1. (a) What do you mean by Fibers ? 2
- (b) Write the sources of weakness in RC frame building. 5
- (c) Classify the retrofitting techniques and their uses. 7
2. (a) What do you mean by PVC and RPVC ? 2
- (b) Describe briefly how plastics are being used in construction of structures. 4
- (c) Write short notes on : 2 × 4
- (i) Cladding
- (ii) Micro-silica

6th SEM / CIVIL / 2022(S)

(Turn Over)

(2)

- (iii) Artificial sand
- (iv) Acoustics material
3. (a) Define seismic retrofitting. 2
- (b) What are the additional strengthening measures in masonry building? 5
- (c) Describe the Hot water supply for a Building with a neat sketch. 7
4. (a) Define Fabrication. 2
- (b) Classify Fabrication and describe. 5
- (c) Write the advantages and disadvantages of Fabrication. 7
5. (a) What do you mean by Reinforcing? 2
- (b) Write short notes on any two : 5
- (i) Wire mesh
- (ii) Geo-synthetics
- (iii) Slope stabilization
- (c) Write the methods of ventilation and systems of ventilation. Describe briefly. 7

(3)

6. (a) Define light intensity. 2
- (b) Describe briefly the structural irregularities. 5
- (c) Describe the assumptions made in the earthquake resistant design of structures. 7
7. (a) List out the types of wiring. 2
- (b) What are the points to be considered for selection of wiring? 4
- (c) Write short notes on : 2 × 4
- (i) Soil reinforcing
- (ii) Smooth wheel roller
- (iii) Vibrating compactors
- (iv) Bulldozer