

Construction Technology and Valuation

Course code	Course title	No. of period/week	Total no. of periods	Marks for Formative Assessment	Marks for Summative Assessment
C-401	Construction Technology and Valuation	04	60	20	80

Model Test Paper

State Board of Technical Education and Training, A.P.

Diploma in Civil Engineering (DCE)

Fourth Semester: C-401 CONSTRUCTION TECHNOLOGY AND VALUATION

Time: 90 Minutes

Unit Test – I

Maximum Marks: 40

PART – A

16 Marks

Instructions:

- (i) Answer all questions
- (ii) First question carries FOUR marks.
- (iii) Remaining questions carries THREE marks.

1. (i) Which one of the following is an ingredient of concrete? (C01)
 - i. Binding material
 - ii. Fine aggregate
 - iii. Both (a) and (b)
 - iv. Neither (a) nor (b)
- (ii) A _____ is used to level the ground and spreads the loose material. (C02)
- (iii) A Fire detector cannot detect the following, (C03)
 - i. Radiation
 - ii. Heat
 - iii. Light
 - iv. Smoke
- (iv) Water cement ratio is defined as the ratio of (C01)
 - i. Volume of water to volume of cement
 - ii. Weight of water to weight of cement
 - iii. Volume of cement to volume of water
 - iv. Weight of cement to weight of water
2. Define workability. (C01)
3. State any one example of each of the following Machinery / Equipment, (C02)
 - (i) Excavation Equipment, (ii) Compaction Equipment and (iii) Hauling Equipment
4. Define Daylight factor. (C03)
5. State any three causes of Fire. (C03)

Instructions:

- (i) Answer all questions
- (ii) Each question carries EIGHT marks.
- (iii) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

6. (A) Explain the procedure of Concrete Mix Design as per IS. (C01)
 OR
 (B) Explain the relation between strength of concrete, workability and w/c ratio. (C01)
7. (A) Explain the uses of any one excavation equipment and any one conveying equipment. (C02)
 OR
 (B) Explain the uses of any one compaction equipment and any one hauling equipment. (C02)
8. (A) Explain hot water supply distribution using solar water heating system with the help of circuit diagram. (C03)
 OR
 (B) Write any eight requirements of good lighting in building. (C03)

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Model Test Paper

State Board of Technical Education and Training, A.P.

Diploma in Civil Engineering (DCE)

Fourth Semester: C-401 CONSTRUCTION TECHNOLOGY AND VALUATION

Time: 90 Minutes

Unit Test – II

Maximum Marks: 40

PART – A

16 Marks

Instructions:

- (i) Answer all questions
- (ii) First question carries FOUR marks.
- (iii) Remaining questions carries THREE marks.

1. (i) Which of the following parameters does not affect the lift waiting time? (C03)
 I. Rated load
 II. Number of stops
 III. Door closing time
 IV. Handling capacity
- (ii) _____ is the built-up covered area of a building measured at floor level of any story. (C05)

- (iii) _____ is required to make out an estimate for a work. (C03)
- (iv) The Earthquake force is a function of _____. (C04)
2. Define the magnitude, intensity and energy release of an Earthquake. (C04)
3. Define the terms value, cost and price. (C05)
4. What is a seismic zone? How many seismic zones INDIA is made of? (C04)
5. State the causes of fire. (C03)

PART – B

3 X 8 = 24 Marks

Instructions:

- (i) Answer all questions
 - (ii) Each question carries EIGHT marks.
 - (iii) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.
6. (A) Explain about firefighting. (C03)
- OR
- (B) Explain about air conditioning. (C03)
7. (A) Explain the seismic construction with brick stone masonry buildings as per codal provisions. (C04)
- OR
8. (B) Explain the seismic construction and ductile detailing as per codal provisions. (C04)
9. (A) Explain the methods of valuation of buildings. (C05)
- OR
- (B) Explain the methods of rent fixation of buildings. (C05)

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Model Test Paper

State Board of Technical Education and Training, A.P.
Diploma in Civil Engineering (DCE)
Fourth Semester: C-401 CONSTRUCTION TECHNOLOGY AND VALUATION

Time: 180 Minutes

End Examinations

Maximum Marks: 80

PART – A

10 x 3 = 30 Marks

Instructions:

- (i) Answer all questions
- (ii) First question carries THREE marks.
- (iii) Answer should be brief and straight to the point and shall not exceed five simple sentences.

1. State any three grades of concrete recommended for different types of work. (C01)
2. State any three reasons for need of mechanization of construction work. (C02)
3. State any three requirements of good electrical wiring. (C03)
4. List any three characteristics of earthquake. (C04)
5. State any three needs for valuation. (C05)
6. List any three methods of fixing the rent of a building. (C05)
7. State any three causes of seismic waves. (C04)
8. List any three fire extinguishers. (C03)
9. State any one example each of the following machinery, (a) crane, (b) conveying equipment and (c) Rollers. (C02)
10. List any three factors affecting variability of concrete strength. (C01)

PART – B

10 x 5 = 50 Marks

Instructions:

- (i) Answer any FIVE questions
- (ii) Each question carries TEN marks.
- (iii) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain about 'Mirco concrete' and 'Shotcrete'. (C01)
12. Explain uses of Clamshell and Dumpers. (C02)
13. Explain about Natural ventilation and Artificial ventilation. (C03)
14. Explain about seismic zoning with the help of neat sketch. (C04)

15. Explain the terms, (i) Depreciation, (ii) Sinking Fund and (iii) Annuity (C05)
16. Explain any two methods of valuation of a building. (C05)
17. Explain about Polymer concrete and Hot weather concreting. (C01)
18. Explain about firefighting. (C03)

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