

Model question paper

Government of Andhra Pradesh

Forest Department

Question paper for selection of Technical Assistants (DM-II)

Subject: DM civil trade

Max. marks: 100

Time: 3 hours

Part –A

- a. Answer in all (4) questions. (4 X 20 = 80 Marks).
- b. Question number 5 is compulsory.
- c. Furnish diagrams wherever required.

-0-0-0-

1. a) What is Damp proof course (DPC) ? Mention any SIX methods of Damp proof course and Explain any ONE Method with neat sketch ?(Marks 2+3+5)

b) Write any FOUR characteristics of Good Bricks ? Draw any TWO brick masonry bonds most frequently used ?(Marks 4+ 3+3)

2. a) What are the FOUR methods of Plane tabling ? Mention any FIVE Advantages and any THREE Disadvantages of Plane Table Survey? (Marks 2+ 5+3)

b) i. Write any FIVE principles of Road Alignment?

ii. Rule out a chain survey field book and show how field observations are entered?

3. a) A 100mm thick slab is to be laid over a room measuring 3m X 4m(External dimensions) in Mix M20 (1: 1 ½ : 3). Find the quantities of CEMENT, FINE AGGREGATE and COURSE AGGREGATE. (8 Marks)

b) Differentiate between Sleepers and Ballast in railways ?(6 Marks)

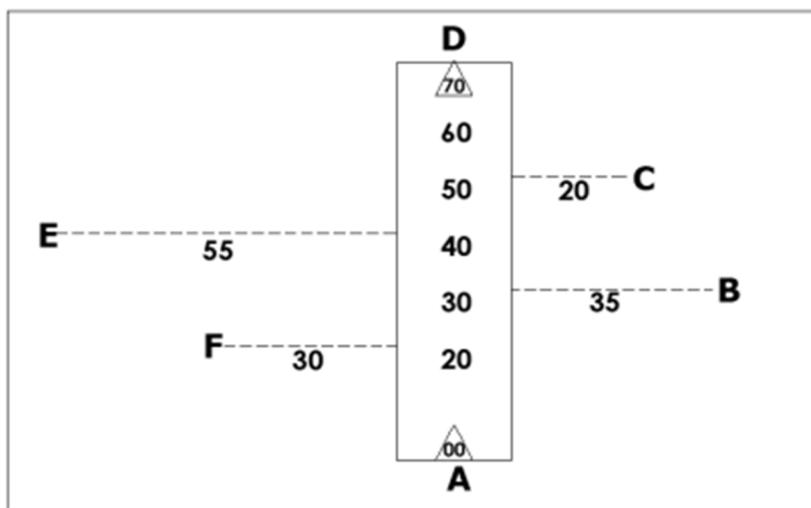
c)What is the Difference between Isometric view and Perspective view ? (6 Marks)

4. Write short notes on

a) Different types of water supply pipes.

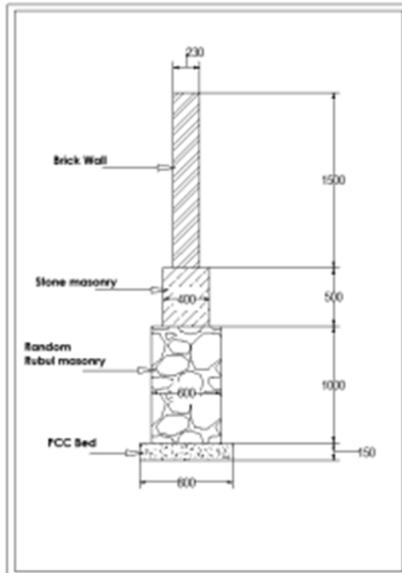
- b) Slump Test
- c) Water logging in an agricultural land
- d) First aid and Treatment of Electric shock.
- e) Advantages of Computer for a draughtsman. (Marks 5 X 4)

5. Plot the following cross staff survey of a field on a graph sheet and calculate the Area of the field. (Marks 2 X10)



6. Find out the Quantities required to construct a compound wall of a length 90 Mts. for the below items as per the cross section (all dimensions are in mm) shown below.

- i) PCC Bed
- ii) RR Masonry
- iii) Stone Masonry
- iv) Brick work
- v) Plastering to only Brick work. (Marks 5 X 4)



SECTION – B (Marks 20 x 1)

Fill in the blanks with most suitable word.

1. The final setting time of ordinary Portland Cement is _____ Hours.
2. The steel in RCC will take _____ stresses.
3. _____ flooring is suitable for Dance Hall.
4. _____ is the process to remove moisture from Timber.
5. The commonly used lime in white washing is _____.
6. The cohesion less soil is _____.
7. The line joining points of the same level is called _____.
8. Drawing is a _____ of technicians.
9. A Solid figure described by the revolution of a right angled triangle about one of its sides containing the right angle is _____
10. The electrical engineering symbol of ceiling fan is _____.
11. ONE Cu.m of Portland cement is equal to _____ no. of bags of cement.
12. In Block cotton soils _____ foundation is suitable.
13. When the Span is more than 9 m and less than 14 m _____ truss is suitable.
14. The front vertical portion of the Step is called _____.
15. Expand I.R.C (used in Roads) _____

16. In Broad gauge the distance between the gauge faces is _____ meters.
17. 20 m length Chain will have _____ no. of Links.
18. The deviation of magnetic needle due to presence of the magnetic objects nearby place of work is called _____ .
19. In the two methods of Building estimates one is Individual wall method and another one is _____.
20. ONE Cubic meter = _____ Cubic Feet.

SECTION – B (Marks 20 x 1)

Fill in the blanks with most suitable word.

1. The final setting time of ordinary Portland Cement is _____ Hours. (10 Hours)
2. The steel in RCC will take _____ stresses. (Tensile)
3. _____ flooring is suitable for Dance Hall. (Wooden)
4. _____ is the process to remove moisture from Timber. (Seasoning)
5. The commonly used lime in white washing is _____. (Hydrated Lime)
6. The cohesion less soil is _____. (Sand)
7. The line joining points of the same level is called _____. (Contour)
8. Drawing is a _____ of technicians. (Language).
9. A Solid figure described by the revolution of a right angled triangle about one of its sides containing the right angle is _____ (Cone)
10. The electrical engineering symbol of ceiling fan is _____.
11. ONECu.m of Portland cement is equal to _____ no. of bags of cement. (30 bags)
12. In Block cotton soils _____ foundation is suitable. (Pile)
13. When the Span is more than 9 m and less than 14 m _____ truss is suitable. (Queen Post)
14. The front vertical portion of the Step is called _____. (Riser)
15. Expand I.R.C (used in Roads) _____ (Indian Road Congress)
16. In Broad gauge the distance between the gauge faces is _____ meters. (1.676)
17. 20 m length Chain will have _____ no. of Links. (100)
18. The deviation of magnetic needle due to presence of the magnetic objects nearby place of work is called _____. (Local Attraction)
19. In the two methods of Building estimates one is Individual wall method and another one is _____. (Centre line Method)
20. ONE Cubic meter = _____ Cubic Feet. (35.31)

