

## 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

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#### Part –A

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

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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)

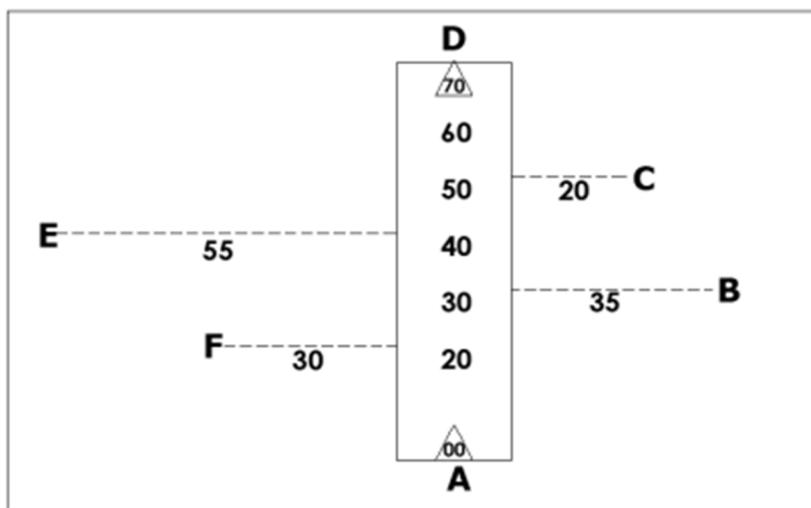
c)What is the Difference between Isometric view and Perspective view ? (6 Marks)

4. Write short notes on

a) Different types of water supply pipes.

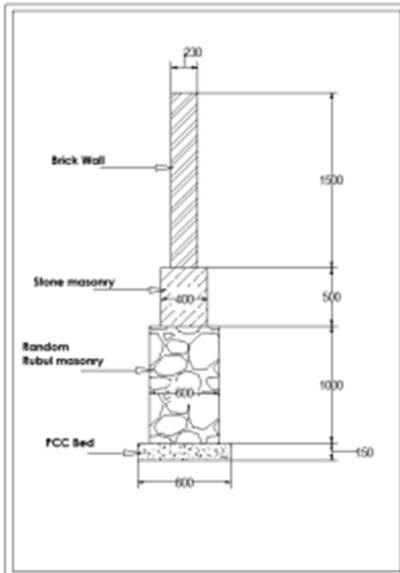
- b) Slump Test
- c) Water logging in an agricultural land
- d) First aid and Treatment of Electric shock.
- e) Advantages of Computer for a draughtsman. ( Marks 5 X 4)

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)

