Skill Development and Entrepreneurship Department
Directorate of Vocational Education and Training
Directorate of Skill Development, Employment and Entrepreneurship
Question Paper Group Name: CIVIL-1
Question Paper Post Names: Craft Instructor – Draftsman-Civil, Surveyor

Duration: 60 Minutes   Total Questions: 40

INSTRUCTIONS

1. This Question Paper Booklet contents 40 mandatory questions. Candidate should check the Question Paper Booklet and ensure that it contents all pages and questions before starting to answer. If candidate finds any problem pertaining to printing/ binding/ incomplete pages etc, candidate should immediately get the Question Paper replaced from the Invigilator.
2. Candidate has to write his/ her seat number in this block.
3. The Question Booklet Number as printed above should be mentioned at the appropriate place on the OMR Answer Sheet.
4. All the Questions are provided with 4 options as 1, 2, 3 and 4. Candidate should select the most correct Option and mention the Option Number on the OMR Answer Sheet in front of the respective Question Number by **fully shading the Option Number with BLACK INK BALL POINT PEN** Only.
5. All Questions carry equal marks i.e. 1 Question has a weightage of 1 marks. Candidate should mind the available time for the examination and solve the questions accordingly.
6. The option shaded once on the OMR Answer Sheet should not be roughed or in any other way changed. Thus candidate should take utmost care while marking their options on OMR Answer Sheet. Such changes if any or any attempt to rough/ change options shall not be checked by the authorities.
7. Marks shall be awarded to the correct answers only during the evaluation of the OMR Answer Sheet. No marks shall be deducted for registering wrong answers (shading wrong option) or not attempting questions. Thus there is **NO NEGATIVE MARKING SYSTEM**.
8. All the rough work has to be done on the sheet provided for Rough Work in the Question Booklet only. Writing anything on the Question Paper Booklet, OMR Answer Sheet or any other Paper Sheet shall be treated as an unfair means and entitle for action under **"Prohibition of Unfair Practices during examination Ordinance – 1982"**.
9. Method of Shading the Correct Option on the OMR Answer Sheet:

   Q.No. 25.How many Centimeters make 1 Meter?

(1)	10	(2)	100
(3)	1000	(4)	10000

The Correct Option for this Question is (2) and hence the (2) option on the OMR Answer Sheet in front of Question Number 25 has to be shaded as following

Correct Method of Shading   Wrong Method of Shading

USE ONLY BLACK INK BALL POINT PEN FOR SHADING

IMPORTANT

This Question Paper Booklet and OMR Answer Sheet is the property of the Department and is being handed over to the candidate for examination purpose only in the examination hall.

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THIS QUESTION PAPER BOOKLET AND PART – 1 OF OMR ANSWER SHEET HAVE TO BE SUBMITTED TO THE INVIGILATOR AFTER THE EXAMINATION.

1. Cutting plane line thickness is

    1. 75 mm   2. 80 mm

    3. 85 mm   4. 90 mm

2. Scale is 20 cm = 1.0 m. The representative Fraction (R.F) is

    1. 1: 20   2. 1 : 2

    3. 1 : 5   4. 1: 50

3. 540 metres is represented by 15 cm in drawing. In drawing hence 500 metres shall be represented as

    1. 13.5 cm   2. 13.3 cm

    3. 13.9 cm   4. 14.0 cm

4. First important adjustment of transit theodolite is to make the axes of the plate level

    1. Perpendicular to the vertical axis   2. Parallel to vertical axis

    3. Tangent to vertical axis   4. In line with the vertical axis

5. The shape of an ellipse in autocad drawing is determined by

    1. Two axes   2. Two radius

    3. Two diameters   4. Two circle

6. A tachometer at A with vertical angle +10° 0' has hair readings 0.952, 1.055, 1.158. The stadia intercept "S" is

    1. 0.208   2. 0.206

    3. 0.103   4. 0.105

7. The tachometer telescope should be fitted with

    1. An anallatic lens   2. Contact lens

    3. Focal lens   4. Convex lens

8. If the fore hearing of a line is N26° 35' W, its back bearing will be

    1. S 26° 35' E   2. S 26° 35' W

    3. N 26° 35' E   4. N 53° 25'W

9. If "R" is radius of the curve and "ϕ" is deflection angle. The total length of the curve is equal to

    1. $\prod R\phi$ 2. $\frac{\prod R\varphi}{90}$

    3. $\frac{\prod R\varphi}{180}$ 4. $\frac{\prod R\varphi}{360}$

10. When the length of a chain along a slope of θ is " I ", the corrections for slope required is

    1. $I \sin^2(\frac{\theta}{2})$ 2. $I \cos^2(\frac{\theta}{2})$

    3. $\frac{l}{2}\sin^2(\frac{\theta}{2})$ 4. $\frac{l}{2}\text{Con}^2(\frac{\theta}{2})$

11. Two points A and B are 1530 m apart across a wide river. The following reciprocal levels are taken with one level

Level	Readings	
	A	B
A	2.165	3.810
B	0.910	2.355

The true difference in level between A and B should be

    1. 1.255 m   2. 1.455 m

    3. 1.545 m   4. 1.645 m

12. On completion of temporary adjustments for plane table is expected to the

    1. Properly leveled   2. Accurately centered

    3. Accurately centered and oriented   4. Accurately centered, properly oriented and leveled

13. In brick masonry with Flemish bond in one course there are

    1. All headers   2. All stretchers

    3. Alternate header end stretcher in some cause   4. Alternate header and stretcher course

14. A stone used for full thickness of wall in stone masonry is called as

    1. Quoin stone   2. Header stone

    3. Through stone   4. Rubble stone

15. The maximum load which will cause failure of a foundation is called as _____ of the soil

    1. Ultimate tensile strength   2. Ultimate normal strength

    3. Ultimate compressive strength   4. Ultimate hearing strength

16. In a ground having low bearing strength and heavy load of foundation generally supported by providing

    1. Combined footing   2. Strap footing

    3. Raft footing   4. None of the above

17. Pile foundation is generally used when soil is

    1. Compressible   2. Water logged

    3. Soft clayey soil   4. All of the above

18. A temporary structure constructed for carrying out construction across river to divert water is called

    1. Caisson   2. Well foundation

    3. Cofferdam   4. Pile foundation

19. For stability of scaffolding to prevent its movement, we must provide

    1. Putlogs   2. Ledgers

    3. Working platform   4. Diagonal tracing

20. A queen closer in brick masonry construction is use full for

    1. Breaking the joints in successive courses   2. Making good appearance

    3. Matching with king closer   4. Making course complete at end

21. The arrangement of supports provided underneath the existing structures without disturbing its stability as known as

    1. Underpinning   2.Scaffolding

    3. Shoring   4. Jacketing

22. A horizontal member of stone, concrete or wood provided to give support for the vertical members of window is called.

    1. Jamb   2. Sill

    3. Reveal   4. Quoin

23. The size of a step commonly adopted for residential buildings

    1. 25 cm X 15 cm   2. 28 cm X 18 cm

    3. 30 cm X 20 cm   4. 20 cm X 12 cm

24. The projections which help in fixing the head of a door frame to the masonry are called as

    1. Reveals   2. Stops

    3. Horns   4. Styles

25. In sloping roof, the inclined wooden members laid from the bridge to the eaves board are known as

    1. Hip Rafters   2. Jack Rafters

    3. Common Rafters   4. Valley Rafters

26. Which is not a carpentry fastening tool?

    1. Bolt   2. Nail

    3. Screw   4. Calculator

27. Tiles used in bathrooms

    1. Marble   2. Glass

    3. Cement   4. Dado

28. Manholes are generally located

   1. At all changes of directions

   2. At all changes of gradients

   3. At all junctions of main and branch sewers

   4. All of the above

29. A pipe installed for ventilation purpose

   1. Waste pipe

   2. Vent pipe

   3. Soil pipe

   4. Anti-Siphonage pipe

30. The minimum thickness of the base of a flexible permanent is kept on

   1. 5 cm

   2. 10 cm

   3. 15 cm

   4. 20 cm

31. The quantity of liquid waste which flows to sewers during rainy season is called

   1. Sewage overflow

   2. Storm sewage

   3. Industrial waste

   4. Dry weather flow

32. The number of vehicles passing at a point on the highway in unit time is known as

   1. Traffic capacity

   2. Traffic volume

   3. Traffic density

   4. All of the above

33. The broad gauge is _____ width.

   1. 0.6096 m

   2. 0.762 m

   3. 1. 00 m

   4. 1.676 m

34. To reduce the wearing of rails the ratios are placed at an

   1. Inward slope of 1 in 20

   2. Outward slope of 1 in 20

   3. Inward slope of 1 in 30

   4. Outward slope of I in 30

35. The bearing plates are used to fix _____ rails on wooden sleepers

    1. Float footed   2. Full headed

    3. Double headed   4. Dimple headed

36. If Δ is the depth of water in meters, B is the number of days of base period and D is the duty in hectares/cume is the relationship which holds good between them is

    1. $D = \dfrac{\Delta\ 8.64\ D}{B}$ 2. $B = \dfrac{\Delta\ 8.64\ D}{D}$

    3. $D = \dfrac{8.64\ \Delta}{B}$ 4. $\Delta = \dfrac{8.64\ B}{D}$

37. Dead storage in a reservoir is provided to

    1. Invigilate the floods   2. Increase the useful life period

    3. Meet the emergency needs   4. Accommodate the silt trapped in the reservoir

38. According to Indian standards institute the actual size of modular bricks is

    1. 23 cm X 11.5 cm X 75 cm   2. 25 cm X 13 cm X 75 cm

    3. 19 cm X 9 cm X 9 cm   4. 20 cm X 10 cm X 10 cm

39. The volume of cement in a 50 kg bag is

    1. 27 litres   2. 34.7 litres

    3. 44.7 litres   4. 42.9 litres

40. Quantities for woodwork are computed generally in terms of

    1. Numbers   2. Numbers and sizes

    3. Area in square metres   4. Volume in cubic metres