PAPER - I
DRAUGHTSMAN CIVIL
(THEORY)
SEMESTER - II

Time: 3 Hrs.  
Marks: 150

Note: Attempt all the questions. 
All questions carry equal marks. 
This paper carries negative marking. 25% marks will be deducted for each wrong answer.

Choose the correct answer:

1. Which tool used to check and transfer on the job?
   a) Bevel square  
b) Try square  
c) Miter square  
d) Divider

2. Which joint is mostly used for making packing cases?
   a) Lengthening joint  
b) Housing joint  
c) Dovetail joint  
d) Tongued and grooved joint

3. ________ is a horizontal projections of head or sill beyond the face of frame.
   a) Frame  
b) Head  
c) Sill  
d) Horn

4. A vertical member which support the frame of the door and window is called –
   a) Transom  
b) Mullion  
c) Rebute  
d) Jamb

5. ________ is a type of casement window in which the panels are fully glazed.
   a) Clere-storey window  
b) Bay window  
c) Glazed window  
d) Corner window

6. A pitched roof in which rafters slope to one side only is called ________.
   a) Aisle roof  
b) Pent roof  
c) Lean – to proof  
d) Any one of these

7. The combination of a king-post truss and queen post truss is known as ________.
   a) Purlin roof  
b) Mansard roof  
c) Collar roof  
d) Couple roof

8. A couple roof is suitable for span upto ________.
   a) 1.5  
b) 2.0  
c) 2.5  
d) 3.5

9. A queen post truss is commonly used for span ________.
   a) 4 to 8 m  
b) 8 to 12 m  
c) 12 to 16 m  
d) 16 to 20 m

Contd...2/
10. The pitch of stair should never exceed –
   a) 40°
   b) 30°
   c) 20°
   d) 10°

11. In wooden stairs, the thickness of tread is adopted as –
   a) 18 mm
   b) 28 mm
   c) 38 mm
   d) 48 mm

12. A line with a tapering width can be easily created by using the ______ tool.
   a) Circle
   b) Polyline
   c) Line
   d) Eclipse

13. When setting up a mechanical drawing in AutoCAD the drafter should set the units to –
   a) Architectural
   b) Decimal
   c) Fractional
   d) Metric

14. The number of tangent required to describe cubic spline is –
   a) 1
   b) 2
   c) 3
   d) 4

15. Which of the following state grid is use to design perspective?
   a) Rectangular
   b) Isometric
   c) Pro-optic
   d) Parametric

16. What is the minimum allowable number of layers in a drawing?
   a) 0
   b) 1
   c) 2
   d) 3

17. Which of the following is not a keyboard shortcut of AutoCAD?
   a) Ctrl + F4
   b) Ctrl + P
   c) Alt + F4
   d) Alt + B

18. Objects are rotate around the –
   a) Base point
   b) Center of the object
   c) Bottom of the object
   d) Origin

19. Scaling objects make them –
   a) Bigger
   b) Smaller
   c) Either bigger or smaller
   d) None of these

20. A _______ is a ceiling of brick, concrete, stone, timber built in principle of arch.
    a) Stair
    b) Vault
    c) Dome
    d) Escalator

21. A cross vault is known as –
    a) Single barrel
    b) Double barrel
    c) Triple barrel
    d) All of these

Contd…3/-
22. _________ is the carpet area plus the thickness of outer walls and balcony.
   a) Carpet area  
   b) Plinth area  
   c) Super built up area  
   d) All of these

23. Agricultural classification is commonly known as ________.
   a) Estimation  
   b) Valuation  
   c) Agricultural  
   d) Green built

24. GUI is the acronym for –
   a) Graphical user interface  
   b) Graphical user intelligence  
   c) Graph user interface  
   d) Graph user intelligence

25. In residential building, the average value of stair width is ________.
   a) 700 mm  
   b) 800 mm  
   c) 900 mm  
   d) 1000 mm

26. Which of the following is used with concrete rigid frames as the principle structural element?
   a) Long shell  
   b) Short shell  
   c) Dome  
   d) Fault

27. Which of the following materials are used for prefabricated building?
   a) Steel  
   b) Wood  
   c) Fibre glass  
   d) All of these

28. The following type of layout is preferred to manufacture a standard product in large quantity?
   a) Process layout  
   b) Product layout  
   c) Combination layout  
   d) Fixed position layout

29. ________ is a state of the art method in which the structure is separated from the substructure by introducing a suspension system between the base and sub structure.
   a) Stair  
   b) Recreation  
   c) Landscape  
   d) Base isolation

30. A ________ dome is a unique structure in which bending stress due to the uniformly distributed load of its dead load is zero.
   a) Sail dome  
   b) Oval dome  
   c) Parabolic dome  
   d) Saucer dome

31. Which of the following system use both natural and mechanical ventilation?
   a) Natural ventilation  
   b) Mechanical ventilation  
   c) Mixed mode ventilation  
   d) None of these

32. The function of aggregate in concrete is to serve as ________.
   a) Binding material  
   b) Filler  
   c) Catalyst  
   d) All of these

33. The compressive strength of stone is found out by ________.
   a) Attrition test  
   b) Crushing test  
   c) Hardness test  
   d) Impact test

Contd...4/-
34. The portion of the brick left after removing the corner equal to half the width and half the length is called –
   a) Closer  
   b) King closer  
   c) Queen closer  
   d) None of these

35. One hectare-metre represents a volume of –
   a) 1000m$^3$  
   b) 10000m$^3$  
   c) 100000m$^3$  
   d) 1000000m$^3$

36. The line of intersection of two surfaces of a sloping roof forming an external angle less than 180° is known as –
   a) Ridge  
   b) Hip  
   c) Valley  
   d) None of these

37. When two or more individual column footings are joined by a beam, it is called –
   a) Strip footing  
   b) Step footing  
   c) Combined footing  
   d) Strap footing

38. The portion of the brick obtained by the cutting it in transverse direction is called –
   a) Bat  
   b) King closer  
   c) Queen closer  
   d) Bevelled closer

39. An arrangement for supporting an unsafe structure temporarily, till it is rendered safe of dismantled, is known as –
   a) Scaffolding  
   b) Hauling  
   c) Shoring  
   d) Jacking

40. In ordinary residential buildings the D.P.C. may be provided at –
   a) Between ground level and water table level  
   b) At ground level  
   c) At plinth level  
   d) At water table level

41. The bricks having one or two edges rounded for use in slightly curved corners are called –
   a) Bull nose  
   b) Closer  
   c) Round nose  
   d) King closer

42. The portion of the wall which support an arch is known as –
   a) Abutment  
   b) Embankment  
   c) Edgement  
   d) Column

43. The type of foundation most suitable for bridges is –
   a) Pier foundation  
   b) Raft foundation  
   c) Pile foundation  
   d) Strap foundation

44. Consolidation of concrete should proceed –
   a) Before mixing  
   b) Before placing  
   c) Immediately after mixing  
   d) Immediately after placing

Contd...5/-
45. A type of bond in a brick masonry consisting of alternate course of headers and stretchers, is called—
   a) English bond
   b) Flemish bond
   c) Stretching bond
   d) Heading bond

46. The horizontal upper part of a step on which foot is placed in ascending or descending a stairway, is called—
   a) Riser
   b) Tread
   c) Flight
   d) Nosing

47. The construct at 10 cm thick partition wall, you will prefer—
   a) English bond
   b) Flemish bond
   c) Header bond
   d) Stretcher bond

48. The platform at the end of a series of steps, is known as—
   a) Platform
   b) Relief
   c) Rest
   d) Landing

49. The aggregate is called coarse aggregate if it is completed retained on—
   a) 10mm sieve
   b) 15mm sieve
   c) 219mm sieve
   d) 4.75mm sieve

50. The increase in volume of dry sand when water is added is called—
   a) Honey combing
   b) Bulking
   c) Segregation
   d) Bleeding