Department of Urban Planning

(Town Planning Wing)
POST: Junior Draftsman
Question Booklet & Answer Key
10.03.2024 (Sunday) Morning

Directions (Q.No. 1 & 2) Out of the four given choices, choose the correct synonym of the words given below:

1. Collate
   A) criticize   B) cruel   C) gather   D) callous

2. Patronage
   A) donation   B) support   C) espionage   D) beneficiary

Directions (Q.No. 3 & 4) Mark the correct antonym of the given word:

3. Anxious
   A) happy   B) reluctant   C) curious   D) apprehensive

4. Implicate
   A) absolve   B) complain   C) eradicate   D) throw

Directions (Q.No. 5 & 6) Choose the correct preposition, out of the four options, to be filled in the gaps of the following sentences:

5. I feel quite done _____ now.
   A) by   B) up   C) at   D) from

6. Indian economy is beset _____ many problems.
   A) of   B) at   C) with   D) by

Directions (Q.No. 7 & 8) Mark the correct meaning of the italicized idioms/phrases used in the following sentences out of the four options:

7. Kailash *pulled through* the examination.
   A) passed with difficulty   B) did not appear at   C) became ill   D) created disorder

8. Kirti has *knocked about* Australia a great deal.
   A) wasted his time   B) condemned the world
   C) exposed his innermost feelings to others   D) wandered about

Directions (Q.No. 9 & 10) Find the right sentences, out of the four given choices:

9. A) He looks like his mother.   B) He is like his mother in the face.
   C) He resembles with his mother.   D) He resembles his mother.

10. A) I rarely go to my village.   B) I scarcely go to my village.
    C) I hardly go to my village.   D) I go to my village very less.

11. Which term of the series 5, 8, 11, 14, ……..is 320?
    A) 104th B) 105th C) 106th D) 64th

12. Select the combination of letters that when sequentially placed in the gaps of the given letter series will complete the series.
    cb_db_cba_bc_bad_c
    A) acdcb   B) cabdc   C) acbcd   D) dcbcb

13. A train X starts from A at 4 PM and reaches B at 5 PM. While another train Y starts from B at 4 PM and reaches A at 5:30 PM. Two trains will cross each other at:
    A) 4:36 PM   B) 4:42 PM   C) 4:48 PM   D) 4:50 PM

14. According to a certain code, 'min fin bin gin' means 'trains are always late', 'gin din cin hin' means 'drivers were always punished', 'bin cin vin rin' means 'drivers stopped all trains', 'din kin fin vin' means 'all passengers were late'. 'hin min kin' would mean
    A) Always late trains   B) Passengers are punished
    C) All passengers trains   D) Passengers are late

15. Q's mother is the sister of P and daughter of M. S is the daughter of P and sister of T. How is M related to T?

A) Maternal grandmother

B) Father

C) Maternal grandfather

D) Option A) or C)

16. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to the group?

A) Volume
B) Size
C) Large
D) Shape

Directions for (Q.No. 17 & 18): Seven boys A, D, Y, U, P, Q and J live in three different buildings -- Ashiana, Top-view and Ridge. Each of them is flying kites of different colours i.e. red, green, blue, white, black, yellow and pink, not necessarily in that order. Not more than three or less than two stay in any of the buildings. Q is flying a pink kite and lives in the same building as only J. i.e. Ashiana. Y is flying a black kite and does not live in Ridge building. U does not live in the same building as A or P and is flying a yellow coloured kite. D lives in Ridge building with only one more person and is flying a green kite. None in the top view building flies a white kite. P does not fly a blue kite.

17. Who stay in top view building?

A) Y, J, P
B) A,Y,P
C) A, P, D
D) Y, U, J

18. What coloured kite is J flying?

A) Blue
B) White
C) Black
D) None of these

Directions for (Q.No. 19 & 20): A training college has to conduct a refresher course for teachers of seven different subjects- Mechanics, Psychology, Philosophy, Sociology, Economics, Science and Engineering from 22nd July to 29th July. Course should start with Psychology. 23rd July, being Sunday, should be holiday. Science subject should be on the previous day of the Engineering subject. Course should end with Mechanics subject. Philosophy should be immediately after the holiday. There should be a gap of one day between Economics and Engineering.

19. Which subject will be on Tuesday?

A) Mechanics
B) Engineering
C) Economics
D) Psychology

20. How many day/s gap is there between Science and Philosophy?

A) One
B) Two
C) Three
D) No gap

21. A boy starts from home in early morning and walks straight for 8km facing the Sun. Then, he takes a right turn and walks for 3km. Then, he turns right again and walks for 2 km and then turns left and walks for 1 km. Then, he turns right, travels 1 km and then turns right and travels for 4 km straight. How far and in which direction is he from the starting point?

A) 5 Km east
B) 6 Km west
C) 2 Km north
D) 4 Km south

22. How many pairs of letters are there in the word "SPARKLE" which has as many letters between them as we have in the English alphabetical series (from both forward and backward direction).

A) One
B) Two
C) Three
D) More than three

23. In a row of children, Deepti is ninth from the left and Kashish is thirteenth from the right. They exchange their positions and then Deepti becomes seventeenth from the left. Find the new position of Kashish from the right end of the row.

A) 20th
B) 21st
C) 27th
D) None of these

24. This question is based on the following five numbers: **834 427 563 649 975**
   If 2 is subtracted from every even digit and 1 is subtracted from every odd digit of each number which number among them will be the lowest number?
   A) 834   B) 427   C) 563   D) 649

25. Which of the following interchanges of signs and numbers would make the given equation correct? $18 - 3 \div 6 + 24 \times 12 = 48$
   A) $\times$ and $-$, 3 and 6   B) $\div$ and $-$, 12 and 6
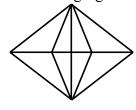   C) $\times$ and $+$, 3 and 6   D) $\div$ and $\times$, 3 and 12

26. A clock seen through a mirror shows quarter to three. What is the correct time shown by the clock?
   A) 8 : 15   B) 9 : 12   C) 8 : 17   D) 9 : 15

27. How many triangles are there in the following figure?

   A) 24   B) 18   C) 20   D) None of the these

28. The six faces of a cube are coloured black, brown, green, red, white and blue in the following ways:
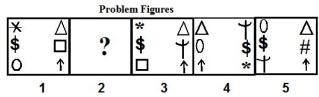   Blue is opposite to black; Brown is adjacent to red; Red is adjacent to white; Blue is at the bottom surface; and Green is between Blue and Black
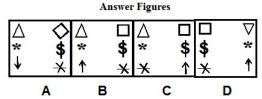   Which of the following can be deduced from the given information?
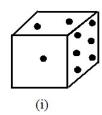   A) Red is on the top   B) White is opposite to Black
   C) Brown is adjacent to White   D) Green is opposite to Red

29. One figure from the set of problem figures, marked as (1, 2, 3, 4, 5) is missing and this missing figure is represented by the sign '?' Choose one figure from the set of answer figures marked as (A, B, C, D) which completes the series of problem figures, based on a certain rule and replaces the sign '?'.
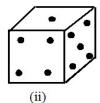

30. Two positions of a dice are shown below. How many dots are there on the face opposite to the face that contains four dots?

   (i)   (ii)

   A) 2   B) 3   C) 5   D) 6

31. The prismoidal formula for determining the quantity of earthwork is:

A) $\frac{A_1+A_2}{2} \times L$

B) $(Bd + Sd^2) \times L$

C) $\frac{L}{6}(A_1 + A_2 + 2A_m)$

D) $\frac{L}{6}(A_1 + A_2 + 4A_m)$

32. The livable area is known as

A) Carpet area   B) Plinth area   C) Built-up area   D) Floor area

33. The vertical face of a window or door opening which supports the frame is called:

A) Jamb   B) Reveal   C) Mullion   D) Transome

34. Which of the following is not an essential idea of town planning?

A) Beauty   B) Convenience   C) Environment   D) Space

35. Which of the following is the principle of zoning:

A) Density   B) Height   C) Use   D) Flexibility

36. Assembly buildings belong to which group?

A) Group A   B) Group B   C) Group C   D) Group D

37. Main objective of town planning is to deal with utilization of _____.

A) Available land

B) Road system network

C) Transport facilities

D) Housing

38. Scale which represents three different units such as meters, decimeters, and centimeters is:

A) Vernier scale   B) Plane scale   C) Diagonal scale   D) Isometric scale

39. Which estimate is called item rate estimate?

A) plinth area estimate

B) detailed estimate

C) abstract estimate

D) preliminary estimate

40. In a residential building, the average value of stair width is

A) 700 mm   B) 900 mm   C) 1000 mm   D) 800 mm

41. When two footings are connected by a beam the foundation is called

A) Combined footing   B) Mat footing   C) Strap footing   D) Strip footing

42. If the metric chain is stretched out of the line, the measured distance will always be

A) Less   B) More   C) Same   D) Cannot be determined

43. In-plane tabling, the instrument used to measure vertical and horizontal distances directly, is known as:

A) Plane alidade   B) Tacheometer   C) Clinometer   D) Telescopic alidade

44. Which direction aspect is best suitable for Gallery or Verandah?

A) North or North-East

B) South or South-East

C) North or North-West

D) West or South-West

45. While folding of prints, how title block needs to be placed?

A) The title block of all the folded prints appears in topmost position and visible on top after folding

B) The title block of all the folded prints appears in bottommost position andvisible on bottom after folding

C) The title block of all the folded prints appears in topmost position and visible on bottom after folding

D) The title block of all the folded prints appears in bottommost position and visible on top after folding

46. Which of the following lengthening joint types is used for rough and temporary structure such as scaffolding?
   A) Fished joint
   B) Tabled joint
   C) Scarified joint
   D) Lapped joint

47. Which is the structure constructed in the form of a chamber along the sewer line to admit clear rain water into the combined sewer?
   A) Catch basin
   B) Drop manhole
   C) Clean out
   D) Trap

48. Which of the following prevents purlins from sliding?
   A) Batten
   B) Cleat
   C) Rafter
   D) Eave board

49. The designation of sheet of size 594 × 841 mm is
   A) A3
   B) A2
   C) A1
   D) A0

50. Internal angle of a regular hexagon is
   A) 72°
   B) 108°
   C) 120°
   D) 135°

51. Which of the following gives Error of Measurement?
   A) Precision value – True value
   B) Measured value – True value
   C) True value – Measured value
   D) True value – Assumed value

52. What will be the distance between two points having coordinates (0, 5) and (12, 0)?
   A) 15
   B) 12
   C) 17
   D) 13

53. In a contour plan, if contour lines are drawn with a contour interval of 2 m and if the gradient is 1 in 30, then the horizontal distance required between successive points on consecutive contours will be
   A) 15 m
   B) 30 m
   C) 45 m
   D) 60 m

54. _____ refers to the effect produced by deriving the maximum benefits from the minimum dimensions off a room.
   A) Compactness
   B) Roominess
   C) Grouping
   D) Privacy

55. The science which deals with the sound insulation in a building is known as _____.
   A) Reverberation
   B) Transmission
   C) Air-insulation
   D) Acoustics

56. The most important purpose of frog in brick is to
   A) display manufacturer's name
   B) form keyed joint between brick and mortar
   C) reduce the weight of brick
   D) improve insulation by providing 'hollows'

57. When a protractor is not available then which scale is used to set out or measure angles?
   A) Scales of chords
   B) Plain scales
   C) Circular vernier
   D) Comparative scales

58. Which door is recommended when privacy combined with natural ventilation is desired?
   A) Collapsible steel door
   B) Louvered door
   C) Revolving door
   D) Rolling steel shutter door

59. Which of the following is the effect of slope of roof truss?
   A) Flatter the slope, greater are effect of rain leakage while steeper the slope lesser are effect of wind action.
   B) Flatter the slope, lesser are effect of rain leakage while steeper the slope greater are effect of wind action.
   C) Flatter the slope, lesser are effect of rain leakage while steeper the slope lesser are effect of wind action.
   D) Flatter the slope, greater are effect of rain leakage while steeper the slope greater are effect of wind action.

60. The construction of engineering drawing means line, line segments, points, planes, circles, and polygons by using a compass and straight edge called:
A) Architecture drawing
B) Geometric construction
C) Structural drawing construction
D) Infrastructural construction

61. A portion of land acquired under the land acquisition act for a street, is sold by the _____ to an individual.
A) Municipal council
B) Secretary
C) Urban authority
D) Magistrate

62. Length of an offset pole is generally equal to:
A) 2 meters
B) 4 meters
C) 5 meters
D) 6 meters

63. In a 20-m long chain with 100 links, each link denotes:
A) 0.1 m
B) 0.25 m
C) 0.4 m
D) 0.2 m

64. Aristotle said a city should be built to give its inhabitants _____.
A) Security and happiness
B) Happiness
C) Food and power
D) Clean streets and security

65. A city should be divided into suitable zones such as _____.
A) recreation zone
B) residential zone, commercial zone
C) residential zone, commercial zone, industrial zone and recreation zone
D) industrial zone and recreation zone

66. Mohenjo-Daro divided in to _____ blocks.
A) 10
B) 12
C) 14
D) 16

67. Gandhinagar and Chandigarh's planning are based on _____,
A) Rectangular grid pattern
B) Rectangular with diagonal pattern
C) Concentric and radial street pattern
D) Radial street pattern

68. Which factors are considered for the height zoning?
A) Cubical contents of the building
B) Width of streets and other marginal open spaces of buildings
C) Options A) and B)
D) Heights of buildings

69. Causes of slums are:
A) Rapid industrialization
B) Population growth
C) Lack of zoning
D) All of the above

70. _____ area of a building is the area of verandahs, passages, corridors, balconies, porches, etc.
A) Floor area
B) Horizontal circulation area
C) Vertical circulation area
D) Plinth area

71. The axis used to show depth in AutoCAD
A) W axis
B) X axis
C) Y axis
D) Z axis

72. Which command convert discrete object in polyline?
A) Union
B) Subtract
C) Join
D) Polyline

73. In CAD, which of the following is not a property of an object?
A) Line weight
B) Measure
C) Hyperlink
D) Elevation

74. Line connecting a view to a note is know as
   A) Dimension line   B) Projection line   C) Arrowhead   D) Leader

75. Which of the following commands is used for closing the active window?
   A) Alt + F4   B) Alt + F1   C) Shift + F4   D) Ctrl + F4

76. 'Offset' command can be used for drawing:
   A) Parallel lines   B) Intersecting lines
   C) Perpendicular bisectors   D) To cut extra lines

77. In four quadrants, the planes of projection are extended beyond the line of intersection and the four right angles are obtained in this way is called _____ angle.
   A) obtuse   B) reflex   C) complete   D) dihedral

78. Which of the following is not a valid option of Units command?
   A) Architectural   B) Decimal   C) Metric   D) Meter

79. Parallelogram bars are the basic part of which instrument?
   A) Drafting board   B) Protractor   C) Drafting chair   D) Mini drafter

80. Oblique sections are useful to show the _____.
   A) Interior shapes   B) Oblique lines
   C) Foreshortened features   D) Projected features

81. Which mode allows the user to draw perpendicular straight lines?
   A) OSNAP   B) Ortho   C) Linear   D) Offset

82. A regular cone is placed on a horizontal plane on its base, the front view is
   A) Circular   B) Triangular   C) Oblong   D) Elliptical

83. Which of the following drawings is an axonometric and has three axis that are divided in equal angles?
   A) Dimetric   B) Isometric   C) Trimetric   D) Orthographic

84. Straight line joining the opposite corners of a quadrilateral is called as:
   A) Side   B) Hypotenuse   C) Perpendicular   D) Diagonal

85. The 'Collabland' software is developed under _____ platform.
   A) Visual Basic   B) Java   C) Oracle   D) C++

86. In transverse plotting, the stations are examined and inked as _____.
   A) Red   B) Blue   C) Black   D) Green

87. The following formula is used to check the value of measured angles in a closed circuit with 'n' number of sides.
   A) 2n × 90   B) (2n + 4) × 90   C) 2n   D) (2n – 4) × 90

88. When plan is drawn above the elevation, the projection is called:
   A) First Angle   B) Third Angle   C) Isometric   D) Fourth Angle

89. If a thin circular disc is perpendicular to both HP and VP, its plan and elevation will be respectively:
   A) Line, Ellipse   B) Ellipse, Line   C) Line, Line   D) Circle, Line

90. Two sides of a right-angled triangle are 3 cm and 4 cm, then length its hypotenuse will be:
   A) 14 cm   B) 6 cm   C) 7 cm   D) 5 cm

91. Maximum length of a rod that can be kept in a room of size 12×12×12 feet is:
A) 12+12+12 feet
B) 12^2 feet
C) $\sqrt{12 + 12 + 12}$ feet
D) $\sqrt{12^2 + 12^2 + 12^2}$ feet

92. In AutoCAD software, effect of freezing a layer is:
A) make it invisible and prevent regeneration
B) make is invisible and allow regeneration
C) allow visibility and regeneration
D) display the layer but prevents its editing

93. In AutoCAD, which of the following commands is used to make a surface bounded by broken lines:
A) Trim
B) Offset
C) Region
D) Fillet

94. Files extensions of drawing files and template files in AutoCAD are respectively:
A) .dwg and .bmp
B) .dwt and .png
C) .dwg and .dwt
D) .dxf and .dwg

95. To continue dimensioning along the same line, which of the following commands may be used:
A) DLI
B) DAL
C) DIMANG
D) DCO

96. When hatching a sectional view in an engineering drawing:
A) Every detail cut be the section plane must be hatched
B) It is upto the draughtsman which part should be hatched
C) There is no need to hatch any part of the drawing
D) Only parts not cut by section are to be hatched

97. A Polyline can be broken into individual lines and arcs using which of the following command?
A) BREAK
B) TRIM
C) EXPLODE
D) OVERKILL

98. Find the false statement in regards with "If an array is made associative".
A) You can't use Boolean operations on the array elements
B) The array can be edited again by selecting it
C) The array can't be modified in any way once it is made associative
D) To make the array non-associative you need to use explode command on it

99. Model Tab and Layout Tab can be majorly distinguished as,
A) The Model tab is used for drawing in 3D and a Layout is used for drawing in 2D
B) The Model tab is where you create the drawing, and a Layout tab represents the sheet that you will plot or print on
C) The colour of the background
D) The Model tab displays the drawing you are copying from and the Layout tab is where you lay out the new drawing

100. A Boolean operation that is used to select interfering region between solids
A) Union
B) Intersect
C) Subtract
D) Deduct

***

Urban Planning (Town Planning wing)
Post : Junior Draftsman (Morning)
10-03-2024 (Sunday)

Q.No.	Ans	Q.No.	Ans	Q.No.	Ans	Q.No.	Ans
1	C	26	D	51	C	76	A
2	B	27	A	52	D	77	D
3	B	28	D	53	D	78	D
4	A	29	B	54	B	79	D
5	B	30	D	55	D	80	A
6	C	31	D	56	B	81	B
7	A	32	A	57	A	82	B
8	D	33	A	58	B	83	B
9	D	34	D	59	D	84	D
10	A	35	C	60	B	85	B
11	C	36	D	61	A	86	B
12	A	37	A	62	A	87	D
13	A	38	C	63	D	88	B
14	B	39	B	64	A	89	C
15	D	40	B	65	C	90	D
16	A	41	C	66	B	91	D
17	B	42	B	67	A	92	A
18	B	43	D	68	C	93	C
19	C	44	A	69	D	94	C
20	A	45	B	70	B	95	D
21	A	46	D	71	D	96	A
22	D	47	A	72	C	97	C
23	B	48	B	73	B	98	C
24	B	49	C	74	D	99	B
25	A	50	C	75	A	100	B