213/2015

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. The narrow strip of drawing board are joint together by ———— joints.
   (A) Butt and lap joints  (B) Lapped and splayed joints
   (C) Tongue and groove joint  (D) Butt and dovetail joints

2. Which wood is used to made wooden T-Square?
   (A) Teak  (B) Oak
   (C) Pine  (D) Linoleum

3. The designation of standard recommended scales of 1:10 and 1: 20 is :
   (A) M 2  (B) M 4
   (C) M 5  (D) M 3

4. The trimmed size of A2 drawing sheet in mm is :
   (A) 297 × 420  (B) 420 × 594
   (C) 594 × 841  (D) 210 × 297

5. Which type of line is used to draw centre lines?
   (A) Chain Thin  (B) Chain Thick
   (C) Dashed Thin  (D) Dashed Thick

6. Which tool is used to splitting stone in stone masonry?
   (A) Mallet  (B) Pick
   (C) Face Hammer  (D) Gads

7. A good brick earth the percentage of silt contents is ———— by weight.
   (A) 20 to 50%  (B) 20 to 35%
   (C) 10 to 35%  (D) 10 to 45%

8. The down stream face of dam may be eroded by heavy rain is known as.
   (A) Over topping  (B) Toe Erosion
   (C) Gullyng  (D) None of these

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[P.T.O.]
9. The temperature variations in chain surveying is a:
   (A) Cumulative error  (B) Compensating error
   (C) Permanent error   (D) All the above

10. The pipe which is used to discharge foul gases in drains or sewer into the atmosphere is known as:
    (A) Soil pipe  (B) Vent pipe
    (C) Ventilating pipe  (D) None of these

11. One cubic feet is ———— gallons.
    (A) 6.23 gallons  (B) 6.32 gallons
    (C) 4.546 gallons  (D) None of these

12. The value of one Horse power in British system is ———— Foot Pound/second.
    (A) 555  (B) 735
    (C) 746  (D) 550

13. A section subjected to axial pushes acting normally across the section, the stress setup is known as.
    (A) Tensile stress  (B) Shear stress
    (C) Compressive stress  (D) Direct stress

14. In optical square two mirrors are placed at an angle of ———— to each other.
    (A) 30°  (B) 90°
    (C) 180°  (D) 45°

15. The tool used to screwing and unscrewing bigger diameter pipe is:
    (A) Chain wrench  (B) Adjustable wrench
    (C) Spanner  (D) Threading dies

16. The projecting stone provided to serve as a support for joist is known as:
    (A) Cornice  (B) Corbel
    (C) Coping  (D) Throating

17. The pressure piles are ———— type of piles.
    (A) Timber piles  (B) Steel piles
    (C) Sheet piles  (D) Board piles
18. In plate load test the minimum recommended size of bearing plate is:
   (A) 15 cm  (B) 30 cm
   (C) 45 cm  (D) 60 cm

19. One square meter is ———— square yards.
   (A) 1.968  (B) 1.986
   (C) 1.869  (D) 1.896

20. The seven days compressive strength of ordinary cement is ———— N/mm².
    (A) 19-23 N/mm²  (B) 22-28 N/mm²
    (C) 27-32 N/mm²  (D) 36-52 N/mm²

21. The joint used for connecting a horizontal member into an inclined member is known as.
   (A) Oblique tenon joint  (B) Housed joint
   (C) Dovetailed housed joint  (D) Mitred and rebated joint

22. The quantity of water required in cement for completely hydrated is about ———— of its weight.
    (A) 1/2 to 1/3  (B) 1/3 to 1/7
    (C) 1/5 to 1/4  (D) 1/4 to 1/8

23. A four sided figure having no parallel side is:
    (A) Rhombus  (B) Trapezoid
    (C) Trapezium  (D) Quadrilateral

24. The double ordinate passing through the focus of cone is:
    (A) Abscissa  (B) Double ordinates
    (C) Focal chord  (D) Latus rectum

25. Which one is an isolated footing for a column?
    (A) Strip footing  (B) Mat footing
    (C) Pad footing  (D) Combined footing
26. A brick whose one end is cut splayed for full width is known as?
   (A) Bevelled closer  (B) Bevelled bat
   (C) King closer  (D) Mitred closer

27. The exposed vertical surface left on the sides of an opening after the door frame has been fitted in position is:
   (A) Jambs  (B) Reveals
   (C) Sill  (D) Freeze

28. Two walls meet at $90^\circ$ a ______ quoin is formed.
   (A) Square quoin  (B) Squint quoin
   (C) Tea quoin  (D) None of these

29. 0.005 of 10 is what percent?
   (A) 50%  (B) 5%
   (C) 0.5%  (D) None of these

30. The area of a pentagon is:
   (A) $1.7205 \times \text{side}^2$  (B) $1.2705 \times \text{side}^2$
   (C) $1.7205 \times \sqrt{\text{side}}$  (D) $1.2705 \times \sqrt{\text{side}}$

31. Which method is commonly adopted for the removed of permanent hardness?
   (A) Lime-soda poses  (B) Base exchange process
   (C) Demineralisation process  (D) All the above

32. The granite is a _______ rock.
   (A) Sedimentary  (B) Metamorphic
   (C) Igneous  (D) None of these

33. Silica is melt at _______°C.
   (A) 1730°C  (B) 1400°C
   (C) 1430°C  (D) 1510°C

34. The compressive strength of 1:1:2 concrete mix is:
   (A) 15 N/mm²  (B) 20 N/mm²
   (C) 25 N/mm²  (D) None of these
35. The concrete provided to resist to attack by acids and other chemicals:
   (A) Pre stressed concrete  (B) Polymer concrete
   (C) No-fines concrete     (D) Vaccum concrete

36. The defect indicated by the curvature formed in the direction of length of timber is:
   (A) Warp         (B) Split
   (C) Cup         (D) Bow

37. The unit weight of ice in kg/m³:
   (A) 1016 kg/m³  (B) 1000 kg/m³
   (C) 910 kg/m³   (D) None of these

38. The maximum safe bearing capacity of medium clay in tone /m² is:
   (A) 25 tone /m²  (B) 35 tone /m²
   (C) 45 tone /m²  (D) 50 tone/m²

39. In raking the bottom of the raker is rest on:
   (A) Braces   (B) Straining
   (C) Rakers   (D) Sole plate

40. The removal of props of slab spanning upto 4.5 m is ___ days.
   (A) 3 days   (B) 7 days
   (C) 14 days  (D) 21 days

41. The defect in painting due to poor adhesion:
   (A) Blistering  (B) Bloom
   (C) Fading     (D) Flaking

42. The additional horizontal rails fixed between the top and bottom rails of a shutter is known as:
   (A) Cross rail  (B) Bottom rail
   (C) Top rail    (D) Lock rail

43. Name the window where shutter open like doors are called:
   (A) Fixed window  (B) Casement window
   (C) Pivoted window  (D) None of these

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44. The type of flooring perfectly noiseless and is used in theater is named as:
   (A) Glass Floor    (B) Asphalt Floor
   (C) Cork Floor     (D) Linoleum Floor

45. The minimum depth of concrete at the crown of a jack arch floor should be:
   (A) 100 mm         (B) 150 mm
   (C) 180 mm         (D) 200 mm

46. A sloping surface and it is adopted as a suitable for stair for easy connection between the floors:
   (A) Ladder         (B) Ramps
   (C) Elevators      (D) Lift

47. The inclined member in wooden stair acting as wooden beams to support the step is:
   (A) Soffit         (B) Waist
   (C) String         (D) Stringers

48. The accepted speed of the moving stair is ————mm/second.
   (A) 450 mm         (B) 300 mm
   (C) 200 mm         (D) 150 mm

49. A non residential enclosure constructed of non load bearing partition is known as:
   (A) Balcony        (B) Canopy
   (C) Cabin          (D) Barsati

50. In industrial area, the covered area shall not be exceed ———— of the site area.
   (A) 40%            (B) 60%
   (C) 70%            (D) None of these

51. Which one is not a CAD package?
   (A) Power point    (B) STADD
   (C) REVET          (D) IDEAS

52. The area of horizontal circulation of a residential building should be in between:
   (A) 10% to 15%     (B) 20% to 40%
   (C) 30% to 40%     (D) 20% to 25%
53. In D-Type plot the permissible covered area is ———— of the site area.
   (A) 60%          (B) 50%
   (C) 40%          (D) 30%

54. The layout plan are drawn to a scale not less than :
   (A) 1 : 2000     (B) 1 : 1500
   (C) 1 : 1000     (D) 1 : 500

55. In Auto Cad the short key of GRID command is :
   (A) F9          (B) F8
   (C) F7          (D) F10

56. What percentage of cement is mixed with asbestos fibers in the manufacture of AC sheet?
   (A) 5%          (B) 15%
   (C) 30%         (D) 45%

57. Which one of the following group B type building?
   (A) Industrial    (B) Business
   (C) Educational   (D) Assembly

58. 1 kg = ———— lbs.
   (A) 2.502 lbs     (B) 2.205 lbs
   (C) 2.052 lbs     (D) 2.520 lbs

59. The command used in Auto Cad, for shorten object using other object :
   (A) Trim         (B) Erase
   (C) Delete       (D) None of these

60. The number of dwelling units in a row of building shall not exceed :
   (A) 40           (B) 30
   (C) 20           (D) 10

61. The horizontal angle between a line and the true meridian is called :
   (A) Azimuth      (B) Magnetic declination
   (C) Horizontal declination  (D) Dip of needle
62. Which method is suitable in plain table surveying for a small area can be commanded from a single station?
   (A) Intersection methods  (B) Traversing method  (C) Radiation method  (D) All of these

63. The total length of stair in a horizontal plain, including landing is known as:
   (A) Flight  (B) Going  (C) Scotia  (D) Run

64. The short key for removes italic format for select text is:
   (A) Ctrl + B  (B) Ctrl + I  (C) Ctrl + U  (D) Ctrl + A

65. In painting P.V.C.N. means:
   (A) Pigment Value Concentration Number  (B) Pigment Volume Content Number  (C) Pigment Value Constant Number  (D) Pigment Volume Concentration Number

66. In C.G.S system the unit of mass is expressed in:
   (A) lbs  (B) gm  (C) Kg  (D) N

67. The process adopted to make the steel to soft is known as:
   (A) Annealing  (B) Normalizing  (C) Hardening  (D) Tempering

68. The melting point of lead is in between:
   (A) 655 to 455°C  (B) 410 to 510°C  (C) 320 to 330°C  (D) 200 to 210°C

69. The area of a ellipse is:
   (A) \( \pi / 2 \) (major axis \( \times \) minor axis)  (B) \( \pi / 3 \) (major axis \( \times \) minor axis)
   (C) \( \pi / 3 \) (perimeter)  (D) \( \pi / 4 \) (major axis \( \times \) minor axis)
70. The maximum span of a lean to roof is ———— mts.
   (A) 2.4 m  (B) 2.6 m
   (C) 2.10 m  (D) None of these

71. The unit of measurement of cornice is worked out in MKS system is:
   (A) Sq. metre  (B) Metre
   (C) Cubic metre  (D) Sq. feet

72. The multiplying factor of one hecto is:
   (A) $10^4$  (B) $10^3$
   (C) $10^2$  (D) $10^6$

73. The value at the end of the utility period without dismantled is known as:
   (A) Book value  (B) Market value
   (C) Scrap value  (D) Salvage value

74. A curve generated by a fixed point on the circumference of a circle which rolls without slipping along a fixed straight line is called:
   (A) Hyperbola  (B) Cycloid
   (C) Involute  (D) Hypocycloid

75. The plane surface which are mutually perpendicular and used for projecting the views of an object is known as:
   (A) Principle planes  (B) Horizontal planes
   (C) Vertical planes  (D) None of these

76. Which meridian changes its position with time?
   (A) True meridian  (B) Arbitrary meridian
   (C) Magnetic meridian  (D) All the above

77. The external curve of an arch is known as:
   (A) Intrados  (B) Back of the arch
   (C) Skew back  (D) None of these

78. When a stair slab spanning horizontally the bending moment equal to?
   (A) $wL^2/2$  (B) $wL^2/12$
   (C) $wL^2/4$  (D) $wL^2/8$
79. Le-Chatelier method of test is done for finding out ———— property of cement.
   (A) Soundness  (B) Fineness
   (C) Setting time  (D) Compressive strength

80. In a singly reinforced beam section depth of actual N.A is more than the critical N.A, the section is known as :
   (A) Balanced section  (B) Under reinforced section
   (C) Over reinforced section  (D) Critical section

81. Who is regarded as the 'Grand Old Man' of 1857 Revolt?
   (A) Dadabhai Naoroji  (B) Nana Saheb
   (C) Kunwar Singh  (D) Bahadurshah Safar

82. Aurobindo Ghosh was arrested and trailed in which case :
   (A) Lahore Conspiracy Case
   (B) Kakori Train Robbery Case
   (C) Alipore Conspiracy Case
   (D) Chittagong Armory Raid

83. Which South Indian River is known as 'Dakshina Bhageeradhi'?
   (A) Kaveri  (B) Bharatapuzha
   (C) Periyar  (D) Pamba

84. Who was the President of Indian National Congress when Indira Gandhi was expelled from the Congress (1969)?
   (A) C. Sankaran  (B) Jagjivan Ram
   (C) K. Kamaraj  (D) S. Nijalingappa

85. The Poverty Alleviation scheme, Antyodaya Anna Yojana (AAY) was launched on :
   (A) 25th December, 2000  (B) 1st April, 2000
   (C) 25th August, 2005  (D) 12th October, 2005
86. The statement 'India that is 'Bharat', shall be a union of states' expressed in:
   (A) Article 1, Indian Constitution  (B) Article 17, Indian Constitution
   (C) Article 5, Indian Constitution  (D) Preamble, Indian Constitution

87. National Council of Educational Research and Training (NCERT) was established in:
   (A) 1986  (B) 1961
   (C) 1953  (D) 1964

88. Name the Viceroy of British India, who prepared the Mont-Ford Reforms (Government of India Act, 1919):
   (A) Edwin Samuel Montagu  (B) Viscount Chelmsford
   (C) Stafford Cripps  (D) Lord Minto II

89. Narora Atomic Power Station is located in:
   (A) Gujarat  (B) Maharashtra
   (C) Telungana  (D) Uttar Pradesh

90. Who was the first 'Malayalee' chairman of Rajya Sabha?
   (A) P. J. Kurian  (B) John Mathai
   (C) Dr. S. Radhakrishnan  (D) K. R. Narayanan

91. 'Om Sahodaryam Sarvatra' (The Brotherhood of All) is the motto of:
   (A) Advaita Ashram, Aluva  (B) Missionaries of Charity, Kolkata
   (C) Sri Aurobindo Ashram, Pondicherry  (D) Ramakrishna Math, Belur

92. The birth place of Poikayil Yohannan is:
   (A) Eraviperoor, Pathanamthitta  (B) Kainakary, Kuttanad
   (C) Cherai, Cochin  (D) Cherukolpuzha, Pathanamthitta
93. Mar Kuriakose Elias Chavara was beatified (blessed and face) at Kottayam on 8 February 1986 by:
   (A) Pope Benedict XVI
   (B) Pope John Paul II
   (C) Baselios Mar Thoma Paulose II
   (D) H.H. Baselios Mar Thoma Didymos I

94. The First president of Nair Service Society:
   (A) Mannath Padmanabhan
   (B) K. Kelappan
   (C) K. P. Karunakara Menon
   (D) Kakkanattu Narayana Panikker

95. Who called Ayyankali “Pulayaraja”?
   (A) Mahathma Gandhi
   (B) Indira Gandhi
   (C) Sri Chithirathirunal
   (D) Dr. B. R. Ambedkar

96. In which of the Padmarajan novel, the character of ‘Clara’ appears?
   (A) Itha Ivide Vare
   (B) Peruvazhiyambalam
   (C) Rethinirvedam
   (D) Udakappola

97. Kerala soil Museum is at:
   (A) Sreekaryam
   (B) Parottukonam
   (C) Pujappura
   (D) Kazhakkuttam

98. Alexis Tsipras, the newly elected Prime Minister of Greece belongs to which political party?
   (A) PASOK
   (B) POTAMI
   (C) SYRIZA
   (D) XPIKA

99. Who was the chief guest of India’s 66th Republic Day?
   (A) Shinzo Abe
   (B) Jigme Khesar Namgyel Wangchuck
   (C) Barack Obama
   (D) David Cameron

100. International Yoga Day:
    (A) January 25
    (B) June 26
    (C) June 21
    (D) June 14