लोक सेवा आयोग [KEY: D]

नेपाल इन्जिनियरिङ्ग सेवा, सिभिल समूह

नेपाल इन्जिनियरिङ्ग सेवा सिमित समूह अन्तर्गतका जनरल, हाइवे, हाइड्रोपावर, इरिगेशन, स्यानिटरी र एयरपोर्ट उपसमूहहरुको राजपत्राङ्कित तृतीय श्रेणीका, सिभिल इन्जिनियर पदहरुको खुला प्रतियोगितात्मक परीक्षा-२०७९

समयः १ घण्टा ३० मिनेट   पूर्णाङ्क : १००
पत्रः प्रथम   मितिः २०७९।१०।१४   उत्तीर्णाङ्क : ४०

उत्तर पुस्तिकामा प्रश्नपत्रको key अनिवार्य रुपले उल्लेख गनुपर्नेछ । उल्लेख नगरेमा उत्तरपुस्तिका रद्द हुनेछ । परीक्षामा Calculator, Mobile प्रयोग गर्न पाइने छैन ।

General awareness

1. **Which of the following statement is wrong?**
   a. Rukum east is hilly district
   b. Bhojpur is hilly district
   c. Morang is terai distric
   d. None

2. **Krishnasar is found in which national park of Nepal?**
   a. Sagarmatha NP
   b. Bardiya NP
   c. Makalu Barun NP
   d. Lamtang NP

3. **According to census of 2078, the no. of district having negative population growth rate is…**
   a. 20
   b. 32
   c. 40
   d. 11

4. **From when did latest poverty alleviation policy implemented?**
   a. 2070 BS
   b. 2072 BS
   c. 2076 BS
   d. 2073 BS

5. **What is the capacity of Bheri Babai Diversion Multipurpose Project?**
   a. 36 MW
   b. 48 MW
   c. 56 MW
   d. 64 MW

6. **When was Sugauli Treaty signed?**
   a. 1816 Mar 16
   b. 1816 Apr 16
   c. 1818 Mar 16
   d. 1818 Apr 16

7. **Which river doesn't originate from Tibet?**
   a. Arun
   b. Tamor
   c. Trisuli
   d. Seti

8. **What was the name of lowest administrative unit during Lichhavi Period?**
   a. Tal
   b. Gram
   c. Dranga
   d. Bisaya

9. **Harisayani Ekadasi falls on…**
   a. Asar krishna ekadasi
   b. Asar sukla ekadasi
   c. Kartik krishna ekadasi
   d. Kartik sukla ekadasi

10. **Who is the inventor of mobile phone?**
    a. Tomy karl palm
    b. Martin cooper
    c. Justin cell
    d. Justin cooper

11. **Which one of the following is not the advantage of bio-diversity?**
    a. Physiological impact on human
    b. Environmental protection
    c. Balance in ecosystem
    d. None of above

12. **From when Nepal started participating in UNO peace keeping force…**
    a. 1955
    b. 1958
    c. 1960
    d. 1978

13. **Which organization published nine-chapter report in 2022 AD?**
    a. IMF
    b. World Bank
    c. WTO
    d. ADB

14. **According to constitution of Nepal, sovereignty and state authority is vested in…**
    a. Shri 5
    b. Legislature parliament
    c. Council of ministers
    d. Nepali people

15. **Which one of the following is/are the duty of every citizens according to constitution of Nepal?**
    a. To safe guard the nationality, sovereignty and integrity and integrity of the nation
    b. To abide by the constitution and law
    c. To render compulsory service as and when the state requires
    d. all of above

16. **How many metropolitan and sub-metropolitan city are there in Nepal?**
    a. 9 and 15   b. 6 and 11   c. 11 and 6   d. 15 and 9
17. **The misconception between the federal and state can be resolved by which committee?**
    a. Inter-state council   b. judiciary   c. supreme court   d. none of above
18. **According to civil service act sick leave is provided for**?
    a. 6 days   b. 12 days   c. 15 days   d. 30 days
19. **The provision that every governmental office should have the spokeperson is provisioned in…**
    a. Civil service act-2049   b. Good governance act-2064
    c.   d.
20. **The consideration about provision of public service charter is made in which act?**
    a. Civil service act-2049   b. Good governance act-2064
    c.   d.
21. **Which of the following is not the theory of public policy?**
    a. Ellite theory   b. Group theory   c. Political group theory   d. Rational choice theory
22. **Which of the following is negative theory of motivation?**
    a.   b.   c.   d.
23. **Which of the following is the primary function of accounting system?**
    a. Vouching   b. Reconciling   c. Ledger posting   d. none of them
24. **'Hamro lok sanskriti' was written by?**
    a. Bhairav Aryal   b. Satya Mohan Joshi   c. Guru Prasad Mainali   d. Ramesh Bikal
25. **Where did Queen Elizabeth II died?**
    a. Buckingham Palace, London   b. Sardhingam Estate
    c. Princeton hospital, Scotland   d. Kings Palace

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Intelligence Questions

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26. **If BUS = 7, Truck = 23 then NINE equals what…?**
    a. 11   b. 12   c. 14   d. 17
27. **Find the missing letter U, O, I, …, A**
    a. B   b. E   c. P   d. Z
28. **What will be the multiplication of all the number in telephone?**
    a. 362880   b. 0   c. 9   d. undefined
29. **Assertion(A): Leaves of plants are green.**
    Reason(R): Plants contains chromoplast, the green pigment.
    a. Both A and R are true and R is the correct explanation of A
    b. Both A and R are true and R is not the correct explanation of A
    c. A is true but R is false.
    d. A is false and R is true.
30. **If the cost of the article is 26000 then what will be its selling price after 15% discount?**
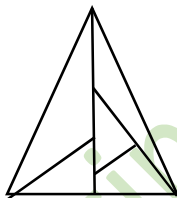   a. 3900   b. 22100   c. 22500   d. 20800
31. **87:56::97:?**
    a. 114   b. 221   c. 63   d. 69
32. **In an election, a candidate secures 40% of votes and defeated by the only other candidate by a majority of 298 votes. Find the total number of voters recorded?**
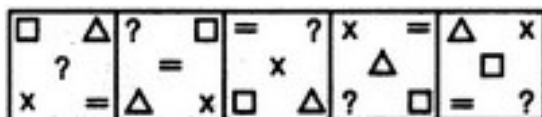   a. 1580   b. 1490   c. 1470   d. 1530

33. **16 men or 24 women can do a piece of work in 20 days. The number of days needed to complete the job, if 20 men and 30 women are employed to do the same piece of work is…**

 a. 6 b. 7 c. 8 d. 9

34. **Find the odd one out? Mars, Venus, Saturn, Jupiter**

 a. Mars b. Venus c. Saturn d. Jupiter

35. **The average of the first five multiples of 3 is…?**

 a. 6 b. 9 c. 12 d. 15

36. **Find the next term of the series?**
 24, 48, 69, 90,?

 a. b. c. d.

37. **Two cars start from opposite places on the main road, 150 km apart. The first car runs from 25 km and takes a right turn and then runs 15 km. It then turns left and runs for another 25 km and then takes the direction to reach the main road. In the meantime, due to a minor break down the other car has run only 35 km along the main road. What would be the distance between the two cars at this instant?**

 a. 65 kmph b. 75 kmph c. 80 kmph d. 85 kmph

38. **Choose the group of letters which is different from others?**

 a. LITYAQU b. TITYUANQ
 c. TEAUBY d. TEDUCAED

39. **Sum of Rs. 53 is divided among A, B, C in such a way that A gets Rs.7 more than what B gets and B gets Rs. 8 more than what C gets The ratio of their shares is**

 a. 16:9:18 b. 25:18:10 c. 18:25:10 d. 15:8:30

40. **In a row of line Balendra Shah is 13th from left and 18th from right, find the total number of people in a line?**

 a. 29 b. 28 c. 30 d. 31

41. **A man walks 5 km toward south and then turns to the right. After walking 3 km he turns to the left and walks 5 km. Now in which direction is he from the starting place?**

 a. west b. south c. north-east d. south-west

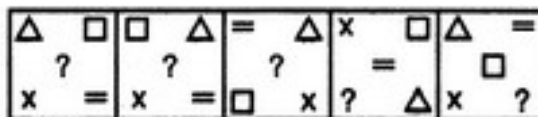42. **Find the number of triangles in the given figure?**

 a. 7 b. 9 c. 10 d. 8

43. **Select a figure from amongst the answer figures which will continue the same series as established by the five problem figures.**
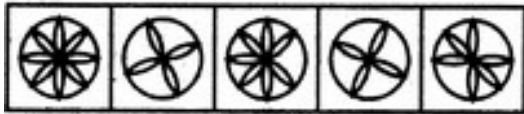
 Problems figure Answers figure

 a. 1 b. 2 c. 3 d. 5

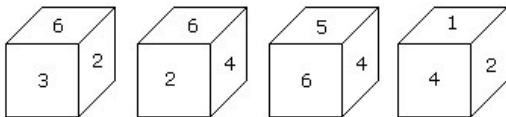**44.** Choose the figure which is different from the rest?

    a. 1   b. 2   c. 3   d. 4

45. Find the figure which is different from the rest?

    a. 1   b. 2   c. 3   d. 5
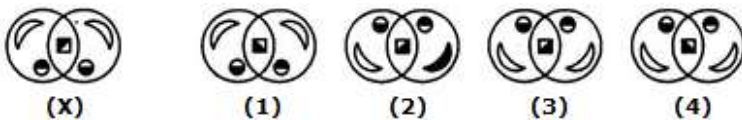
46. Which number lies on the face opposite of 6?

    a. 4   b. 1   c. 2   d. 3

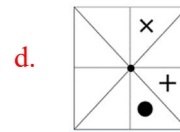**47.** Which of the following Venn diagrams correctly represents males, fathers and doctors?
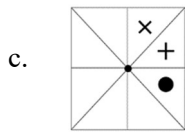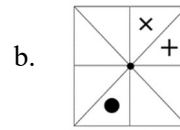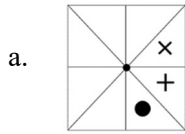
    a.

    b.

    c.

    d.

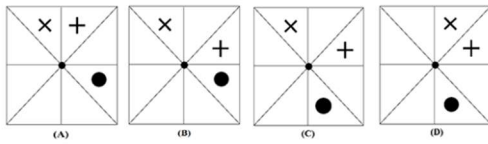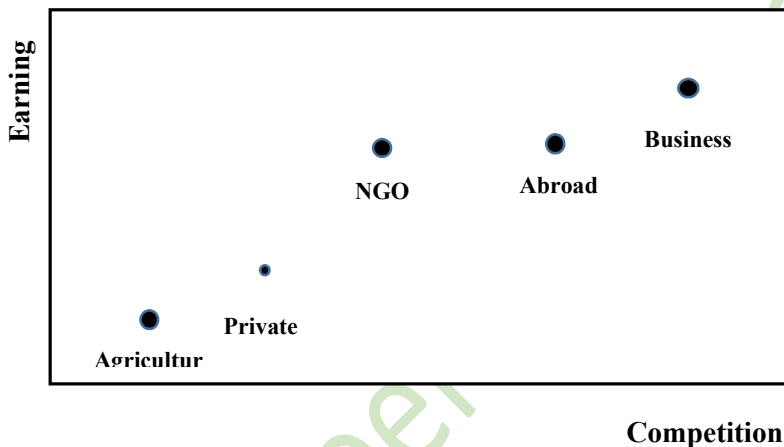**48.** Choose the correct water image of the given figure (X) from amongst the four alternatives.

    (X)   (1)   (2)   (3)   (4)

    a. 1   b. 4   c. 3   d. 2

49. Which of the following figures will come next in the series?

a.

b.

c.

d.

50. Which job has the maximum earning with the least competition?

a. Private   b. NGO   c. Abroad   d. Business

Technical

51. Strain energy stored in a bar is given by…
a. 0.5 x stress x volume   b. 0.5 x strain x volume
c. 0.5 x stress x strain x volume   d. 0.5 x stress x strain

52. A continuous beam is loaded with udl throughout its span, the maximum bending moment at continuous support is given by…
a. $Pl^3/48$ b. $wl^2/8$ c. $Pl/4$ d. none

53. Maximum tension in a cable occurs at…?
a. at all points in the cable   b. at the center of the cable
c. at the lowest point in the cable   d. at the highest point in the cable

54. Parabolic arch related question……
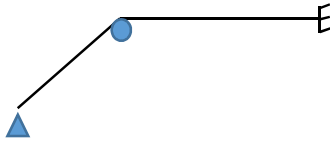a.   b.   c.   d.

5

55. **Find the total degree of indeterminacy in the following figure…?**

    a. 1   b. 2   c. 3   d. 4

56. **Local attraction is due to…?**
    a. incorrect levelling of the magnetic needles   b. loss of magnetism of the needle
    c. friction of the needle at the pivot   d. presence of the magnetic substances

57. **Which one of the following procedures for getting accurate orientation is the most distinctive feature of the art of plane tabling…?**
    a. radiation   b. intersection   c. traversing   d. resection

58. **The method of detailed plotting in hilly area is done by…?**
    a. radiation   b. intersection   c. traversing   d. resection

59. **When the angular and linear measurements are equally precise in traversing, the balancing of a traverse is done by…?**
    a. transit rule   b. empirical rule
    c. bow ditch's rule   d. all of the above

60. **Which of the following errors can be neutralized by setting the level midway between the two stations?**
    a. error due to curvature only   b. error due to refraction only
    c. error due to both curvature and refraction   d. none of the above

61. **Total station is…?**
    a. total number of stations in traverse   b. even/odd number of station in traverse
    c. optical distance measurement instrument   d. electromagnetic distance measurement instrument

62. **If + 0.8% grade meets - 0.7% grade and the rate of change of grade for 30 m distance is 0.05, the length of the vertical curve will be …?**
    a. 600 m   b.700 m   c. 800 m   d.900 m

63. **Stone is rejected if it absorbs water more than…**
    a. 5%   b. 10%   c. 15%   d. 20%

64. **Specific gravity of most of the building stone should be more than…**
    a. 2.5   b. 2.7   c. 2.9   3.0

65. **The solvent used in cement paint is…**
    a. turpentine   b. water   c. spirit varnish   d. none of the above

66. **Cast iron is used for…**
    a. structural works in beams   b. small sized water pipes
    c. columns and struts   d. axles and springs

67. **Terracotta is used in building for…**
    a. ornamental work   b. insulation   c. storage   d. none of these

68. **To increase the setting time of cement the compound added is…**
    a. tri-calcium silicate   b. gypsum   c. di-calcium silicate   d. calcium chloride

69. **Maximum swelling of sand occurs at the moisture content of…**
    a.2%   b. 3%   c. 4%   d. 5%

70. **Modulus of elasticity of concrete increases with…**
    a. short curing period   b. higher w/c ratio   c. age   d. all of above

71. **Slump value for beams and slab work is…**
    a. 25-75   b. 50-125   c. 75-150   d. >150

72. **The process of proper and accurate measurement of concrete ingredients for uniformity in proportion is known as,**
    a. grading   b. curing   c. batching   d. none of these

73. **A buttress in a wall is intended to provide…?**
    a. lateral support to roof beams only   b. lateral support to roof slab only
    c. lateral support to wall   d. to resist vertical load only

74. **Maximum size of silt particles in soil is…**
    a. 0.002mm   b. 0.006mm   c. 0.02mm   d. 2mm

75. **A sample of a soil has a liquid limit 35%, plastic limit 15% and natural water content of 20%, then the consistency index of the soil will be…**
    a. $-\frac{15}{20}$ b. $-\frac{20}{15}$ c. $\frac{15}{20}$ d. $\frac{20}{15}$

76. **Void ratio of any soil can**
    a. never be greater than unity   b. be zero
    c. takes any value greater than zero   d. takes value between 0 and 1 only

77. **The property of a soil due to which the loss in shear strength caused by remolding can be regained with time is known as …**
    a. activity   b. sensitivity   c. thixotropy   d. consistency re-gain

78. **Drift method of tunneling is used for…?**
    a. soft ground   b. firm ground   c. both   d. none

79. **The region where no displacement occurs is…?**
    a. fold   b. fault   c. intrusions   d. joint

80. **Tender document doesn't contain…**
    a. notice   b. item of work   c. estimated cost   d. item rate

81. **A bar chart is drawn for…**
    a. activity vs time   b. activity vs resources
    c. resources vs progress   d. progress vs time

82. **Slack time in pert analysis…**
    a. can never be greater than zero   b. is always zero for critical activities
    c. can never be less than zero   d. is minimum for critical activities

83. **Black listing of contractor is related to…**
    a. PPMO   b. GoN   c. MoPIT   d. NEA

84. **The provision of penalty for liquidated damage is…**
    a. 0.05%   b. 0.10%   c. 0.15%   d. 0.20%

85. **Questions related to …construction management**
    a.   b.   c.   d.

86. **Work charge establishment in Nepal is…**
    a. 1%   b. 2%   c. 2.5%   d. 3%

87. **The technique of finding fair price of an existing building or property is known as…**
    a. costing   b. valuation   c. pricing   d. estimation

88. **The number of skilled manpower needed for 10 cubic meter of PCC work is…**
    a. 1   b. 5   c. 12   d. 18

89. **The value of the property at the end of its useful life is**
    a. Salvage value   b. Scrap value   c. Book value   d. Junk value

90. **Questions related to…estimating and costing**
    a.   b.   c.   d.

91. **The space covered by a drawing in a paper after changing the scale from 1:100 to 1:50 will…**
    a. increase 400%   b. increase 200%   c. decrease 200%   d. decrease 400%

92. **Which of the following is a part of dimension line?**

a. centerline   b. section line   c. extension line   d. all of above

93. Perspective view is also known as…?

a. natural view of an object   b. orthographic view of an object

c. angular view of an object   d. none of above

94. Rounded interior corner is called…

a. a. round   b. chamfer   c. fillet   d. countersink

95. Present worth annuity is generally known as…?

a. premium annuities   b. income annuities   c. future annuities   d. all of above

96. Payback period is counted only after…?

a. tendering for the project   b. starting of the construction of the project

c. completion of the construction of the project   d. commissioning of the project

97. Engineering economics is mainly concerned with…?

a. IRR   b. ERR   c. B/C ratio   d. profit

98. NEC categorizes the type of engineer into…

a. 2 category   b. 3 category   c. 4 category   d. 5 category

99. FAR is defined as the…

a. $\dfrac{total\ floor\ area\ of\ building}{area\ of\ plot}$ b. $\dfrac{area\ of\ ground\ floor}{area\ of\ plot}$

c. $\dfrac{area\ of\ ground\ floor}{plint\ area}$ d. $\dfrac{total\ floor\ area\ of\ building}{plinth\ area}$

100.   NBC divides the building in…… categories?

a. 2   b. 3   c. 4   d. 5