

GENERAL INTELLIGENCE

1. Select the set in which the numbers are related in the same way as are the numbers of the following set.

- (17, 12, 7)
 (1) (42, 34, 27)
 (2) (23, 32, 39)
 (3) (15, 19, 23)
 (4) (39, 28, 19)

2. Select the set in which the numbers are related in the same way as are the numbers of the following set.

- (5, 24, 7)
 (1) (8, 80, 12)
 (2) (10, 71, 13)
 (3) (9, 63, 14)
 (4) (6, 75, 11)

3. Arrange the following words in a logical and meaningful order.

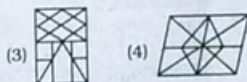
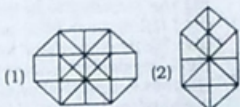
- Child
 - Marriage
 - Infant
 - Employment
 - Education
- (1) 4, 1, 3, 5, 2
 (2) 3, 1, 5, 4, 2
 (3) 3, 5, 2, 4, 1
 (4) 5, 2, 4, 1, 3

4. 'Geology' is related to 'Rocks' in the same way as 'Cytology' is related to '_____'.
 (1) Organism (2) Cells
 (3) Plants (4) Life

5. Select the word-pair in which the two words are related in the same way as are the two words in the following word-pair.
 Barter : Commodities

- (1) Treat : Disease
 (2) Debate : Discussion
 (3) Movement : Traffic
 (4) Correspond : Letters

6. Select the figure in which the given figure is embedded.



7. The average of 9 numbers is 40. If the average of the first five numbers is 38 and that of the last five is 50, then what is the fifth number?

- (1) 90 (2) 84
 (3) 78 (4) 80

8. Three of the following four numbers are alike in a certain way and one is different. Pick the number that is different from the rest.

- (1) 953 (2) 523
 (3) 312 (4) 734

9. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

- DGIL : WTRO :: FHKM : ?
 (1) USPN (2) TRON
 (3) QPLJ (4) WTSP

10. A square paper is folded and cut as shown below. How will it appear when unfolded?



- (1) (2)
 (3) (4)

11. If HEAD is coded as 37 and BANK is coded as 57, then how will KITE be coded as?

- (1) 87 (2) 91
 (3) 69 (4) 76

12. Which two signs should be interchanged in the following equation to make it correct?

- $24 - 12 + 4 + 8 \times 2 = 11$
 (1) + and \times (2) - and +
 (3) + and - (4) + and +

13. Which number will replace the question mark (?) in the following series?

- 16, 24, 36, ?, 81
 (1) 54 (2) 52
 (3) 61 (4) 58

14. Select the number-pair in which the two numbers are related in the same way as are the two numbers of the following number-pair.

- 24 : 56
 (1) 18 : 48
 (2) 12 : 36
 (3) 9 : 21
 (4) 15 : 40

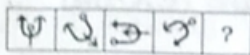
15. In a code language, PASTEUR is coded as TPRUASE. How would SEVENTY be coded in that language?

- (1) ENVETYS
 (2) NSYTEVN
 (3) ESYETNV
 (4) ESYTEVN

16. In a family of seven persons, B is the brother of A and the son of C. D is the son-in-law of C, who has two grandchildren, E and F. A is the mother of F, who is the niece of G. E is the son of G. If C has two children, how is E related to D?

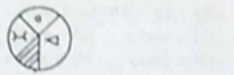
- (1) Brother-in-law
 (2) Son
 (3) Cousin
 (4) Nephew

17. Select the figure that will come next in the following figure series.



- (1) (2)
 (3) (4)

18. Select the mirror image of the given figure when the mirror is placed to the right of the figure.



- (1) (2)
 (3) (4)

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



- (1) 14 (2) 24
 (3) 22 (4) 18

20. Three of the following four words are alike in a certain way and one is different. Pick the odd word out.

- (1) Steal (2) Hinder
 (3) Impede (4) Arrest

21. Select the combination of letters that when sequentially placed in the gaps of the given letter series will complete the series.

- ca_bab_ad_ab_ad_ab
 (1) bcdcb (2) cdbcd
 (3) debcb (4) dcabc

22. Two different positions of the same dice are shown. Which number will be at the top if 5 is at the bottom ?



- (1) 6 (2) 4
 (3) 2 (4) 3

23. Two statements are given, followed by three Conclusions numbered I, II and III. Assuming the statements to be true even if they seem to be at variance with commonly known facts, decide which of the Conclusions logically follow(s) from the statements.

Statements :
 Some carpenters are technicians.
 All technicians are mechanics.

Conclusions :

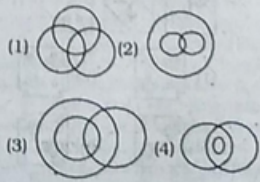
- I. Some carpenters are mechanics.
 II. Some mechanics are technicians.
 III. All carpenters are mechanics.
 (1) None of the Conclusions follows
 (2) Only Conclusion I follows
 (3) Only Conclusions I and II follow
 (4) Only Conclusions II and III follow

24. Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.

- (1) MLKP (2) TSRN
 (3) XVWZ (4) DCBZ

25. Select the venn diagram that best illustrates the relationship between the following classes.

Indians, Females, Voters



26. In March 2019, the Central Board of Secondary Education (CBSE) announced the introduction of skill subjects in the school curriculum for the academic session 2019-20. Which of the following is NOT one of them ?

- (1) Spiritual Enhancement
 (2) Artificial Intelligence (AI)
 (3) Yoga
 (4) Early Childhood Care Education (ECCE)

27. One of the prominent Buddhist structures in India, ___ Stupa at Sarnath was constructed by the great Mauryan king, Ashoka.

- (1) Dhaulti
 (2) Dhamekh
 (3) Bharhut
 (4) Lalitgiri

28. Which of the following elements is an actinide ?

- (1) Ytterbium
 (2) Lutetium
 (3) Curium
 (4) Erbium

29. Law of octaves says that if the chemical elements are arranged according to increasing atomic weight, those with similar physical and chemical properties occur after each interval of ___ elements.

- (1) 10 (2) 5
 (3) 7 (4) 9

30. A situation where the expenditure of the government exceeds its revenue is called _____.

- (1) Default Financing
 (2) Deficit Revenue
 (3) Budget Deficit
 (4) Default Revenue

31. The Global Business Summit, launched on 15 January, 2015, is a flagship initiative of the ___ Group.

- (1) Economist
 (2) Bhaskar
 (3) Times
 (4) Dutch

32. Special Olympics, held every _____ years, is a global movement of people creating a new world of inclusion, where every single person is accepted and welcomed, regardless of their ability or disability.

- (1) five (2) two
(3) three (4) four

33. The power to summon the Houses of the Parliament is vested with the _____.

- (1) Prime Minister
(2) Speaker
(3) Vice President
(4) President

34. Superstats, a new platform to analyse the game of cricket, comprises of three metrics. Which of the following is NOT one of them?

- (1) Score Index
(2) Luck Index
(3) Smart Stats
(4) Forecaster

35. In February 2019, Flight Lieutenant _____ created history by becoming the first Indian woman flight engineer.

- (1) Mohana Singh
(2) Hina Jaiswal
(3) Bhawana Seth
(4) Anjali Gupta

36. Safdarjung's tomb, set in the middle of a garden, was built by Nawab Shuja-ud-Daulah in

- (1) Uttar Pradesh
(2) Uttarakhand
(3) Delhi
(4) Bihar

37. _____ married Mehr-un-Nisa whom he gave the title of 'Nur Jahan' (light of the world).

- (1) Shahjahan
(2) Aurangzeb
(3) Akbar
(4) Jahangir

38. Which of the following elements is a lanthanide?

- (1) Actinium (2) Francium
(3) Cerium (4) Polonium

39. _____ pass connects Uttarakhand and Tibet and is situated in the north of Gangotri.

- (1) Zoji La
(2) Bara Lacha La
(3) Shipki La
(4) Muling La

40. The Parliament of India consists of _____.

(1) President, House of the People and Council of states

- (2) House of the People
(3) House of the People and Council of States
(4) Council of States

41. In his periodic table, Mendeleev could NOT assign a correct position to _____.

- (1) Oxygen (2) Carbon
(3) Nitrogen (4) Hydrogen

42. A nautical mile is equal to _____.

- (1) 2000 metres
(2) 1852 metres
(3) 1672 metres
(4) 2450 metres

43. _____, activist-journalist from Karnataka, who was shot dead in September 2017, was posthumously conferred the Anna Politkovskaya Award 2017.

- (1) Gauri Lankesh
(2) Naveen Gupta
(3) Sudip Dutta Bhaumik
(4) Sayed Mehdi

44. _____ Strait separates the islands of Java (east) and Sumatra.

- (1) Sunda (2) Yucatan
(3) Malacca (4) Cook

45. _____ died in 1605, nearly 50 years after his ascension to the throne. He was buried outside of Agra at Sikandra.

- (1) Akbar (2) Aurangzeb
(3) Shahjahan (4) Jahangir

46. Swaroop Rawal, an Indian teacher at Laved Primary School in _____ was in the running for the prestigious Global Teacher Prize 2019 which honours the world's best teacher.

- (1) Gujarat (2) Maharashtra
(3) Kerala (4) Tamil Nadu

47. _____ has been called the "architect king" as during his reign, the world witnessed a unique development of arts and culture of the Mughal Empire.

- (1) Shahjahan
(2) Jahangir (3) Aurangzeb
(4) Akbar

48. It was under the reign of _____ that the Mughal Empire reached its peak in matter of area.

- (1) Jahangir (2) Aurangzeb
(3) Shahjahan
(4) Akbar

49. Who among the following gave the 'Law of Octaves'?

- (1) Lavoisier (2) Mendeleev
(3) Newlands (4) Doberiner

50. Indian origin campaigner _____ was named UK's Most Influential Black Person of the Year on 25 October, 2017.

- (1) Priti Patel
(2) Gina Miller
(3) Jonathan Marland
(4) David Olusoga

QUANTITATIVE APTITUDE

Directions (51-54) : The following table shows the production of different types of cars (in thousands). Study the table carefully and answer the questions.

Cars \ Year	Year				
	2012	2013	2014	2015	2016
A	46	53	56	58	67
B	50	65	67	66	72
C	43	54	55	47	51
D	47	52	61	65	74
E	48	58	63	64	67

51. The average production of type A cars during the five years is what per cent of the total production of type C cars during the five years?

- (1) 22.4 (2) 20.6
(3) 21.8 (4) 18.7

52. If the data related to the production of type B cars is represented by a pie chart, then the central angle of the sector representing the production of type-B cars in 2016 is :
 (1) 56° (2) 81°
 (3) 75° (4) 73°
53. What is the ratio of the total production of type C and D cars in 2012 to the total production of type A cars in 2014 and type E cars in 2015 ?
 (1) 5 : 6 (2) 9 : 11
 (3) 3 : 4 (4) 11 : 12
54. The total production of type B cars in 2015 and type D cars in 2016 is what per cent less than the total production of type E cars in five years ?
 (1) $50\frac{1}{3}$ (2) $52\frac{2}{3}$
 (3) $46\frac{2}{3}$ (4) $53\frac{1}{3}$
55. The average of twelve numbers is 55.5. The average of the first four numbers is 53.4 and that of the next four numbers is 54.6. The 10th number is greater than the 9th number by 3 but less than the 11th and 12th number by 2 and 3, respectively. What is the average of the 10th and the 12th number?
 (1) 59.5 (2) 58
 (3) 57.5 (4) 56
56. The speed of train A is 25 km/h more than the speed of train B. A takes 4 hours less time to travel a distance of 300 km than what train B takes to travel 250 km. what is the speed (in km/h) of A ?
 (1) 60 (2) 50
 (3) 65 (4) 55
57. A circle touches the side PQ of a $\triangle APQ$ at the point R and sides AP and AQ produced at the points B and C, respectively. If the perimeter of $\triangle APQ = 30$ cm, then the length of AB is :
 (1) 20 cm (2) 10 cm
 (3) 12 cm (4) 15 cm
58. The income of A is 40% more than that of B. If A got a 25% rise in his income and B got a 40% rise in his income, the percentage increase in the combined incomes of A and B is :
 (1) 31.25 (2) 34.5
 (3) 28.25 (4) 24.5
59. A sum of Rs. 12,000 amounts to Rs. 20,736 in 3 years at a certain rate per cent per annum, interest compounded annually. What will be the amount of the same sum in 2 years at the same rate of compound interest ?
 (1) Rs. 15,640 (2) Rs. 17,820
 (3) Rs. 17,280 (4) Rs. 14,520
60. The marked price of an article is Rs. 550. A shopkeeper allows a discount of 20% and still gets a profit of 10%. If he sells it for Rs. 470, his profit per cent will be :
 (1) 16.8 (2) 18
 (3) 17.5 (4) 16
61. The value of

$$\frac{3}{4} \times 2\frac{2}{3} + \frac{5}{9}$$
 of $1\frac{1}{5} + \frac{2}{23} \times 3\frac{5}{6}$
 + $\frac{2}{7}$ of $2\frac{1}{3}$ is :
 (1) $1\frac{5}{6}$ (2) $1\frac{2}{3}$
 (3) $3\frac{1}{2}$ (4) $4\frac{5}{6}$
62. In a $\triangle ABC$, right angled at B, $AB = 7$ cm and $(AC - BC) = 1$ cm. The value of $(\sec C + \cot A)$ is :
 (1) $\frac{19}{24}$ (2) $\frac{4}{3}$
 (3) $\frac{3}{4}$ (4) 1
63. The curved surface area and the volume of a cylinder are 264 cm^2 and 924 cm^3 , respectively. What is the ratio of its radius to height ? (Take $\pi = \frac{22}{7}$)
 (1) 4 : 3 (2) 5 : 4
 (3) 7 : 6 (4) 3 : 2
64. The ratio of the efficiencies of A, B and C, to do a certain work is 7 : 3 : 5. Working together, they can complete the work in 21 days. A and C worked together for 15 days. The remaining work will be completed by B alone in :
 (1) 54 days (2) 45 days
 (3) 60 days (4) 63 days
65. If $4x^2 - 6x + 1 = 0$, then the value of $8x^3 + (8x^2)^{-1}$ is :
 (1) 36 (2) 13
 (3) 18 (4) 11
66. A bought an article for Rs. 5,400 and sold it at a loss of 30%. With this amount, he bought another article and sold it at a gain of 60%. What was his overall percentage gain or percentage loss ?
 (1) Gain, 1.2% (2) Gain, 12%
 (3) Loss, 12% (4) Loss, 1.2%
67. In $\triangle PQR$, $QT \perp PR$ and S is a point on QR such that $\angle PSQ = p^\circ$. If $\angle TQR = 46^\circ$ and $\angle SPQ = 32^\circ$, then the value of p is :
 (1) 78° (2) 82°
 (3) 76° (4) 72°
68. If $3 \sin \theta = 2 \cos^2 \theta$, $0^\circ < \theta < 90^\circ$, then the value of $(\tan^2 \theta + \sec^2 \theta - \csc^2 \theta)$ is :
 (1) -2 (2) $-\frac{7}{3}$
 (3) $\frac{7}{3}$ (4) 2
69. If $\frac{\tan \theta + \sin \theta}{\tan \theta - \sin \theta} = \frac{k+1}{k-1}$, then $k = ?$
 (1) $\csc \theta$ (2) $\sec \theta$
 (3) $\cos \theta$ (4) $\sin \theta$
70. If $x + y + z = 0$, then the value of $(x^2 + y^2 + z^2) - (x^2 - xy)$ is :
 (1) 1 (2) 2
 (3) -2 (4) -1
71. What is the ratio of the mean proportional between 4.8 and 10.8 and the third proportional to 0.4 and 2.4 ?
 (1) 2 : 1 (2) 3 : 2
 (3) 1 : 2 (4) 2 : 3

72. In ΔABC , E and B are the points on the sides AD and AC respectively such that $\angle ABE = \angle ADC$. If $AE = 6$ cm, $BC = 2$ cm, $BE = 3$ cm and $CD = 5$ cm, then $(AB + DE)$ is equal to :

(1) 14 cm (2) 16 cm
(3) $\frac{49}{3}$ cm (4) $\frac{46}{3}$ cm

73. Let O be the centre of a circle and AC be its diameter. BD is a chord intersecting AC at E. Point A is joined to B and D. If $\angle BOC = 50^\circ$ and $\angle AOD = 110^\circ$, then $\angle BEC = ?$

(1) 80° (2) 70°
(3) 55° (4) 90°

74. If $a^2 + b^2 + c^2 + 27 = 6(a + b + c)$, then what is the value of

$\sqrt{a^3 + b^3 - c^3} ?$

(1) 3 (2) 1
(3) 9 (4) 6

75. If an 11-digit number $5y5884805x6$ where $x \neq y$, is divisible by 72, then the value of \sqrt{xy} is :

(1) $\sqrt{7}$ (2) 3

(3) 7 (4) $2\sqrt{7}$

ENGLISH COMPREHENSION

76. Select the correct passive form of the given sentence.

The enemy will have seized the fort before nightfall.

- (1) The fort would have been seized by the enemy before nightfall.
(2) The enemy will be seized by the fort before nightfall
(3) The fort will have been seized by the enemy before nightfall.
(4) The enemy will seize the fort before nightfall.

77. Given below are four jumbled sentences. Select the option that gives their correct order.

A. For a split second, as the stranger stepped into the light, his furry head was clearly visible.

B. At first, all seemed still outside the house, except for the sound of the rain.

C. Recognizing him, Joe stood petrified staring at the man wearing a long coat, wet from rain.

D. But then, footsteps approached the house and a stranger emerged out of the darkness.

- (1) CABD (2) BCDA
(3) DACB (4) BDAC

78. Select the most appropriate antonym of the given word.

NOTORIOUS

- (1) famous (2) vicious
(3) infamous (4) disgraceful

79. Select the correctly spelt word.

- (1) maintenance
(2) mentainance
(3) mainteneance
(4) maintainence

80. Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select No improvement.

Though many European traders visit Puducherry in the sixteenth century onwards, what remains today is a relic of its French past.

- (1) No improvement
(2) traders visited Puducherry in a sixteenth century onward
(3) traders visited Puducherry from the sixteenth century onwards
(4) trader visit Puducherry from the sixteenth century onwards

81. Select the most appropriate antonym of the given word.

SACRED

- (1) perpetual (2) pious
(3) profane (4) profound

Directions (82-83) : Select the most appropriate meaning of the underlined idiom in the given sentences.

82. It is unfortunate that most people in the country are still living from hand to mouth.

- (1) consuming daily what little is earned
(2) saving for the future generations
(3) doing manual labour
(4) earning wealth by selfish means

83. The loyal watchman was cut to the quick when he was accused of theft.

- (1) imprisoned
(2) severely punished
(3) hurt intensely
(4) dismissed

84. In the sentence identify the segment which contains the grammatical error.

Most disputes can be solved amicably unless one are not rigid.

- (1) Most disputes
(2) can be solved amicably
(3) unless one are
(4) not rigid

85. Select the correct active form of the given sentence.

She was seen sitting in the last row.

- (1) We see her sitting in the last row.
(2) We saw her sitting in the last row.
(3) We had seen her sitting in the last row.
(4) We have seen her sitting in the last row.

86. Select the word which means the same as the group of words given.

One who is indifferent to art and culture.

- (1) cynic (2) scientist
(3) philanderer (4) philistine

87. Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select No improvement.

The India consensus study highlight a benefits by adding domestic violence prevention approaches to current government policy.

- (1) highlight the benefits from added
(2) highlight a benefit in addition
(3) No improvement
(4) highlights the benefits of adding

88. Select the word which means the same as the group of words given.

One who embraces voluntary death for the sake of one's country

- (1) fanatic
- (2) martyr
- (3) patriot
- (4) diplomat

89. Given below are four jumbled sentences. Select the option that gives their correct order.

- A. The students often go about their business, singing along in the corridors.
- B. But for the students of St. Ambrose High School, it no longer dictates their day.
- C. A bell can sound gloomy or cheerful depending on when it is rung.
- D. It has been scrapped in favour of music which now breaks up the timetable of the school.

- (1) CADB (2) BDAC
- (3) CBDA (4) ACBD

Directions (90-91) : Select the most appropriate synonym of the given word.

90. **PRECARIOUS**

- (1) abundant
- (2) dangerous
- (3) valuable
- (4) premature

91. **STERILE**

- (1) pure
- (2) productive
- (3) barren
- (4) sordid

92. In the sentence identify the segment which contains the grammatical error.

In the northern suburbs of Bengaluru, home to the bulk of the information technology industry, the water crisis is even worst.

- (1) home to the bulk of
- (2) is even worst
- (3) the water crisis
- (4) In the northern suburbs

Directions (93-97) : In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Perhaps India should listen to her (93) sages who taught the importance (94) balance. This means we should be (95) not to take anything too far (96) be too radical. The unfortunate results of (97) too far are obvious in the environmental degradation.

- 93. (1) extinct (2) ancient
(3) initial (4) antique
- 94. (1) for (2) in
(3) of (4) by
- 95. (1) careless (2) careful
(3) carefree (4) caretaker
- 96. (1) but
(2) otherwise
(3) so
(4) or
- 97. (1) venturing
(2) pioneering
(3) climbing
(4) risking

98. Select the correctly spelt word.

- (1) adolescence
- (2) adolesense
- (3) adolescense
- (4) adolescance

Directions (99-100) : Select the most appropriate option to fill in the blank.

99. She performs different roles very convincingly as she is a very ____ actor.

- (1) virtuous
- (2) voracious
- (3) versatile
- (4) verbose

100. Charles Dickens was different in his style of writing from most of his ____ in the Victorian era.

- (1) contemporaries
- (2) cronies
- (3) critics
- (4) confidants