



INTSO EDUCATION

APTITUDE TALENT SEARCH OLYMPIAD (ATSO) 2016 - 2017

STAGE - 1

TIME : 60 min.

CLASS : IX

Max. Marks : 50

Instructions:

- ⇒ Fill the OMR sheet completely and carefully.
- ⇒ Each question carries one mark and has only one correct answer. $\frac{1}{4}$ (one fourth) marks will be deducted for indicating incorrect response of each question.
- ⇒ The question paper contains 50 questions to be answered in 60 minutes.

NUMBER SERIES :

- | | | | | | |
|----|-----------------------------|----------|----------|----------|-----|
| 1. | 4, 48, 180, 448, ? | | | | [] |
| | 1) 758 | 2) 648 | 3) 900 | 4) 720 | |
| 2. | 6, 12, 36, 180, 1260, ? | | | | [] |
| | 1) 12860 | 2) 13860 | 3) 14860 | 4) 15860 | |
| 3. | 4, 9, 20, 43, 90, ? | | | | [] |
| | 1) 184 | 2) 186 | 3) 183 | 4) 185 | |
| 4. | 9, 4, 14, 11, 19, 18, 24, ? | | | | [] |
| | 1) 25 | 2) 37 | 3) 23 | 4) 29 | |

NUMBER ANALOGY :

- | | | | | | |
|----|---------------------|--------|--------|--------|-----|
| 5. | 7 : 56 :: 12 : ? | | | | [] |
| | 1) 136 | 2) 156 | 3) 146 | 4) 168 | |
| 6. | 529 : 23 :: 676 : ? | | | | [] |
| | 1) 24 | 2) 18 | 3) 26 | 4) 34 | |
| 7. | 216 : 36 :: 343 : ? | | | | [] |
| | 1) 49 | 2) 64 | 3) 81 | 4) 121 | |
| 8. | 6 : 180 :: 7 : ? | | | | [] |
| | 1) 264 | 2) 274 | 3) 284 | 4) 294 | |

LETTER SERIES :

- | | | | | | |
|-----|---------------------------|---------|---------|---------|-----|
| 9. | PG, SJ, VM, YP, ? | | | | [] |
| | 1) CS | 2) BS | 3) DT | 4) ET | |
| 10. | LIKE, MKNI, NMQM, OOTQ, ? | | | | [] |
| | 1) PQNU | 2) PSNU | 3) PQWU | 4) PSVW | |
| 11. | SUN, TSQ, UQT, VOW, ? | | | | [] |
| | 1) WMZ | 2) WNY | 3) WLZ | 4) WOY | |
| 12. | C, E, H, M, T, ? | | | | [] |
| | 1) B | 2) C | 3) D | 4) E | |

LETTER ANALOGY :

- | | | | | | |
|-----|-------------------------|---------|---------|---------|-----|
| 13. | MORE : NLIV :: SCFT : ? | | | | [] |
| | 1) HYTG | 2) HXUG | 3) FXTG | 4) HYST | |

14. JEB : WRO :: FUN : ? []
 1) SHA 2) UFM 3) SIA 4) UHC
15. PRO : QTR : SIN : ? []
 1) TLR 2) TKS 3) TKP 4) TKQ

DIRECTIONS (Q.NO : 16 TO 20) : FIND THE ODD MAN OUT.

16. 1) 2X4 2) 1M4 3) 1L2 4) 2Z6 []
17. 1) 27 2) 125 3) 343 4) 729 []
18. 1) BDG 2) HJM 3) LNQ 4) NPT []
19. 1) CP 2) DW 3) IV 4) FS []
20. 1) 41 2) 31 3) 91 4) 71 []
21. In a certain code language, JUMP is coded as WHZC, then how is RIOS written in that language?
 1) IVLF 2) EVBF 3) ERLF 4) EVDF []
22. In a certain code language, WISH in that VGPD, then how is MARK written in that language?
 1) LYOG 2) LZNG 3) LYNG 4) LXOG []
23. In a certain code language, SWIFT is written as UUKDV, then how is BREAK written in that language?
 1) DPGZM 2) DPGYM 3) DPFZM 4) DPFYM []
24. If GUN = 29, MORE = 51, then what is the value of DRAFT?
 1) 58 2) 60 3) 62 4) 64 []
25. In a certain code language, Blue is called Yellow, Yellow is called Red, Red is called Orange, Orange is called Green, Green is called pink. In this code, which colour is used to stop Vehicles ?
 1) Pink 2) Green 3) Red 4) Orange []
26. My sister's grandmother's only daughter's only child related to me as
 1) Brother 2) Sister 3) Either 1 or 2 4) Cousin []
27. Six persons - P, Q, R, S, T and U sit in a row, facing South, not necessarily in the given order.
 i) P is at one of extrem ii) Q and T are neighbours of S
 iii) P is to the immediate left of R. iv) S is third to the right of R
 v) T is not the neighbour of U
 Who is to the immediate left of U? []
 1) R 2) Q 3) P 4) S
28. A man is moving towards East. He turns 225° anticlock wise direction and then 90° clock wise direction. Now, which direction is the facing?
 1) North - East 2) North - West 3) South - West 4) South - East []
29. Find the angle between the hands of a clock when the time is 7 hours 45 min? []
 1) $22\frac{1}{2}^\circ$ 2) $47\frac{1}{2}^\circ$ 3) $57\frac{1}{2}^\circ$ 4) $37\frac{1}{2}^\circ$
30. If $5 * 3 = 98$, and $7 * 4 = 279$ then what is the value of $9 * 6 = ?$ []
 1) 511 2) 513 3) 515 4) 517

ARITHMETICAL ABILITY :

31. The number of divisors of 248 is []
 1) 8 2) 6 3) 7 4) 9

32. If an article is sold for ₹280, a profit of 25% is obtained. What should be the cost price? []
 1) 236 2) 244 3) 224 4) 228
33. A trader sells an article at a profit of 30%. If he gives a discount of 40% on the selling price, then what is his loss percentage? []
 1) 22% 2) 25% 3) 26% 4) 28%
34. What is the total number of prime factors of $6^{28} \times 4^{31} \times 5^{42}$? []
 1) 140 2) 150 3) 160 4) 170
35. If $a : b = 5 : 4$, $b : c = 3 : 7$, then $a : b : c$ is ? []
 1) 15 : 12 : 28 2) 15 : 28 : 12 3) 15 : 26 : 12 4) 15 : 12 : 26
36. What is the least number that is to be subtracted from the largest four digit number so that it is exactly divisible by 29? []
 1) 21 2) 23 3) 25 4) 19
37. If $\frac{1}{3}$ of a number is equal to $\frac{2}{9}$ of 27, then what is $\frac{7}{2}$ of the number? []
 1) 42 2) 56 3) 49 4) 63
38. When an amount was distributed among 12 boys, each of them get ₹15 more than the amount received by each boy when the same amount is distributed equally among 16 boys. What was the amount? []
 1) 720 2) 810 3) 930 4) 840
39. $\frac{(269+174)^2 - (269-174)^2}{269 \times 174} = ?$ []
 1) 2 2) 4 3) 441 4) 95
40. Two numbers are in the ratio 3 : 4 and their L.C.M is 48, then what is their H.C.F? []
 1) 4 2) 3 3) 8 4) 6
41. A starts a business with ₹ 40000. B joins him after some months with ₹ 20000 and it was found that he gets $\frac{1}{4}$ th of the total profit at the end of the year. After how many months did B join A? []
 1) 6 2) 3 3) 4 4) 5
42. By what percent is 3×10^3 greater than 3×10^2 ? []
 1) 900% 2) 600% 3) 500% 4) 800%
43. A is thrice as fast as B in completing a work. If A can complete the work in 4 days. In how many days A and B together can complete the same work? []
 1) 12 2) 6 3) 3 4) 2
44. Four men can complete a work in 7 days working 3 hours a day. How many men are required to complete the same work in 14 days working at 2 hours a day? []
 1) 3 2) 6 3) 4 4) 8
45. A person goes to office from his house in 25 minutes. If he increases his speed by 25%, how many minutes does he save? []
 1) 9 2) 5 3) 6 4) 10
46. The investments of A and B are in the ratio 5 : 7. Their periods of investments are in the ratio 3 : 2. If A gets a share of ₹1650 in the profit, then what is B's share (in ₹) ? []
 1) ₹1428 2) ₹1420 3) ₹1540 4) ₹1680

47. Each filling pipe attached to a tank can fill it in 9 hours. While each emptying pipe can empty the full tank in 4 hours. If seven filling pipes and three emptying pipes attached to the tank are opened simultaneously, then in how many hours can an empty tank be filled? []
1) 18 2) 12 3) 8 4) 36
48. One - fourth of Ramu's marks in Telugu exceeds one - third of his marks in Hindi by 10. If he got 180 marks in the two subjects together, how many marks did he get in Telugu? []
1) 60 2) 120 3) 80 4) 160
49. Income of a company doubles after every one year. if the initial income was ₹3 lakhs, what would be the income after 5 years ? []
1) 93 lakhs 2) 12 lakhs 3) 15 lakhs 4) 75 lakhs
50. A cricket team won 5 matches more than they lost. If a win gives them 3 points and loss (– 2) point. how many matches in all have they played if their score is 21? []
1) 17 2) 5 3) 10 4) 15

