



# INTSO EDUCATION

## APTITUDE TALENT SEARCH OLYMPIAD (ATSO) 2015 - 2016

CLASS : VII

STAGE - 1

TIME : 60 min.  
Max. Marks : 50

### Instructions:

- ⇒ Fill the OMR sheet completely and carefully.
- ⇒ Each question carries one mark and has only one correct answer. No negative marks
- ⇒ The question paper contains 50 questions to be answered in 60 minutes.

### Number Series

- |    |                           |         |         |         |         |     |
|----|---------------------------|---------|---------|---------|---------|-----|
| 1. | 13, 17, 25, 37, 53, _____ | 1) 63   | 2) 73   | 3) 83   | 4) 93   | [ ] |
| 2. | 7, 9, 12, 17, 24, _____   | 1) 29   | 2) 32   | 3) 35   | 4) 40   | [ ] |
| 3. | 4, 8, 32, 192, _____      | 1) 1296 | 2) 1364 | 3) 1432 | 4) 1536 | [ ] |
| 4. | 48, 63, 80, 99, _____     | 1) 101  | 2) 111  | 3) 120  | 4) 130  | [ ] |
| 5. | 1, 4, 27, 256, _____      | 1) 512  | 2) 3125 | 3) 4096 | 4) 7788 | [ ] |

### Number Analogies

- |     |                             |         |         |         |         |     |
|-----|-----------------------------|---------|---------|---------|---------|-----|
| 6.  | 23 : 13 :: 32 : _____       | 1) 11   | 2) 12   | 3) 13   | 4) 14   | [ ] |
| 7.  | 196 : 324 :: 441 : _____    | 1) 529  | 2) 576  | 3) 625  | 4) 676  | [ ] |
| 8.  | 43 : 41 :: 83 : _____       | 1) 80   | 2) 81   | 3) 78   | 4) 79   | [ ] |
| 9.  | 1331 : 1728 :: 2197 : _____ | 1) 2744 | 2) 3125 | 3) 3600 | 4) 4096 | [ ] |
| 10. | 64 : 100 :: 25 : _____      | 1) 36   | 2) 49   | 3) 81   | 4) 100  | [ ] |

### Letter series

- |     |                           |        |        |        |        |     |
|-----|---------------------------|--------|--------|--------|--------|-----|
| 11. | JQ, IR, HS, _____ FU      | 1) TG  | 2) GT  | 3) FS  | 4) IV  | [ ] |
| 12. | AD, BF, DI, GM, KR, _____ | 1) AT  | 2) PX  | 3) PR  | 4) PW  | [ ] |
| 13. | GTB, CYV, YDP, _____ QND  | 1) DIV | 2) UIJ | 3) DDV | 4) UVV | [ ] |
| 14. | BEA, DJD, FOI, HTP _____  | 1) OTY | 2) TTY | 3) JTO | 4) JYY | [ ] |

15. BR, GQ, KO, NL, \_\_\_\_\_ [ ]  
 1) PI                    2) PH                    3) QI                    4) QH

### **Letter Analogy**

16. INTSO : JOUTP : : ATSO : \_\_\_\_\_ [ ]  
 1) PULP                2) KUTP                3) BUTP                4) HULP
17. INTSO : JPWWT : \_\_\_\_\_ : KIKO [ ]  
 1) JGHK                2) JGKH                3) KCKH                4) PVKH
18. TALENT : VDQLYG : : MODERN : \_\_\_\_\_ [ ]  
 1) ORJMCB            2) OQIMCA            3) ORILCA            4) ORIKCZ
19. EAGLE : DYDHZ : : BULLOCK : \_\_\_\_\_ [ ]  
 1) ASIHJWD           2) ASJKLWD           3) ASIGKWD           4) EVMMPEO
20. BAD : BBL : JDFE : \_\_\_\_\_ [ ]  
 1) JHRI                2) JHPX                3) JFTV                4) JHRT

### **Word Analogy**

21. India : Peninsula : : Bermuda : \_\_\_\_\_ [ ]  
 1) Land locked        2) Peninsula            3) Island                4) None
22. Pig : Piglet : : Horse : \_\_\_\_\_ [ ]  
 1) Farrow              2) Pony                3) Lamb                4) Larva
23. Blacksmith : Anvil : : Mason : \_\_\_\_\_ [ ]  
 1) Plumbline           2) Anvil                3) Needle                4) Knife
24. Muslims : Mosque : : Sikhs : \_\_\_\_\_ [ ]  
 1) Golden temple      2) Gurudwara            3) Jamma Masjid      4) Makka Masjid
25. Ornithology : Birds : : Pedalogy : \_\_\_\_\_ [ ]  
 1) Pedias              2) Soil                3) Pedestrians            4) Sun

### **Coding & decoding**

26. If KIRAN is coded has KAKI KARA KAN then by using same logic the code for “ SURESH “ is [ ]  
 1) KAS KAUR KASH                    2) KASU KARE KASH  
 3) KASUR KARESH                    4) None
27. If RAGHU is coded has TCIJW then how is BED coded [ ]  
 1) EHJ                    2) EHL                3) DGF                4) EHG
28. If RAVI is coded has AIRV then by using same logic how is BIRD coded [ ]  
 1) DRIB                2) IBRD                3) BDIR                4) IDRIB
29. If PEN is coded as 35 then how is RAT coded in that language [ ]  
 1) 36                    2) 37                3) 38                4) 39
30. If KIRAN is coded has PRIZM then how is KUMAR coded in that language [ ]  
 1) PFNZI                2) PFKZI                3) PFNSU                4) PFSZI

### **Equations**

31. Sum of two numbers is 15. Two times of the first exceeds by 5 from the three times of the other. Then the numbers will be [ ]

- 1) 6, 9      2) 10, 5      3) 7, 8      4) 9, 6
32. Sum of two numbers is 80. Greater number exceeds by 5 from four times of the smaller. Find the numbers [ ]  
 1) 65, 15      2) 64, 16      3) 62, 18      4) 60, 20
33. The difference between the two digit number and the number obtained by interchanging its digits is 54. The difference between the digit is [ ]  
 1) 4      2) 6      3) 1      4) Nothing can be said
34. If a number is subtracted from its square we get 272. Find the number [ ]  
 1) 24      2) 14      3) 17      4) 22
35. Two third of three - fifth of one - fourth of a number is 24, What is 30 % of that number ? [ ]  
 1) 42      2) 72      3) 90      4) 240
36. One half of a two digit number exceeds its one third by 6. What is the sum of the digits of the number ? [ ]  
 1) 3      2) 5      3) 7      4) 9

### Ratio & Proportion

37. The greatest ratio out of  $2 : 3$ ,  $5 : 4$ ,  $3 : 2$  and  $4 : 5$  is [ ]  
 1)  $4 : 5$       2)  $3 : 2$       3)  $5 : 4$       4)  $2 : 3$
38. The third proportional to 1 and 2 is [ ]  
 1) 2      2) 3      3) 4      4) 1
39. The proportion of copper and zinc in the brass is  $13 : 7$ . How much zinc will there be in 100 kg of brass ? [ ]  
 1) 20 kg      2) 35 kg      3) 55 kg      4) 14 kg
40. The ratio of two numbers is  $2 : 3$  and the sum of their cubes is 945. The difference of the numbers is [ ]  
 1) 3      2) 4      3) 5      4) 6
41. The ratio of the number of ladies to gents at a party was  $1 : 2$  but when 2 ladies and 2 gents left, the ratio became  $1 : 3$ . How many people were at the party originally? [ ]  
 1) 36      2) 24      3) 12      4) 6

### LCM & HCF :

42. LCM of  $\frac{1}{3}, \frac{5}{6}, \frac{5}{4}, \frac{10}{7}$  is [ ]  
 1)  $\frac{10}{7}$       2) 10      3)  $\frac{10}{11}$       4)  $\frac{11}{10}$
43. HCF of  $\frac{3}{16}, \frac{5}{12}, \frac{7}{8}$  is : [ ]  
 1)  $\frac{2}{47}$       2)  $\frac{3}{47}$       3)  $\frac{1}{48}$       4)  $\frac{5}{48}$
44. Find the H.C.F of 12, 16, 18 and 24 [ ]  
 1) 1      2) 2      3) 3      4) 4

45. The product of two numbers is 2025 and their HCF is 15 their LCM is : [ ]  
1) 2040      2) 2010      3) 135      4) 30375

**Percentage, Profit & loss**

46. 60% of a number is added to 120 the result is the same number. Find the number. [ ]  
1) 300      2) 200      3) 400      4) 500
47. 96 % of the population of a village is 23040. The total population of village is [ ]  
1) 32256      2) 24000      3) 24936      4) 25640
48. If the price has fallen by 10 % what percent of its consumption be increased so that the expenditure may be the same as before ? [ ]  
1) 11 %      2) 10 %      3)  $11\frac{1}{9}\%$       4)  $9\frac{1}{11}\%$
49. An article is brought for Rs. 675 and sold for Rs. 900. Find the gain percent ? [ ]  
1)  $16\frac{2}{3}\%$       2) 30 %      3)  $33\frac{1}{3}\%$       4)  $33\frac{1}{6}\%$
50. A watch was sold at a loss of 10%. If it was sold for Rs. 140 more, there would have been again of 4 %. What is the cost price ? [ ]  
1) Rs. 1000      2) Rs. 1140      3) Rs. 860      4) Rs. 760

