



INTSO EDUCATION

APTITUDE TALENT SEARCH OLYMPIAD (ATSO) 2015 - 2016

STAGE - 2

TIME : 60 min.

CLASS : X

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. 8, 15, 24, 35, _____ []
 1) 44 2) 46 3) 48 4) 50
2. 31, 38, 49, 62, 79, 98 _____ []
 1) 196 2) 169 3) 144 4) 121

NUMBER ANALOGIES :

3. 42 : 56 :: 72 : _____ []
 1) 81 2) 90 3) 92 4) 100
4. 25 : 37 :: 49 : _____ []
 1) 41 2) 56 3) 60 4) 65

LETTER SERIES :

5. BMY, DNW, FOU, ? []
 1) GHO 2) GPS 3) HPS 4) HPT
6. BZA, DYC, FXE, ?, JVI []
 1) HUG 2) HWG 3) UHG 4) WHG
7. ABD, DGK, HMS, MTB, SBL, ? []
 1) XKW 2) ZAB 3) ZKU 4) ZKW

LETTER ANALOGIES :

8. KMF : LLH :: RMS : _____? []
 1) SLR 2) SLU 3) SSU 4) SUS
9. Square : Diamond :: Circle : _____ []
 1) Round 2) Oval 3) Ball 4) Smooth
10. Ruby : Red :: Sapphire : _____ []
 1) White 2) Red 3) Black 4) Blue

CODING & DECODING

11. In a certain code, COMPATIBLE is written as BQNPDDKAHS. How is STABILISED written in that code? []
 1) TUBCJC DRHK 2) JCBUTEDTHM 3) JCBUTC DRHK 4) JCBUTEFTJM

12. In a certain code language, STREAMLING is written as CGTVUHOJMN. How will the word PERIODICAL be written in that language ? []
 1) PJSFQMBDJE 2) PJEFQMNBJE 3) QKTGRMBDJE 4) QKTGRMCEKF
13. In a certain code language, BOARD is written as EQBNC. How will the word CLIMB be written in that language ? []
 1) CLJKD 2) DKJLF 3) DNHMB 4) FNJRO

ODD MAN OUT :

14. 1) Lion 2) Tiger 3) Fox 4) Deer
15. 1) Mumbai 2) Kandla 3) Cochin 4) Mysore
16. 1) Flute 2) Gitar 3) Sitar 4) Violin

CLOCKS :

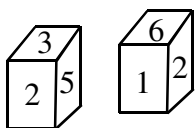
17. The angle between the hands of a clock when the time is 3 hrs 20 minutes []
 1) 10° 2) 20° 3) 30° 4) 40°
18. When the hours hand is in between 4 and 5 and the angle between the hands is 20° the possible time is []
 1) 4 hrs 25 $\frac{5}{11}$ minute 2) 4 hrs 18 $\frac{2}{11}$ minute 3) Both 1 & 2 4) None

CALENDERS :

19. Which day of the week was 27th july 1980 []
 1) Sunday 2) Monday 3) Tuesday 4) Wednesday
20. 15th jan 1996 was friday then which day was 20th july 1999 []
 1) Friday 2) Saturday 3) Sunday 4) Monday

DICE :

21. The two positions of a single dice in two throws are shown below.



then which number is opposite to one []

- 1) 2 2) 3 3) 4 4) 5
22. In a standard dice for three dice the top numbers are 2, 3, 5 then what is the sum of the numbers which touch the ground. []
 1) 7 2) 9 3) 11 4) 12

BLOOD RELATIONS :

23. A is the father of Y, who has a brother X, X's mother is C. How is A related to C []
 1) Father 2) Brother 3) Mother 4) Husband
24. My mother's only brother's only sister's only child's son's wife related to me as []
 1) Wife 2) Daughter- in-law 3) Sister 4) My self

SYLLOGISM :

25. Statements :

I. All cars are monkeys

II. Some monkeys are cats

[]

1) Some cars are cats

2) No car is cat

3) Some cars are not cats

4) No conclusion

SEATING ARRANGEMENT :

26. Five persons A, B, C, D and E sit in a row facing towards North, not necessarily in the same order. B and E sit on either side of D, A and C sit at either ends of the row, A sits to the left of D and adjacent to E. What is the order in which these five persons sit from left to right? []

1) CEDBA

2) ABDEC

3) AEDBC

4) Can not be determined

NON VERBAL SERIES :

27. **PROBLEMFIGURE** **ANSWER FIGURE**

A B C D E 1 2 3 4

[]

28.

A B C D E 1 2 3 4

[]

NON VERBAL ANALOGIES :

29. **PROBLEM FIGURE** **ANSWER FIGURE**

A B C D 1 2 3 4

[]

30.

A B C D 1 2 3 4

[]

TIME & WORK :

31. 10 men can produce 1000 units in 10 days working 8 hours a day. In how many days will 10 men produce 1500 units working 6 hours a day? []

1) 25 2) 20 3) 15 4) 18

32. Ajay and Vijay can do a piece of work in 10 days. Vijay and Sanjay can do it in 15 days, Ajay and Sanjay can do it in 20 days. In how many days can Ajay complete the work individually? []

1) 20 2) 16 3) 12 4) 24

33. If 2 men or 3 women can do a piece of work in 12 days, then how many men should accompany 6 women to complete the work in 4 days ? []
 1) 1 2) 2 3) 3 4) 4
34. A works 4 times as fast as B. If B completes a job in 60 days, then in how many days can A and B together complete the same job ? []
 1) 24 2) 12 3) 18 4) 15

TIME & DISTANCE :

35. A train travelling at a speed of 60 km/hr passes a pole in 9 seconds. What time will it take to cross a platform 350 m long? []
 1) 32 seconds 2) 24 seconds 3) 30 seconds 4) 36 seconds
36. A train 300 m long crosses a bridge 1200 m long in 3 minutes. Find the speed of the train.
 1) 60 kmph 2) 45 kmph 3) 30 kmph 4) 36 kmph []
37. A car covers 240 km at a constant speed. If its speed was 20 kmph more, it would have taken 2 hours less to travel the same distance. Find the speed of the car. []
 1) 60 kmph 2) 52 kmph 3) 40 kmph 4) 45 kmph
38. A man can swim downstream at 15 kmph and upstream at 7 kmph. find the speed of the man in still water and the speed of the current in kmph respectively. []
 1) 12; 3 2) 3; 12 3) 4; 11 4) 11; 4

RATIO & PROPORTION :

39. The ratio of green balls to red balls in a bag is 3 : 2. If 10 white balls are added to them, then the ratio of white, green and red balls will be 5 : 6 : 4. How many green balls were there in the bag ?
 1) 8 2) 5 3) 6 4) 12 []
40. The ratio of the incomes of Radha and Ramani is 4 : 3, and the ratio of their expenditures is 5 : 4. If Ramani saves $\frac{1}{3}$ rd of her income, then what is the ratio of their savings ? []
 1) 2 : 3 2) 5 : 3 3) 3 : 5 4) 3 : 2
41. A bag contains 10 paise, 20 paise and 50 paise coins in the ratio 5 : 2 : 1. The total value of all the coins in the bag is Rs. 140. How many 20 paise coins are there in the bag ? []
 1) 250 2) 200 3) 300 4) 150
42. The ratio of the present ages of Pavan, Kalyan and Kumar is 3 : 5 : 4. Six years ago the sum of ages of Kumar and Kalyan was 30 years more than the present age of Pavan. What is the present age of Kalyan ? []
 1) 36 years 2) 30 years 3) 34 years 4) 35 years

PERCENTAGES :

43. Two candidates contested in an election. The candidate who got 45% of votes defeated by 321 votes. Find the total number of votes polled if no votes were invalid []
 1) 8025 2) 6420 3) 1605 4) 3210
44. If Ram's salary went up by 25% by what percent should it be brought down to bring it back to original level []
 1) 25% 2) 20% 3) 33.33% 4) 37.5%

45. The population of a city increases by 30% every year. If the present population is 3,38,000. What was the population of the city two years ago? []
 1) 3,00,000 2) 2,50,000 3) 2,00,000 4) 2,40,000
46. If an electorate of 1500 persons, 80% were "For" the resolution. If the number of votes increases by 100% and the resolution is to be passed by a 2/3rd majority, what percentage of the new votes should vote "For" the resolution? []
 1) 33 1/3% 2) 22% 3) 53.33% 4) Cannot be determined

PROFIT & LOSS

47. There would be 15% loss if sugar is sold at Rs. 10.2 per kg. if a profit of 10% is to be earned, at what price per kg should be sold? []
 1) Rs.14.50 2) Rs. 13.20 3) Rs.15.10 4) Rs.16
48. A trader sells two articles at the same price but earns 12% profit on one article and incurs 12% loss on other article. What is his overall profit or loss percentage? []
 1) 12% profit 2) 12% loss 3) 1.44% profit 4) 1.44% loss
49. A manufacturer purchases a second hand machine for Rs. 90,000 and incurs Rs.30,000 on installation and repairs. After one year he sells the machinery for Rs.1,00,000. What is his profit or loss percentage, if 25% is to be deducted on account of depreciation? []
 1) 10% profit 2) 10% loss 3) $9\frac{1}{11}$ % profit 4) $11\frac{1}{9}$ % loss
50. Ramesh sold a book at 10% loss. Had he sold it for Rs.85 more, he would have made a profit of 7%. What was the cost price of the book? []
 a) Rs. 200 2) Rs. 300 3) Rs. 400 4) Rs. 500

