INTSO EDUCATION

APTITUDE TALENT SEARCH OLYMPIAD (ATSO) 2016 - 2017

STAGE - 1

TIME : 60 min.

CLASS : VIII

Max. Marks : 50

Instructions:

⇨ *Fill the OMR sheet completely and carefully.*

⇨ *Each question carries one mark and has only one correct answer. ¼ (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. 0, 18, 100, 294, ?   [ ]
    1) 648   2) 584   3) 674   4) 568

2. 8, 9, 20, 63, 256, ?   [ ]
    1) 1024   2) 1278   3) 1285   4) 1045

3. 54, 9, 15, 3, 8, 2, ?   [ ]
    1) 1   2) 4   3) 8   4) 6

4. 47, 37, 29, 23, 19, ?   [ ]
    1) 15   2) 17   3) 13   4) 11

5. 2, 3, 7, 16, 32, ?   [ ]
    1) 49   2) 53   3) 57   4) 61

LETTER SERIES :

6. PK, OM, LQ, GW, ?   [ ]
    1) AE   2) YD   3) YE   4) ZE

7. E, X, I , U, M, R, ?   [ ]
    1) S   2) Q   3) P   4) R

8. A, C, E, G, I, K, M, ?   [ ]
    1) O   2) H   3) Q   4) N

9. IQC, OTZ, UWW, AZT, ?   [ ]
    1) EBP   2) ECR   3) ECQ   4) EBQ

10. B, F, N, Z, P, ?   [ ]
    1) I   2) J   3) K   4) L

ODD MAN (CLASSIFICATION) :

11. 1) Ink   2) Pen   3) Pencil   4) Sharpener   [ ]

12. 1) Radio   2) X- ray   3) Television   4) Computer   [ ]

13. 1) Eyes   2) Hands   3) Legs   4) Nose   [ ]

14. 1) Mars   2) Saturn   3) Sun   4) Mercury   [ ]

15. 1) Up   2) Down   3) Below   4) Small   [ ]

NUMBER ANALOGY :

16. 18 : 80 : : ? : 143   [   ]
    1) 26   2) 27   3) 24   4) 28

17. 4 : 29 : : 36 : : ?   [   ]
    1) 243   2) 253   3) 247   4) 258

18. 35 : : 24 : : 323 : ?   [   ]
    1) 624   2) 576   3) 276   4) 288

19. 5 : 20 : : 8 : ?   [   ]
    1) 72   2) 64   3) 56   4) 68

20. 61 : 67 : : 71 : ?   [   ]
    1) 75   2) 80   3) 87   4) 73

LETTER AND WORD ANALOGY :

21. BSK : GXP : : IMC : ?   [   ]
    1) NRE   2) NRJ   3) NRH   4) NRI

22. JEY : WRL : : KTO : ?   [   ]
    1) XGL   2) PGL   3) XHL   4) XGB

23. ADHE : DICB : : PLUS : ?   [   ]
    1) RULQ   2) RVKQ   3) RWIQ   4) RTJQ

24. Hear : Deaf : : Speak : ?   [   ]
    1) Quiet   2) Silent   3) Mumb   4) Dumb

25. Young : Old : : Wide : ?   [   ]
    1) Insufficient   2) Big   3) Narrow   4) Long

CODING AND DECODING :

26. In a certain code, GREAT is coded as HTHEY. Then how is the work SOLVE coded ?
    1) TQPYJ   2) TQOZJ   3) TQOXJ   4) TQNYJ   [   ]

27. In a certain code, DEPOSIT is coded as TISOPED. Then how is EDITION coded ?
    1) NOIITDE   2) NOITDIE   3) NOITIDE   4) NOIDITE   [   ]

28. In a certain code CUT is coded as 1B9L13G. Then which word is coded as 3 G 7 H 2 W ?
    1) JAY   2) JOB   3) JPY   4) JOY   [   ]

29. If TRAILER is coded as VRCINET. How is VERDICT is coded ?   [   ]
    1) XETDKCV   2) XGREJOT   3) XETCLCV   4) XEUCKCV

30. If SIN is coded as FVA. Then how PLE is coded ?   [   ]
    1) KOB   2) CZR   3) CYR   4) CXR

EQUATIONS :

31. What is the difference between the largest 5 digit number and the least 5 digit number written with
    the figures 3, 5, 9, 0, 6 ?   [   ]
    1) 64961   2) 65961   3) 63861   4) 66861

32. Sum of two consecutive even terms lacks by 142 from their product. Find the sum of these numbers ?
    1) 20   2) 22   3) 24   4) 26   [   ]

33. If one - seventh of one - sixth of a number is 8. Then find the number ?   [   ]
    1) 326   2) 336   3) 316   4) 346

RATIO AND PROPORTION :

34. 650 men have provisions for 28 days. If 50 more men join them. For how many days will the provisions last now ? [   ]
1) 24   2) 20.5   3) 22   4) 26

35. An amount is to be divided between P, Q and R in the ratio 3: 5 : 8. If the difference between the shares of P and Q is ₹ 12,000. What will be the difference betweeen Q and R's share ?
1) ₹ 24000   2) ₹ 18000   3) ₹ 16000   4) ₹ 20000   [   ]

36. ₹ 520 contained in a box consists of one rupee, 50 paise and 25 paise coins in the ratio 3 : 5 : 4. The number of 50 paise coins is ? [   ]
1) 400   2) 360   3) 420   4) 380

LCM AND HCF :

37. The least square number which divides 12, 8, 10 is ? [   ]
1) 1200   2) 2400   3) 6400   4) 3600

38. Four bells begin to toll together respectively at the intervals of 6, 9, 12 and 14 seconds. After how many seconds will they toll together agian ? [   ]
1) 248   2) 252   3) 256   4) 284

39. The product of two numbers is 432 and their HCF is 6. Find the LCM ? [   ]
1) 36   2) 12   3) 48   4) 72

PERCENTAGES :

40. If the price of an article has fallen by 20% then what percent of its consumption be increased so that the expenditure be the same as before ? [   ]
1) 25%   2) 10%   3) $33\frac{1}{3}\%$ 4) 15%

41. If y exceeds x by 40%, then x is less than y by ? [   ]
1) $14\frac{2}{7}\%$ 2) $28\frac{4}{7}\%$ 3) 25%   4) $32\frac{1}{7}\%$

42. The salary of Mr. A is 60% more than that of Mr. B. Find what percent of Mr. B's salary is less than Mr. A's ? [   ]
1) $37\frac{1}{2}\%$ 2) $32\frac{1}{3}\%$ 3) 25%   4) $35\frac{1}{2}\%$

PROFIT AND LOSS :

43. A watch was sold at a loss of 15%. If it was sold for Rs. 126 more, there would have been a gain of 3%. What is the cost price ? [   ]
1) 500   2) 600   3) 700   4) 800

44. The list price of an article is Rs. 424. A customer pays Rs. 286.2 for it. He was given two succesive discounts, one of them is 25%. The other discount is ? [   ]
1) 10%   2) 15 %   3) 20%   4) 5%

45. A single discount equivalent to the discount series of 20%, 25% and 30% is [   ]
1) 45%   2) 48%   3) 58%   4) 55%

46. A man sells a horse for ₹ 550 and loses something. If he had sold it for ₹ 700, his gain would have been double the former loss. Find the cost price of the horse ?   [   ]
    1) 80   2) 50   3) 90   4) 40

47. By selling a house at ₹ 48,000 a person got a loss of 25%. In order to get a profit of 25% he should sell it for ?   [   ]
    1) 80,000   2) 90,000   3) 1,00,000   4) 70,000

MENSURATION :

48. The volume of a cylinder with diameter of base 14cm and height 80cm is   [   ]
    1) 1120 cm^3 2) 1232 cm^2 3) 1356 cm^3 4) 1420 cm^3

49. The volume of a sphere of radius 10.5 cm is   [   ]
    1) 4851 cm^3 2) 4352 cm^3 3) 5241 cm^3 4) 3561 cm^3

50. The total surface area of a cone of radius 6cm and height 8cm is   [   ]
    1) 84π cm^2 2) 96π cm^2 3) 88π cm^2 4) 94π cm^2