HIGH SCHOOL SCHOLARSHIP EXAMINATION, 2003

INTELLIGENCE TEST (English)

(Total Marks — 100)

SUNDAY, 16th FEBRUARY 2003]　　　　©　　　　[TIME : 3-00 P.M. TO 4-00 P.M.

Alphabets:—　　ABCDE　　FGHIJ　　KLMNO　　PQRST　　UVWXY

Q. 1. to 5. → In the letter series given below, which letters will come in place of the question mark?

1. EA, FJ, OK, PT, ?

   (1) UY　　　　(2) VY　　　　(3) YU　　　　(4) YV

2. HC, CM, MH, HR, RM, ?

   (1) MW　　　　(2) WM　　　　(3) WR　　　　(4) RW

3. CI, EJ, GK, IL, ?

   (1) JM　　　　(2) KM　　　　(3) KL　　　　(4) IK

4. BK, DI, FG, HE, ?

   (1) JD　　　　(2) JB　　　　(3) IC　　　　(4) JC

5. FA, HC, JE, LG, ?

   (1) NI　　　　(2) JN　　　　(3) NJ　　　　(4) IN

6. Which of the following is a factor of the sum of three digited numbers 'abc', 'bca' and 'cab'?

   (1) 21　　　　(2) 23　　　　(3) 31　　　　(4) 37

Space for Rough Work

Q. 7. to 11. → *Instructions*:— **In each of the following questions, there is a certain relation between the first and the second term. The same relation exists between the third and the fourth term. Find the relation and choose the correct answer to replace the question mark.**

7. 4 : 20 :: 6 : ?
    (1) 35   (2) 36   (3) 42   (4) 48

8. 5 △ 12 : 13 :: 8 △ 15 : ?
    (1) 14   (2) 15   (3) 16   (4) 17

9. 2 ☆ 3 : 13 :: 1 ☆ 3 : ?
    (1) 8   (2) 9   (3) 10   (4) 15

10. 36 : 55 :: 64 : ?
    (1) 89   (2) 90   (3) 91   (4) 92

11. 111 × 111 : 12321 :: 1111 × 1111 : ?
    (1) 1213211   (2) 1234321   (3) 1245421   (4) 1345431

Q. 12. to 14. → *Instructions*:— **Study the given diagram and answer these questions, choosing correct alternative.**
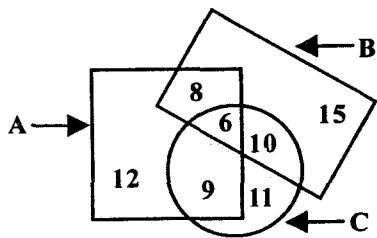
A : Serving persons

B : Persons travelling by bus

C : Persons travelling by railway

12. How many serving persons do not travel by bus?
    (1) 12   (2) 20   (3) 21   (4) 29

13. How many serving persons travel?
    (1) 27   (2) 23   (3) 14   (4) 12

14. How many persons travel but do not serve?
    (1) 15   (2) 26   (3) 36   (4) 50

Space for Rough Work

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Q. 15. to 18. → *Instructions*:— Choose correct alternative to replace the question mark in given series.

15. 21, 31, 42, 62, 84, ?
    (1) 108   (2) 110   (3) 120   (4) 124

16. 169, 121, 81, 49, ?
    (1) 31   (2) 29   (3) 25   (4) 23

17. 123, 235, 358, 5813, ?
    (1) 81319   (2) 81321   (3) 81323   (4) 13821

18. $\dfrac{1}{4}, \dfrac{4}{9}, \dfrac{9}{16}, \dfrac{16}{25}, ?$

    (1) $\dfrac{25}{16}$ (2) $\dfrac{25}{36}$ (3) $\dfrac{25}{49}$ (4) $\dfrac{25}{64}$

Q. 19. to 21. → *Instructions*:— These questions are based on the following table showing how the words in Column I are expressed using certain code, in Column II. The symbols used in Column II are not necessarily in the same order of letters in Column I.

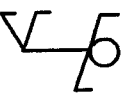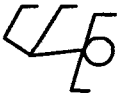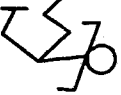| Column I	Column II
POST	□ △ ★ ʮ
RED	○ ▲ ✳
DARK	○ ● ■ ▲
DATE	□ ● ✳ ▲
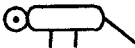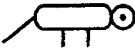
19. READ = ?
    (1) ○ ✳ ▲ ●   (2) ○ ✳ ● △   (3) ○ ✳ ● □   (4) ○ ✳ ● ▲

20. PAPER = ?
    (1) ★ ● ★ □ ○   (2) ★ ● ★ ✳ ○   (3) ★ ● △ ✳ ○   (4) ★ ○ ★ ✳ ●

21. TAKE = ?
    (1) □ ○ ■ ✳   (2) □ ● ■ ✳   (3) □ ● □ ✳   (4) □ ● ■ △

| Alphabets:— | ABCDE | FGHIJ | KLMNO | PQRST | UVWXY |

Q. 22. to 24. → *Instructions*:— **In each of the following questions, there is a certain relation between the first and the second term. The same relation exists between the third and the fourth term. Find the relation and choose the correct answer to replace the question mark.**

22. C : W :: F : ?
(1) R   (2) S   (3) T   (4) U

23. CE : WU :: ? : SQ
(1) GI   (2) HJ   (3) GJ   (4) KI

24. FS : RI :: JO : ?
(1) NM   (2) ON   (3) LM   (4) MN

Q. 25. to 29. → *Instructions*:— **In each of the following questions, find the odd figure.**

25.

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

26.

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

27.

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

28.

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

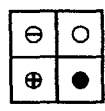29.

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

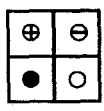| Alphabets:— | ABCDE | FGHIJ | KLMNO | PQRST | UVWXY |

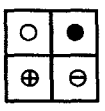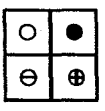30. 1, 3, 6, 10, 15, 17, 21, 28.

(1) 15   (2) 17   (3) 21   (4) 28

31. 0, 6, 20, 30, 42, 72.

(1) 20   (2) 30   (3) 42   (4) 72

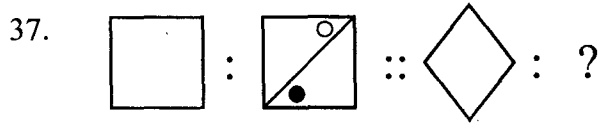32. 2, 6, 12, 20, 32, 42, 56.

(1) 12   (2) 20   (3) 32   (4) 42

33.

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

34.

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

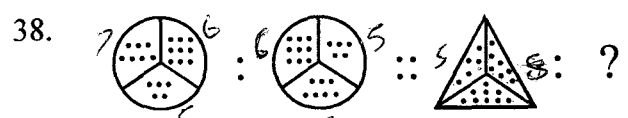35.

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

Space for Rough Work
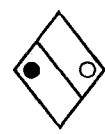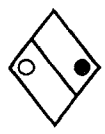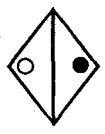
Q. 36. to 39. → *Instructions*:— **In each of these questions there is a certain relation between the first and the second figure. The same relation exists between the third and the fourth figure. Find the relation and choose the correct answer to replace the question mark.**
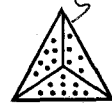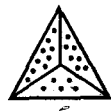
36.

| (1) | (2) | (3) | (4) |

37.

| (1) | (2) | (3) | (4) |

38.

| (1) | (2) | (3) | (4) |

39.

$\dagger : \text{⌘} :: \dagger : ?$
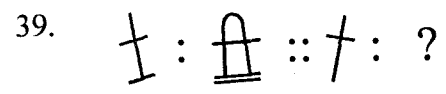
| (1) | (2) | (3) | (4) |

40. If $1 + 3 + 5 = 3^2$ and $1 + 3 + 5 + 7 = 4^2$

then $\sqrt{1 + 3 + 5 + 7 + 9 + \text{..........} + 99} = ?$

   (1) 45   (2) 46   (3) 49   (4) 50

41. In the adjoining figure, in all how many quadrilaterals are there?

   (1) 8   (2) 14   (3) 12   (4) 10

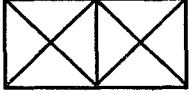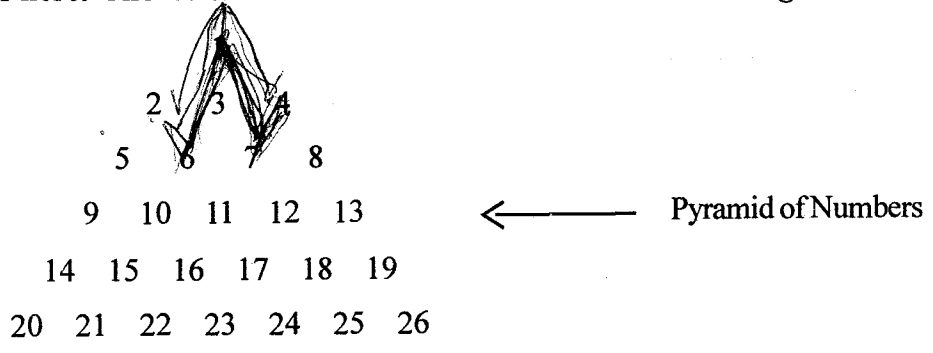Q. 42. to 44. → *Instructions*:— **In each of these questions find the term which does not belong to the group of the remaining three.**

42. (1) BDF   (2) XVT   (3) HJL   (4) RPM

43. (1) E   (2) L   (3) R   (4) X

44. (1) H R   (2) TF   (3) OK   (4) SG

Q. 45. to 47. → *Instructions*:— **These questions are based on the pyramid of numbers given here. Choose the correct answer from the alternatives given below.**



```
       2   3   4
      5   6   7   8
    9  10  11  12  13        ⟵——— Pyramid of Numbers
  14  15  16  17  18  19
20  21  22  23  24  25  26
```

45. If 9510 : 13812 then 2109 : ?
   (1) 4712   (2) 4812   (3) 41213   (4) 41112

46. If 2611 : 1174 then 61117 : ?
   (1) 111724   (2) 61124   (3) 17128   (4) 81217

47. If 26117 : 47116 then 101174 : ?
   (1) 121174   (2) 111063   (3) 121162   (4) 81273

Q. 48. to 50. → *Instructions*:— These questions are based on diagrams A, B, C and D. Each of these diagrams represent certain sets. For example, diagram C represents 'plants, animals and herbs.' Using these diagrams attempt Q. 48, 49 and 50.
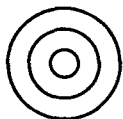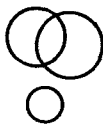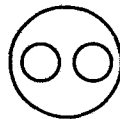

A   B   C   D

48. 'Livings, animals, crows' are represented by?

   (1) A   (2) B   (3) C   (4) D

49. 'Livings, crows, trees' are represented by?

   (1) A   (2) B   (3) C   (4) D

50. 'Natural numbers, even numbers, odd numbers' are represented by?

   (1) A   (2) B   (3) C   (4) D