

1. If all words with 2 distinct vowels and 3 distinct consonants were listed alphabetically, what would be the rank of "ACDEF"?

- A.4716
- B.4720
- C.4718**
- D.1717

2. If we listed all numbers from 100 to 10,000, how many times would the digit 3 be printed?

- A.3980**
- B.3700
- C.3840
- D.3780

3. All the rearrangements of the word "DEMAND" are written without including any word that has two D's appearing together. If these are arranged alphabetically, what would be the rank of "DEMAND"?

- A.36
- B.74**
- C.42
- D.86

4. In how many ways can letters the word ATTITUDE be rearranged such that no two Ts are adjacent to each other?

- A.6720
- B.2400**
- C.4320
- D.1800

5. In how many ways can be select 5 cards from a card pack such that all 4 suits appear?

- A.52728
- B.405646
- C.685464**
- D.4056

6. I roll a die 4 times. In how many outcomes will each subsequent throw be greater than the previous one?

- A.15
- B.48
- C.30
- D.60

7. In how many ways can we rearrange the letters of the word MANANA such that no two A's are adjacent to each other?

- A.  $3! \cdot {}^5C_3$
- B.  $4! \cdot {}^4C_3$
- C.  $3 \cdot {}^4C_3$
- D.  $3! \cdot {}^4C_3$

8. A bag contains 4 blue, 5 white and 6 green balls. Two balls are drawn at random. What is the probability that one ball is white?

- A.10/21
- B.1/2
- C.3/4
- D.2/35

9. What is the area of an equilateral triangle of side 16 cm?

- A.  $48\sqrt{3} \text{ cm}^2$
- B.  $128\sqrt{3} \text{ cm}^2$
- C.  $9.6\sqrt{3} \text{ cm}^2$
- D.  $64\sqrt{3} \text{ cm}^2$

10. If the sides of a triangle are 26 cm, 24 cm and 10 cm, what is its area?

- A. 120 cm<sup>2</sup>
- B. 130 cm<sup>2</sup>
- C. 312 cm<sup>2</sup>
- D. 315 cm<sup>2</sup>

11. The perimeter of a triangle is 28 cm and the inradius of the triangle is 2.5 cm. What is the area of the triangle?

- A. 25 cm<sup>2</sup>
- B. 42 cm<sup>2</sup>
- C. 49 cm<sup>2</sup>
- D. None of these**

**Directions:** A number arrangement machine when given an input line of numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input: 62 97 38 74 55 12 86 45 68 22  
 Step 1: 13 62 97 38 74 55 86 45 68 23  
 Step 2: 39 13 62 97 74 55 86 68 23 46  
 Step 3: 56 39 13 97 74 86 68 23 46 63  
 Step 4: 69 56 39 13 97 86 23 46 63 75  
 Step 5: 87 69 56 39 13 23 45 63 75 98

Find the different steps of output using the above mentioned logic for the following input.

**Input: 88 59 28 94 37 75 15 64 71 48**

**12. Which of the following number is 5<sup>th</sup> to left of 49 in step 4?**

- A 60
- B 38
- C 16
- D 72
- E None of these

**13. How many numbers are there between the one which is 3<sup>rd</sup> from the right end and 38 in step 3?**

- A Four
- B One
- C More than four
- D Two
- E None of the

**14. How many numbers are there between 72 and the one which 4<sup>th</sup> to left of 76 in step 5?**

- A Three
- B Two
- C None
- D More than three
- E None of these

**15. What is the position of 88 from the right end in last but one step?**

- A Fourth
- B Fifth
- C Sixth
- D Third
- E None of these

16. Which of the following number is 7<sup>th</sup> from the left end in step 5?

- A 29
- B 65
- C 76
- D 49
- E None of these

17. Statement :  $Q \geq P = R \geq N < G \geq E > S$

Conclusions : I.  $Q \geq N$     II.  $R > E$

- A. If only conclusion I is true.
- B. If only conclusion II is true.
- C. If either conclusion I or II is true.
- D. If neither conclusion I nor II is true.
- E. If both conclusions I and II are true.

18. Statement :  $Q \geq P = R \geq N < G \geq E > S$

Conclusions : I.  $G > P$     II.  $S < R$

- A. If only conclusion I is true.
- B. If only conclusion II is true.
- C. If either conclusion I or II is true.
- D. If neither conclusion I nor II is true.**
- E. If both conclusions I and II are true.

19. In which of the following expressions 'W > Z' as well as 'Y > Z' hold definitely true?

- A.  $W > X > U = Z < H \leq Y$
- B.  $W \geq X = U > Z \leq H < Y$
- C.  $W = X > U \geq Z < H < Y$
- D. All of the above**
- E. None of the above

Study the following information carefully and answer the question given below.

'P % Q' means 'P is not smaller than Q.'

'P \* Q' means 'P is neither greater than nor equal to Q.'

'P ÷ Q' means 'P is neither smaller than nor equal to Q.'

'P \$ Q' means 'P is neither greater than nor smaller than Q.'

'P © Q' means 'P is not greater than Q.'

20. **Statements :** D \$ T, T % M, M \* J

**Conclusions :** I. J ÷ D      II. M © D

- A. if only conclusion I is true
- B. if only conclusion II is true**
- C. if either conclusion I or II is true
- D. if neither conclusion I nor II is true
- E. if both conclusions I and II are true

21. **Statements :** 8 \* K, K \$ N, N % R

**Conclusions :** I. R \$ K      II. R \* K

- A. if only conclusion I is true
- B. if only conclusion II is true
- C. if either conclusion I or II is true**
- D. if neither conclusion I nor II is true
- E. if both conclusions I and II are true

22. **Statements :** H % F, F \* W, W \$ E

**Conclusions :** I. E ÷ F      II. H ÷ W

- A. if only conclusion I is true**
- B. if only conclusion II is true
- C. if either conclusion I or II is true
- D. if neither conclusion I nor II is true
- E. if both conclusions I and II are true

23. **Statements :**  $Z \delta D, D \odot K, K \delta M$

**Conclusions :** I.  $M * D$  II.  $Z \delta K$

- A. if only conclusion I is true
- B. if only conclusion II is true
- C. if either conclusion I or II is true
- D. if neither conclusion I nor II is true**
- E. if both conclusions I and II are true

24. **Statements :**  $W \odot B, N \delta B, N \odot F$

**Conclusions :** I.  $F \delta B$  II.  $W * N$

- A. if only conclusion I is true
- B. if only conclusion II is true
- C. if either conclusion I or II is true
- D. if neither conclusion I nor II is true
- E. if both conclusions I and II are true**

The following questions are based on the information given below:

1. A cuboid shaped wooden block has 6 cm length, 4 cm breadth and 1 cm height.
2. Two faces measuring 4 cm x 1 cm are coloured in black.
3. Two faces measuring 6 cm x 1 cm are coloured in red.
4. Two faces measuring 6 cm x 4 cm are coloured in green.
5. The block is divided into 6 equal cubes of side 1 cm (from 6 cm side), 4 equal cubes of side 1 cm (from 4 cm side).

**25.**

How many cubes having red, green and black colours on at least one side of the cube will be formed ?

A. 16

B. 12

C. 10

D. 4

26. How many small cubes will be formed ?

A. 6

B. 12

C. 16

D. 24

27. How many cubes will have 4 coloured sides and two non-coloured sides ?

A. 8

B. 4

C. 16

D. 10

28. How many cubes will have green colour on two sides and rest of the four sides having no colour ?

A. 12

B. 10

C. 8

D. 4

29. How many cubes will remain if the cubes having black and green coloured are removed ?

A. 4

B. 8

C. 12

D. 16

**30.Statement:** A large number of people in ward X of the city are diagnosed to be suffering from a fatal malaria type.

**Courses of Action:**

I.The city municipal authority should take immediate steps to carry out extensive fumigation in ward X.

II. The people in the area should be advised to take steps to avoid mosquito bites.

A. Only I follows

B. Only II follows

C. Either I or II follows

D. Neither I nor II follows

E. Both I and II follow

**31.Statement:** Severe drought is reported to have set in several parts of the country.

**Courses of Action:**

I.Government should immediately make arrangement for providing financial assistance to those affected.

II. Food, water and fodder should immediately be sent to all these areas to save the people and cattle.

A. Only I follows

B. Only II follows

C. Either I or II follows

D. Neither I nor II follows

E. Both I and II follow

**32.Statement:** Since its launching in 1981, Vayudoot has so far accumulated losses amounting to Rs 153 crore.

**Courses of Action:**

I.Vayudoot should be directed to reduce wasteful expenditure and to increase passenger fare.

II.An amount of about Rs 300 crore should be provided to Vayudoot to make the airliner economically viable.

A. Only I follows

B. Only II follows

C. Either I or II follows



**D.** Neither I nor II follows

**E.** Both I and II follow

**33.Statement:** Exporters in the capital are alleging that commercial banks are violating a Reserve Bank of India directive to operate a post shipment export credit denominated in foreign currency at international rates from January this year.

**Courses of Action:**

I. The officers concerned in the commercial banks are to be suspended.

II.The RBI should be asked to stop giving such directives to commercial banks.

**A.** Only I follows

**B.** Only II follows

**C.** Either I or II follows

**D.** Neither I nor II follows

**E.** Both I and II follow

**34.Statement:** A large number of people die every year due to drinking polluted water during the summer.

**Courses of Action:**

The government should make adequate arrangements to provide safe drinking water to all its citizens.

The people should be educated about the dangers of drinking polluted water.

**A.** Only I follows

**B.** Only II follows

**C.** Either I or II follows

**D.** Neither I nor II follows

**E.** Both I and II follow

**35.Statement:** There is an unprecedented increase in migration of villagers to urban areas as repeated crop failure has put them into precarious financial situation.

**Courses of Action:**

I.The villagers should be provided with alternate source of income in their villages which will make them stay put.

II.The migrated villagers should be provided with jobs in the urban areas to help them survive.

**A.** Only I follows

**B.** Only II follows

**C.** Either I or II follows

**D.** Neither I nor II follows

**E.** Both I and II follow