CUET (UG) Question Paper - 2024

National Testing Agency

15th MAY 2024 – SHIFT 1

Section - III (General Test)
Logical Reasoning

Examination Duration: 60 Minutes | **Maximum Marks - 250**

1. What should come in the place of the question mark (?) in the following alphanumeric series?

A1X, B4P, E25J, J100F, ?

(A) O289D (B) O225E

(C) Q289D (D) Q225E

Ans. Option (C) is correct.

> *Explanation:*
> Given series, A1X, B4P, E25J, J100F, ?
> Pattern followed:
> $$A + 1 = B + 3 = E + 5 = J$$
> $$\Rightarrow \quad J + 7 = Q$$
> And $\quad X – 8 = P – 6 = J – 4 = F$
> $$\Rightarrow \quad F – 2 = D$$
> And numbers are the square of first alphabet in given series.
> So, missing term = Q289D

2. In the given analogy, choose the word which will replace the question mark:

NEGI : MVTR : SING : ?

(A) TRNS (B) TRNT

(C) FRMT (D) HRMT

Ans. Option (D) is correct.

> *Explanation:*
> Given, NEGI : MVTR :: SING : ?
> Pattern followed:
> Each alphabet of second word is opposite alphabet of first word.
> $$N \Rightarrow M$$
> $$E \Rightarrow V$$
> $$G \Rightarrow T$$
> $$I \Rightarrow R$$
> Now, $\quad S \Rightarrow H$
> $$I \Rightarrow R$$
> $$N \Rightarrow M$$
> $$G \Rightarrow T$$
> Hence, missing term = HRMT

3. In a certain code language 'ki ru pi' means 'nobody like cruel', 'ki mi cha' means 'king was cruel' and 'ru pi cha' means 'nobody like king'. What is the code for 'was' in the given code language?

(A) ki (B) mi (C) cha (D) ru

Ans. Option (B) is correct.

> *Explanation:*
> Given code,
> Ki ru pi $\Rightarrow$ nobody like cruel ....(1)
> Ki mi cha $\Rightarrow$ king was cruel ....(2)
> Ru pi cha $\Rightarrow$ nobody like king ....(3)
> Form (1) and (2), code for cruel $\Rightarrow$ ki
> From (2) and (3), code for king $\Rightarrow$ cha
> From (1) and (3), code for nobody $\Rightarrow$ pi
> So, code for was $\Rightarrow$ mi

4. Read the following information carefully to choose the best option for the question:

'P % Q' means that 'P is the sister of Q'

'P + Q' means that 'P is the son of Q'

'P × Q' means that 'P is the husband of Q'

'P – Q' means that 'P is the brother of Q'

Which of the following means 'A' is the son-in-law of G'?

(A) A × U + S × G (B) A + S % U × G

(C) A – S + U × G (D) A × U % S + G

Ans. Option (D) is correct.

> *Explanation:*
> $$G$$
> $$|$$
> $$A^+ = U^- - S^+$$
> According to the above diagram. A is son-in-law of G.
> From the given options, only option (D) showing that A is son in law of G.

5. If 26th January 2020 was a Sunday, then what day of the week it on 16th March of that year?

(A) Sunday (B) Monday

(C) Tuesday (D) Wednesday

Ans. Option (B) is correct.

Explanation:
Total number of odd days between 26th January and 16th March
$$= 5 + 29 + 16 = 50$$
Number of odd days
$$= \text{remainder of } \frac{50}{7} = 1$$
So, day on 16th March
$$= \text{Sunday} + 1$$
$$= \text{Monday}$$

6. What will be he measurement of the angle made by the hour and minute hands of a clock when the time is 'quarter past' 3?

(A) $6\frac{1}{2}°$ (B) $10°$ (C) $7\frac{1}{2}°$ (D) $8\frac{1}{2}°$

Ans. Option (C) is correct.

Explanation:
Angle between minute hand and hour hand at quarter past three
$$= 30 \times 3 - \frac{11}{2} \times 15$$
$$= 7\frac{1}{2}°$$

7. If in a certain code language, 'MERCURY' is coded as 'NGUGZXF', then how will 'ENTANGLE' be coded in the same code language?

(A) FPXFSMSM   (B) FPWESMSM
(C) FPWESNSN   (D) FPWFTNSM

Ans. Option (B) is correct.

Explanation:
Given pattern:
$$M + 1 = N$$
$$E + 2 = G$$
$$R + 3 = U$$
$$C + 4 = G$$
$$U + 5 = Z$$
$$R + 6 = X$$
$$Y + 7 = F$$
So, $$E + 1 = F$$
$$N + 2 = P$$
$$T + 3 = W$$
$$A + 4 = E$$
$$N + 5 = S$$
$$G + 6 = M$$
$$L + 7 = S$$
$$E + 8 = M$$
Hence, the code for ENTANGLE will be: FPWESMSM

8. The problem given below consists of a question and two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question.
   (I) Sunny is the only son of his parents.
   (II) Sunny's parents have three children.

(A) Only statement I alone is sufficient to answer the question.
(B) Only statement II alone is sufficient to answer the question.
(C) Statements I and II together are sufficient to answer the question.
(D) Either statement I and II alone is sufficient to answer the question.

Ans. Option (C) is correct.

Explanation: From statement I: it is clear that Sunny is the only son.
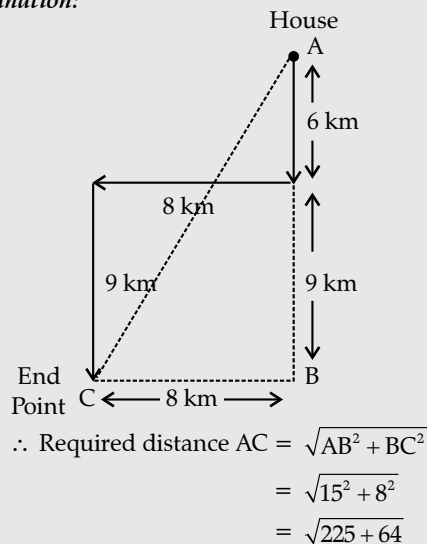From statement II: it is clear that Sunny has two sisters.
Statements I and II together are sufficient to answer the question.

9. A boy leaves his house. He travels 6 km towards South, then travels 8 km towards West and further travels 9 km towards South. How far and in which direction is he from his house now?
(A) 13 km, South West   (B) 17 km, South West
(C) 17 km, North West   (D) 13 km, West
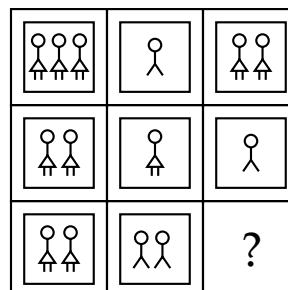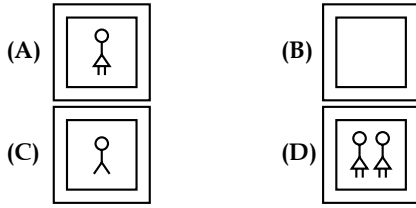
Ans. Option (D) is correct.

Explanation:

$\therefore$ Required distance AC $= \sqrt{AB^2 + BC^2}$
$$= \sqrt{15^2 + 8^2}$$
$$= \sqrt{225 + 64}$$
So, he is 17 km away in south west direction from his house.

10. Find out which of the answer figures completes the figure matrix:
Problem figure:

(A)   (B)

(C)   (D)

Ans. Option (B) is correct.

> *Explanation:*
> **Given pattern:** Difference between the number of persons in 1st and 2nd columns will be in 3rd column.
> Number of persons in 1st column−Number of persons in 2nd column = Number of persons in 3rd column
> So, option (B) is correct.

11. A clock seen through a mirror shows 'quarter to seven' What is the correct time shown by the clock?
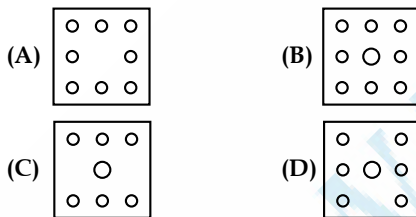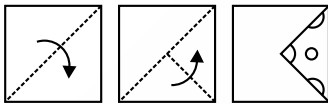
(A) 6:15   (B) 6:17
(C) 5:17   (D) 5:15

Ans. Option (D) is correct.

> *Explanation:*
> Given that the time seen through mirror
> = 6 : 45
> So, actual time = 11 : 60 − 6 : 45
> = 5 : 15

12. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?

(A)   (B)

(C)   (D)

Ans.Option (B) is correct.

> *Explanation:*
> According to the given pattern of cutting, option (B) will be correct.

13. Find out the missing (?) number and letter.

(A) 59 and K.
(B) 61 and L
(C) 61 and K
(D) 59 and L

Ans. Option (B) is correct.

> *Explanation:*
> **Given Pattern:**
> For numbers: Starting from 5, next number in anti-clockwise direction is obtained by adding consecutive prime numbers, i.e.,
> $$5 + 3 = 8$$
> $$8 + 5 = 13$$
> $$13 + 7 = 20$$
> $$20 + 11 = 31$$
> $$31 + 13 = 44$$
> So, missing number = 44 + 17 = 61
> For alphabets: in every rectangle, the difference in alphabets is in increasing order, i.e.,
> $$A + 2 = C$$
> $$C + 3 = F$$
> $$E + 4 = I$$
> So, missing alphabet = G + 5 = L

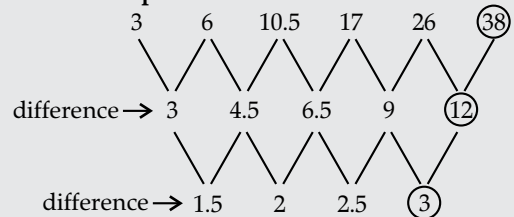**14.** What will be the next number of the series.
3, 6, 10.5, 17, 26, ?

(A) 31   (B) 38   (C) 40   (D) 41

Ans. Option (B) is correct.
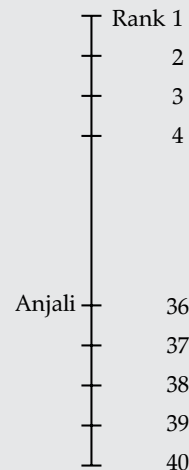
> *Explanation:*
> **Given pattern:**
>
> Hence, the missing number is 38.

15. In a class of 40 students, Anjali's rank is thrice that of Anita. There are 4 students who have ranks worse than that of Anita's rank in the class is:

(A) 9th   (B) 10th   (C) 18th   (D) 12th

Ans. Option (D) is correct.

> *Explanation:*
>
> According to the question,
> (Anita rank) × 3 = Anjali rank
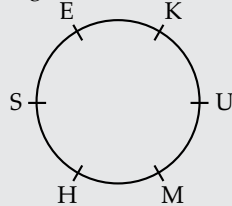> ∴ Anita rank = $\dfrac{36}{3}$ = 12th

16. Six people E, H, K, M, S and U are seated in a circle facting the centre. U and H are immediate neighbours of M, E is the only person sitting between K and S. H is to the immediate right of S. Who is to the immediate right of U.?

(A) M **(B)** E **(C)** K **(D)** S
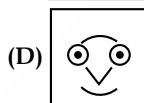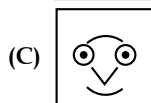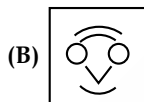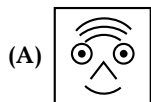
Ans. Option (C) is correct.

Explanation:
Sitting arrangement is as follows:

So, K is the immediate right of U.

17. Find out which of the answer figures from the options can be formed using all the pieces given in the problem figure.

(A)   **(B)**

(C)   **(D)**

Ans. Option (D) is correct.

Explanation:
From the given options, only option (D) figure can be formed by using the question figure.

18. Read the given statements and conclusions carefully assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts. Decide which of the given conclusion(s) logically follows from the statements.

Statements:
No keyboard is a mouse.
All mouses are computers.
All computers are laptops.

Conclusions:
I.   All mouses are laptops.
II. All computers can never be keyboards.
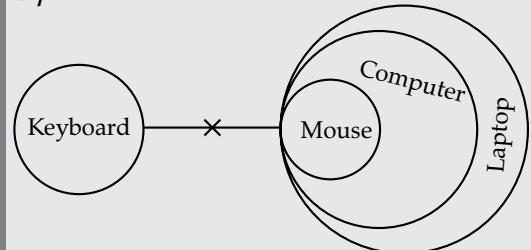
(A) Only conclusion I follows
(B) Only conclusion II follows
(C) Neither conclusion I nor II follows
(D) Both conclusions I and II follow

Ans. Option (D) is correct.

Explanation:

From above Venn diagram, both conclusions I and II follow.

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