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LOGICAL REASONING

Section III : General Test

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CUET (UG) Question Paper - 2022

National Testing Agency

23rd AUG 2022 – SHIFT 1

Section - III (General Test)

Logical Reasoning

General Instructions:

Marking scheme of the test:

- (a) Correct answer or the most appropriate answer: Five marks (+5)
- (b) Any incorrect option marked will be given minus one mark (-1).
- (c) Unanswered/Marked for review will be given no mark (0).

1. A father said to his child, "I was as old as you are at the time of your birth". If the father's age is 48 years now, the child's age six years back was:
- (A) 15 years (B) 16 years
(C) 17 years (D) 18 years

Ans. Option (D) is correct.

Explanation:

Let child's age = x years
As per the question,
 $2x = 48$
 $x = 24$ years
So, six years back, child's age = $24 - 6 = 18$ years

2. Abundant : Scarce :: Artificial : ?
- (A) Manmade (B) Sparse
(C) Meager (D) Genuine

Ans. Option (D) is correct.

Explanation: Antonyms of each other, so the correct word is as follows:
Abundant : Scarce :: Artificial : Genuine

3. GFE : KJI :: ONM : ?
- (A) SRT (B) SRQ
(C) TSR (D) RQP

Ans. Option (B) is correct.

Explanation:

Given that
G + 4 K
F + 4 J
E + 4 I
So, ONM SRQ
So, option B is correct option.

4. Contaminated : Sinful :: Immense : ?
- (A) Tiny (B) Gigantic
(C) Brave (D) Beautiful

Ans. Option (B) is correct.

Explanation:

Synonyms of each other, so the correct word is as follows:
Contaminated : Sinful :: Immense : Gigantic

5. Ganga : Kanpur :: Narmada : ?
- (A) Bhopal (B) Amarkantak
(C) Ahmedabad (D) Jodhpur

Ans. Option (B) is correct.

Explanation: The town Kanpur is situated on the south bank of river Ganga. Similarly, the Narmada River rises from the Amarkantak Plateau in Anuppur district Madhya Pradesh.

6. Arrange the following words in the sequence they will appear in a dictionary:
- a. Mechanics b. Mathematics
c. Monuments d. Measurement
e. Magnitude

Choose the correct answer from the option given below:

- (A) b, c, a, e, d (B) a, c, d, e, b
(C) d, a, c, e, b (D) e, b, d, a, c

Ans. Option (D) is correct.

Explanation:

According to arrangement of words in alphabetically order the sequence will be Magnitude, Mathematics, Measurement, Mechanics and Monuments.

7. If 'BHARAT' stands for 'B-8-A-18-A-20' and "ENGLAND" stands for E-14-G-12-A-14-D then how will you code the SRILANKA?
- (A) S-18-I-12-A-14-11-A (B) S-15-I-9-A-11-10-A
(C) S-17-I-11-A-13-K-1 (D) S-18-I-12-A-14-K-1

Ans. Option (D) is correct.

Explanation:

In code every alternate alphabet is replaced by its numeric value as written below.
BHARAT B-8-A-18-A-20
ENGLAND E-14-G-12-A-14-D
So, SRILANKA S-18-I-12-A-14-K-1

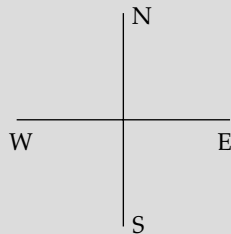
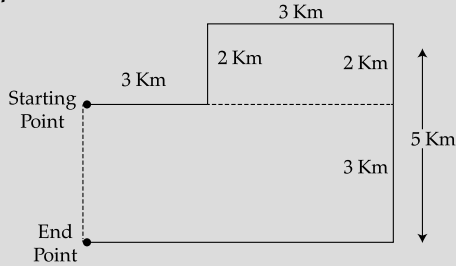
8. Arpit travelled 3 km east from his home, then 2 km north followed by 3 km to east. He took a 90° right turn and walked 5 km straight, then he again took a right turn and walked 6 km more. How far is he

now his home?

- (A) 5 km (B) 3 km
(C) 6 km (D) 2 km

Ans. Option (B) is correct.

Explanation:



So, required distance = 3 km
Hence, option B is correct option.

9. Complete the series: 29, 31, 37, 41, 43 _____

- (A) 45 (B) 47
(C) 49 (D) 51

Ans. Option (B) is correct.

Explanation: Given Series is a series of prime numbers.
So, missing number = 47

10. Today is Friday : After 91 days, it will be:

- (A) Wednesday (B) Thursday
(C) Friday (D) Saturday

Ans. Option (C) is correct.

Explanation:

91 is completely divisible by 7. So, Same day will repeat.

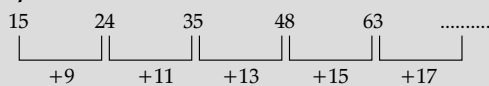
11. Complete the series:

15, 24, 35, 48, 63 _____

- (A) 80 (B) 89
(C) 94 (D) 99

Ans. Option (A) is correct.

Explanation:



So, Last number = 63 + 17 = 80
Hence, option A is correct option.

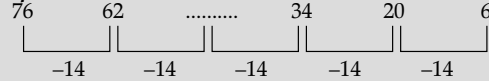
12. Complete the series:

76, 62,?.... 34, 20, 6

- (A) 56 (B) 48
(C) 43 (D) 36

Ans. Option (A) is correct.

Explanation:



So, Missing number = 62-14=48
Hence, option B is correct option.

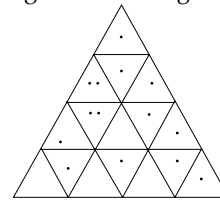
13. In this question, four words have been given of which three are alike in some way and one is different. Find the odd one out.

- (A) Motorcycle (B) Metro
(C) Bus (D) Car

Ans. Option (B) is correct.

Explanation: Motorcycle, Bus and Car run on road but Metro runs on rail track.

14. How many triangles are in the given shape?



- (A) 21 (B) 23
(C) 27 (D) 29

Ans. Option (B) is correct.

Explanation:

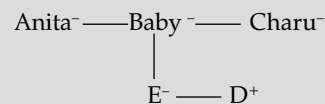
$$\begin{aligned} \text{Total number of triangles} \\ = \frac{n(n+2)(2n+1)}{8} = \frac{4 \times 6 \times 9}{8} = 27 \end{aligned}$$

15. Anita, Baby and Charu are sisters. D is the brother of E and E is the daughter of Baby. How is Anita related to D?

- (A) Niece (B) Sister
(C) Cousin (D) Aunt

Ans. Option (D) is correct.

Explanation:



So, Anita is Aunt of D.
Hence, option D is correct option.

16. When seen through a mirror, a clock shown 8 : 30. What is the correct time?

- (A) 2:30 (B) 3:30
(C) 5:30 (D) 8:30

Ans. Option (B) is correct.

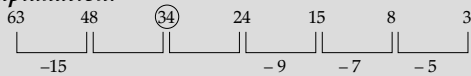
Explanation:

$$\begin{aligned} \text{Correct time} &= 11:60 - 8:30 \\ &= 3:30 \end{aligned}$$

17. Find the odd number in the series 63, 48, 34, 24, 15, 8, 3

- (A) 24 (B) 34
(C) 15 (D) 8

Ans. Option (B) is correct.

Explanation:

In given series, 34 is the odd number as it is not following the odd number difference. Difference of 5, 7, 9, 11, 13, 15 should be there from last.

18. Arrange the following in a logical order :

- (a) Frog (b) Eagle
(c) Grasshopper (d) Snake
(e) Grass

Choose the correct answer from the option given below:

- (A) a, c, e, b, d (B) c, d, b, e, a
(C) e, c, a, d, b (D) e, c, d, b, a

Ans. Option (C) is correct.

Explanation: - e → c → a → d → b

The logical order is Grass – Grasshopper – Frog – Snake – Eagle

19. Which of the following collection of letter will looks the same in the simple mirror?

- (A) HIMOSTA (B) HIMOVTA
(C) AOSVMTA (D) HVHRTAM

Ans. Option (B) is correct.

Explanation: All characters of option B will look same in the mirror.

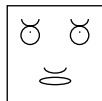
20. If 'book' is called 'watch', watch is called 'beg'; 'beg' is called 'dictionary' and 'dictionary' is called door: which is used to carry the books?

- (A) Watch (B) Bag
(C) Dictionary (D) Door

Ans. Option (C) is correct.

Explanation: Bag is called dictionary. So, as per the question 'Dictionary' is used to carry the books.

21. Find out the figure which will be exactly make up from the sum collection of symbols:



- (A) (B)
(C) (D)

Ans. Option (C) is correct.

Explanation: Option C will be exactly make up from the sum collection of symbols.

22. Match List-I with List-II.

List-I		List-II	
(a)	Book	(I)	Editor
(b)	Film	(II)	Dramatist
(c)	Play	(III)	Author
(d)	News paper	(IV)	Producer

Choose the correct answer from the options given below:

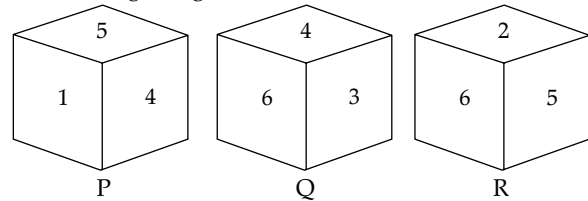
- (A) (a) – (III), (b) – (II), (c) – (I), (d) – (I)
(B) (a) – (I), (b) – (IV), (c) – (III), (d) – (II)
(C) (a) – (I), (b) – (II), (c) – (III), (d) – (IV)
(D) (a) – (III), (b) – (IV), (c) – (II), (d) – (I)

Ans. Option (C) is correct.

Explanation: A-III, B-IV, C-II, D-I

- Book is associated with Author.
- Film is associated with Producer.
- Play is associated with Dramatist.
- Newspaper is associated with Editor.

23. Three different position P, Q and R of dice are shown in the figures given below.



Which number lies at the bottom face in position P?

- (A) 2 (B) 3
(C) 4 (D) 5

Ans. Option (B) is correct.

Explanation: The number lies at the bottom face in position P is 3. Adjacent numbers to 5 are 1, 4, 6 & 2. So, 3 is opposite to 5.

24. Which of the following diagrams correctly represents European countries. Arab countries and the countries that took part in the Gulf War?

- (A) (B)
(C) (D)

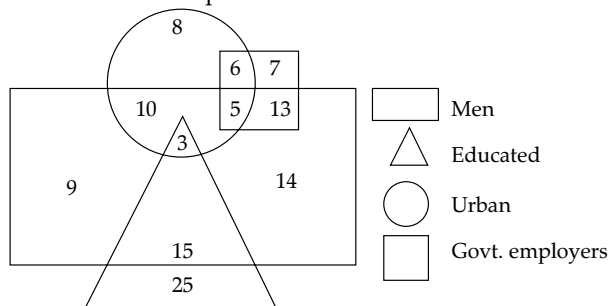
Ans. Option (A) is correct.

Explanation: The possible correct diagram for European countries. Arab countries and the countries that took part in the Gulf War is option A.

Direction for questions (25–27):

In the following diagram, rectangle represent man, triangle represents educated, circle represents urban and square represents government employees.

Answer the questions



25. Which of the following numbers represent Educated man who are not urban?

- (A) 14
- (B) 3
- (C) 15
- (D) 25

Ans. Option (C) is correct.

Explanation: The numbers represent Educated men who are not urban = 15

26. Which one of the following represent Urban educated man?

- (A) 3
- (B) 15
- (C) 5
- (D) 25

Ans. Option (A) is correct.

Explanation: Number of Urban educated man = 3

27. Which of the following number represents urban men who are government employee?

- (A) 10
- (B) 3
- (C) 5
- (D) 13

Ans. Option (C) is correct.

Explanation: The numbers represent urban men who are government employee = 5



CUET (UG) Question Paper - 2022

National Testing Agency

18th AUG 2022 – SHIFT 1

Section - III (General Test)

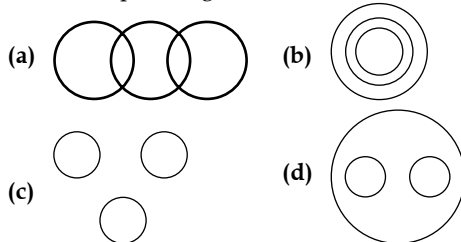
Logical Reasoning

General Instructions:

Marking scheme of the test:

- (a) Correct answer or the most appropriate answer: Five marks (+5)
- (b) Any incorrect option marked will be given minus one mark (-1).
- (c) Unanswered/Marked for review will be given no mark (0).

1. Which of the following diagram best depicts the relationship among Pen, Pencil, Eraser?



- (A) a (B) b
(C) c (D) d

Ans. Option (C) is correct.

Explanation: From the given options, diagram (C) best depicts the relationship between pen, pencil and eraser.

2. Mita goes towards North, turn right, then right again and then goes to the left. In which direction is she now?

- (A) East (B) West
(C) North (D) South

Ans. Option (A) is correct.

Explanation: Mita goes towards North direction after right turn, she moves East direction, again right turn, and she moves South direction. The finally she takes left turn then moves to East direction.

3. Arrange the following words that would be a meaningful order of the following,

- (a) Heel (b) Skull
(c) Shoulder (d) Thigh
(e) Stomach

Choose the correct answer from the options given below:

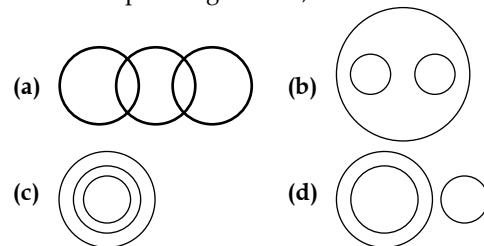
- (A) b, c, e, d, a (B) b, e, c, d, a
(C) b, c, d, e, a (D) c, b, d, e, a

Ans. Option (A) is correct.

Explanation: The proper order of these word should be B, C, E, D, A.

Word	Correct order
Skull	1
Shoulder	2
Stomach	3
Thigh	4
Heel	5

4. Which one of the following diagram best depicts the relationship among Planets, Saturn and Sun?



Choose the correct answer from the options given below:

- (A) (a) (B) (b)
(C) (c) (D) (d)

Ans. Option (B) is correct.

Explanation: From the given options, diagram (B) best depicts the relationship between planets, Saturn and Sun.

5. Which one of the given responses would be a meaningful order of the following words?

- (a) Income (B) Education
(c) Fame (D) Employment

Choose the correct answer from the options given below:

- (A) b, a, c, d (B) b, a, d, c
(C) b, d, a, c (D) a, b, c, d

Ans. Option (C) is correct.

Explanation: The proper order of these word should be b, d, a, c.

Meaningful order	Options	Word
1	b	Education
2	d	Employment
3	a	Income
4	c	Fame

6. Which one of the given responses would be a meaningful order of the following?

- (a) Mother (b) Crying
(c) Smiling (d) Infant
(e) Milk

Choose the correct answer from the options given below:

- (A) b, d, a, e, c (B) b, d, a, e, c
(C) d, b, a, c, e (D) b, d, a, c, e

Ans. Option (D) is correct.

Explanation: The word can be arrange in following ways D → B → A → C → E

Meaningful order	Options	Word
1	d	Infant
2	b	Crying
3	a	Mother
4	c	Smiling
5	e	Milk

7. Among the four options, three have same properties. Find the odd one out.

- (A) Quart (B) Foot
(C) Yard (D) Inch

Ans. Option (A) is correct.

Explanation: Quart is a measure of liquid. Other units are the measurement of length.

8. If NIGHT can be coded as 29, 19, 15, 17, 41, then 'COLD' will be coded as:

- (A) 7, 25, 31, 9 (B) 7, 31, 25, 9
(C) 7, 9, 31, 25 (D) 7, 27, 31, 11

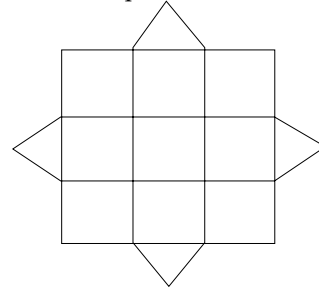
Ans. Option (B) is correct.

Explanation:

In given question,
Alphabet = Numerical value × 2 + 1
E.g. N = 14 × 2 + 1 = 29
And I = 9 × 2 + 1 = 19
G = 7 × 2 + 1 = 15
H = 8 × 2 + 1 = 17
T = 20 × 2 + 1 = 41
So, C = 3 × 2 + 1 = 7
O = 15 × 2 + 1 = 31
L = 12 × 2 + 1 = 25
D = 4 × 2 + 1 = 9

So, COLD will be coded as 7, 31, 25, 9.
Hence, Option B is correct option.

9. Find the number of squares.



- (A) 9 (B) 12
(C) 14 (D) 16

Ans. Option (C) is correct.

Explanation: Number of squares by 3 × 3 = 9
Number of squares by 2 × 2 = 4
Number of squares by 1 × 1 = 9
Total number of squares = 14

10. Who was elected as the president of the Constituent Assembly of India in 1946?

- (A) Dr. S. Radhakrishnan
(B) Dr. Bhimrao Ramji Ambedkar
(C) Dr. Rajendra Prasad
(D) Pt. Jawaharlal Nehru

Ans. Option (C) is correct.

Explanation: The Constituent Assembly was formed for the creation of the Indian Constitution. The Constituent Assembly was formed in 1946. Dr. Rajendra Prasad was elected as the president and its vice-presidents were Harendra Coomar Mookerjee and V. T. Krishnamachari together.

11. Match List-I with List-II.

List-I		List-II	
(a)	Engineer	(I)	Shop
(b)	Teacher	(II)	School
(c)	Grocer	(III)	Garage
(d)	Mechanic	(IV)	Site

Choose the correct answer from the options given below:

- (A) (a) – (II), (b) – (IV), (c) – (I), (d) – (III)
(B) (a) – (IV), (b) – (II), (c) – (I), (d) – (III)
(C) (a) – (IV), (b) – (I), (c) – (II), (d) – (III)
(D) (a) – (IV), (b) – (I), (c) – (II), (d) – (III)

Ans. Option (A) is correct.

Explanation:

List-I		List-II	
(a)	Engineer	(IV)	Site
(b)	Teacher	(II)	School
(c)	Grocer	(I)	Shop
(d)	Mechanic	(III)	Garage

- Work place of an engineer is site.
- Work place of a teacher is school.
- Work place of grocer is shop.
- Work place of a mechanic is garage.

12. If $A > P$, $P > K$ and $K > L$, then which of the following conclusion is definitely wrong?
 (A) $A > K$ (B) $P > L$
 (C) $L > P$ (D) $A > L$

Ans. Option (C) is correct.

Explanation:

As per given conditions, $A > P > K > L$, so the wrong conclusion is $L > P$.

13. Arrange the following in a sequence.
 (a) Curd (b) Ghee
 (c) Cow (d) Milk
 (e) Butter
 Choose the correct answer from the options given below:
 (A) c, d, a, b, e (B) d, c, b, a, e
 (C) c, d, a, e, b (D) c, d, e, a, b

Ans. Option (C) is correct.

Explanation: The proper sequence of the words as Cow, Milk, Curd, Butter, Ghee.

14. Which letter is exactly midway between G and Q if English alphabets are written in order?
 (A) K (B) L
 (C) M (D) N

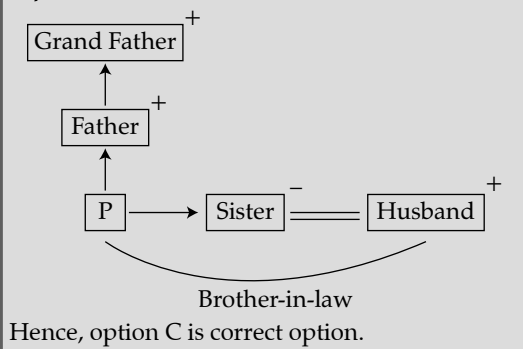
Ans. Option (B) is correct.

Explanation: G H I J K L M N O P Q
 So, L is exactly midway between G and Q.

15. P introduces K saying, 'He is the husband of the grand daughter of the father.' my father of how is K related to P?
 (A) Brother (B) Son-in-Law
 (C) Brother-in-Law (D) Son

Ans. Option (C) is correct.

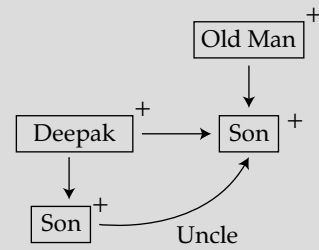
Explanation:



16. Pointing out a picture of old man. Deepak said, "His son is my son's uncle." How is the old man related to Deepak?
 (A) Uncle (B) Grandfather
 (C) Brother (D) Father

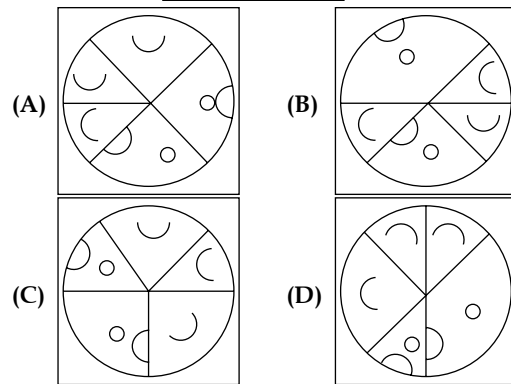
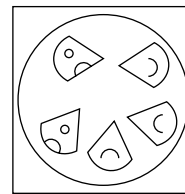
Ans. Option (D) is correct.

Explanation:



Means the old man is Deepak's father. So, Option D is correct option.

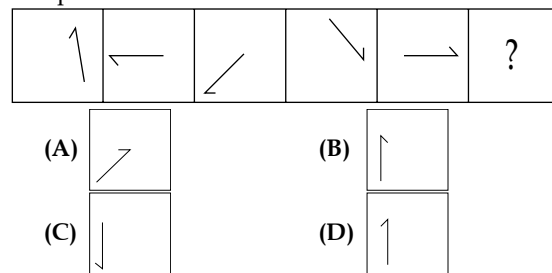
17. Which figure can be formed by the given set of pieces?



Ans. Option (C) is correct.

Explanation: The possible figure is formed from the given set of pieces as option (C) from the given options.

18. Continue the given series and find for ? the right option.



Ans. Option (A) is correct.

Explanation: The possible figure of the series is option (A) from given options.

19. If A means '+', B means '×', C means '÷' and D means '-', then find the value of 17A12B20C5D15 = ?

(A) 50 (B) 42
(C) 101 (D) 98

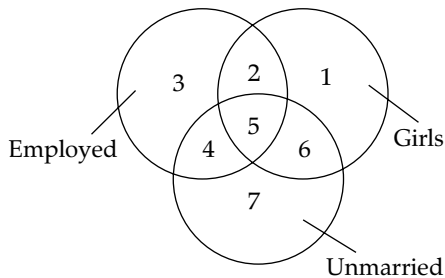
Ans. Option (C) is correct.

Explanation:

$$\begin{aligned} 17A12B20C5D15 &= 17 + 12 \times 20 \div 5 - 15 \\ &= 17 + 12 \times 4 - 15 \\ &= 17 + 48 - 15 \\ &= 50 \end{aligned}$$

Passage:

Direction: Read the following details carefully for questions from 19 to 22. Given below is the diagram with numbers for shapes representing employed, girls and unmarried.



20. Identify the region representing girls who are employed but unmarried.

(A) 1 (B) 2
(C) 4 (D) 5

Ans. Option (D) is correct.

Explanation: The number of girls who are employed but unmarried = 5

21. Identify the region representing girls who are employed.

(B) 1 (B) 2
(C) 4 (D) 5

Ans. Option (B) is correct.

Explanation: The number of regions of girls who are employed = 2

22. Identify the region representing girls who are unmarried.

(A) 3 (B) 2
(C) 6 (D) 1

Ans. Option (C) is correct.

Explanation: The number of girls who are unmarried = 6

23. Identify the region representing the group who are employed as well as unmarried.

(A) 1 (B) 3
(C) 4 (D) 5

Ans. Option (C) is correct.

Explanation: The groups who are employed as well as unmarried = 4



CUET (UG) Question Paper - 2022

National Testing Agency

17th AUG 2022 – SHIFT 1

Section - III (General Test)

Logical Reasoning

General Instructions:

Marking scheme of the test:

- (a) Correct answer or the most appropriate answer: Five marks (+5)
- (b) Any incorrect option marked will be given minus one mark (-1).
- (c) Unanswered/Marked for review will be given no mark (0).

1. In the following question arrange the given words in the sequence that occur in the dictionary.

- a. Whiter
- b. Wound
- c. Writer
- d. Worked
- e. Worst

Choose the correct answer from the options given below:

- (A) a, d, b, e, c
- (B) a, d, e, b, c
- (C) d, a, b, e, c
- (D) d, a, e, b, c

Ans. Option (B) is correct.

Explanation: Arrangement of words as per dictionary: Whiter, Worked, Worst, Wound, Writer. Hence, Whiter is the word which appears first in the dictionary.

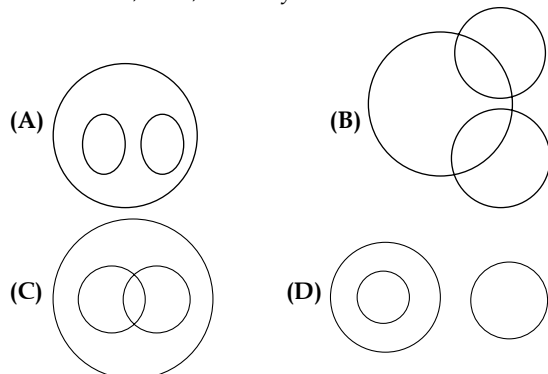
2. Which of the following is a leap year?

- (A) 1500
- (B) 700
- (C) 1300
- (D) 2000

Ans. Option (D) is correct.

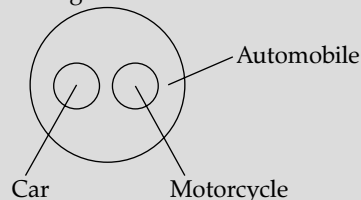
Explanation: A leap year is a calendar year that contains an additional day added to keep the calendar year synchronized with the astronomical year or seasonal year. The year number must be divisible by four – except for end-of-century years, which must be divisible by 400. 2000 is completely divisible by 400 because this is a century leap year.

3. Which one of the following diagram represents Automobile, Cars, Motorcycle?



Ans. Option (A) is correct.

Explanation: From the Venn diagram, Option (A) represents all given items.



4. In the given questions select the related word from the alternatives.

- Horse : Jockey : Car _____
- (A) Brake
 - (B) Chauffeur
 - (C) Seatbelt
 - (D) Steering

Ans. Option (D) is correct.

Explanation: Horse is driven by a Jockey. So, car is driven by a chauffeur.

5. Among the four options given below three have similar properties. Find the odd one out:

- (A) Ginger
- (B) Beetroot
- (C) Carrot
- (D) Cabbage

Ans. Option (D) is correct.

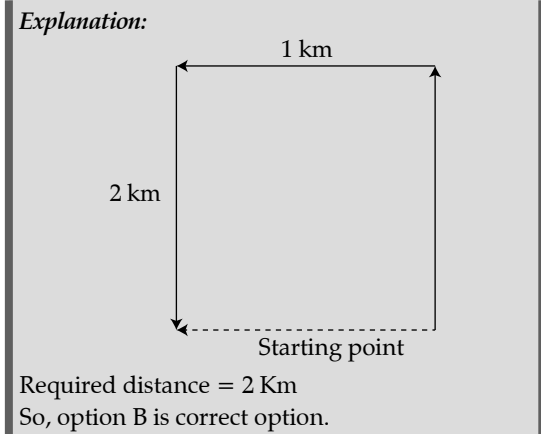
Explanation: Ginger, Beetroot and Carrot are root vegetable but cabbage is not classified as a root vegetable. That's why cabbage is odd from the above. The root vegetables include beets, carrots, radishes, sweet potatoes, and turnips. Stem vegetables include asparagus and kohlrabi. Among the edible tubers, or underground stems, are potatoes. The leaf and leafstalk vegetables include brussels sprouts, cabbage, celery, lettuce, rhubarb, and spinach.

6. Monu rides his bicycle northwards, then turned left and rides one km and again turned left and rides 2 km. Monu found himself exactly one km west of his starting point. How far did he ride northwards initially?

- (A) 5 km
- (B) 2 km
- (C) 3 km
- (D) 4 km

Ans. Option (B) is correct.

Explanation:



Required distance = 2 Km
So, option B is correct option.

7. From the given option which word can not be formed from the letters given in "PERMANENT"
- (a) MENTOR (b) TRAMP
(c) AMPERE (d) REMANT
- Choose the correct answer from the options given below:
- (A) (a) (B) (b)
(C) (c) (D) (d)

Ans. Option (A) is correct.

Explanation: From the given option "MENTOR" cannot be formed from the letters given in "PERMANENT". Because letter 'O' is not present in PERMANENT.

8. Arrange the following words as they occur in the english dictionary.
- (a) Explosive (b) Explicit
(c) Exponent (d) Exposition
(e) Explore
- Choose the correct answer from the options given below:
- (A) (b), (e), (c), (a), (d)
(B) (e), (b), (c), (a), (d)
(C) (e), (b), (a), (c), (d)
(D) (b), (e), (a), (c), (d)

Ans. Option (D) is correct.

Explanation: Arrangement of words as per dictionary: Explicit, Explore, Explosive, Exponent, Exposition. Hence, Explicit is the word which appears first in the dictionary.

9. What is meaningful/logical order of the words given below?
- (a) Type (b) Save
(c) Open (d) Print
(e) Close
- Choose the correct answer from the options given below:
- (A) (c), (a), (d), (b), (e)
(B) (a), (c), (b), (d), (e)
(C) (c), (a), (b), (d), (e)
(D) (a), (c), (d), (b), (e)

Ans. Option (C) is correct.

Explanation: The logical order of the words is given as Open, Type, Save, Print, Close.

10. HEAVY can be coded as 8, 5, 1, 22, 25, then LIGHT will be coded as.
- (A) 12, 7, 9, 8, 20 (B) 12, 9, 7, 8, 20
(C) 7, 8, 9, 12, 20 (D) 9, 7, 8, 12, 20

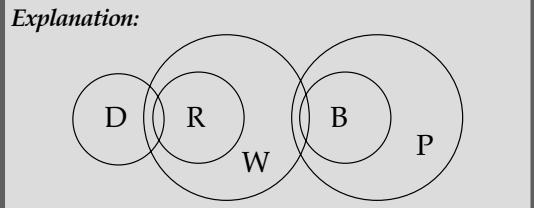
Ans. Option (B) is correct.

Explanation: The word HEAVY is coded as per the numerical value of their alphabets.
So, the code for LIGHT = 12, 9, 7, 8, 20

11. Some dens are rooms. All rooms are walls. Some walls are bricks, all bricks are plates.
- (a) Some plates are walls
(b) Some walls are dens
(c) Some bricks are rooms
(d) Some plates are rooms
- (A) (a) and (c) only (B) (b) and (c) only
(C) (a) and (b) only (D) (c) and (d) only

Ans. Option (C) is correct.

Explanation:

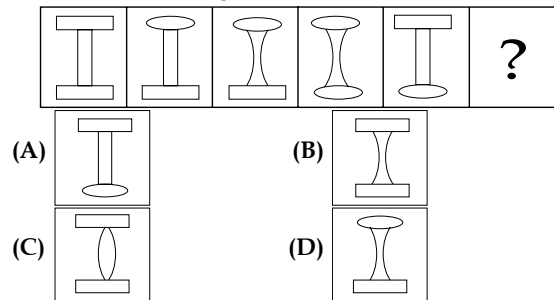


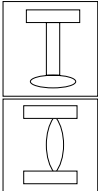
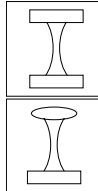


12. If A means '-', B mean '÷', C means '+' and D means '×', then 45B3C18A4D6 = ?
- (A) 179 (B) 9
(C) 18 (D) 152

Ans. Option (B) is correct.

Explanation: $45B3C18A4D6 = 45 \div 3 + 18 - 4 \times 6$
 $= 15 + 18 - 24$
 $= 9$

13. What will be next figure of the series ?

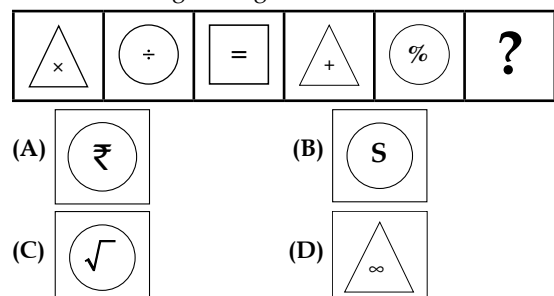



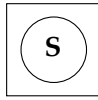


(A)  (B) 
(C)  (D) 

Ans. Option (A) is correct.

Explanation: Lines are changing in curve and vice versa.

14. Find the next figure of given series.

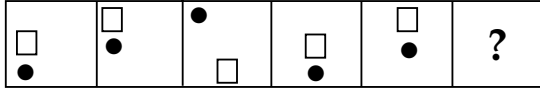


(A)  (B) 
(C)  (D) 

Ans. Option (C) is correct.

Explanation: The pattern is as follows:
Triangle → Circle → Square → Triangle → Circle → Square

15. Find the next item of given series.



- (A) (B)
- (C) (D)

Ans. Option (B) is correct.

Explanation: Here in given figure, It's shifting upward by three steps.

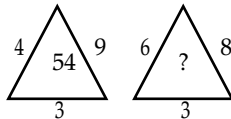
16. A meaningful word starting with A is made from the first, the second, the fourth, the fifth and the sixth letters of the word 'CONTRACT'. Which of the following is the middle letter of the word?

- (A) T (B) O
(C) C (D) R

Ans. Option (A) is correct.

Explanation: A meaningful word starting with A is made from the selected letters as ACTOR. So, the middle letter of the word ACTOR is T.

17. Find the missing number from the following given option:



- (A) 72 (B) 17
(C) 10 (D) 26

Ans. Option (A) is correct.

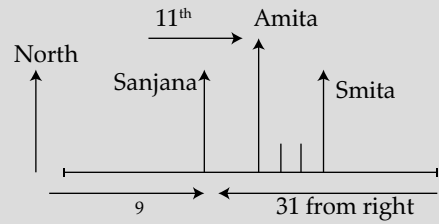
Explanation: In 1st figure, number inside the triangle = $\frac{4 \times 3 \times 9}{2} = 54$
So, in 2nd figure, missing number = $\frac{6 \times 3 \times 8}{2} = 72$

18. Forty girls are standing in a row facing the North. Amita is eleventh from left end and Sanjana is thirty first from the right end of the row. How far will Smita, who is third to the right to Amita in the row, be from Sanjana ?

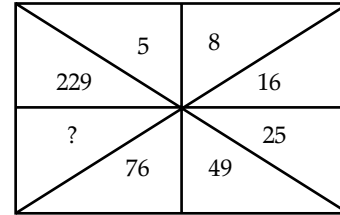
- (A) 3rd (B) 4rd
(C) 2rd (D) 5rd

Ans. Option (B) is correct.

Explanation:



19. Find the missing number from the following given options.



- (A) 150 (B) 53
(C) 125 (D) 148

Ans. Option (D) is correct.

Explanation: All the opposite numbers in given figure is following the pattern as written below:

Number $\times 9 + 4 =$ opposite number
 $5 \times 9 + 4 = 49$
 $8 \times 9 + 4 = 76$
 $25 \times 9 + 4 = 229$
So, required number = $16 \times 9 + 4 = 148$

20. Among the options given below three have similarities. Find the odd one out.

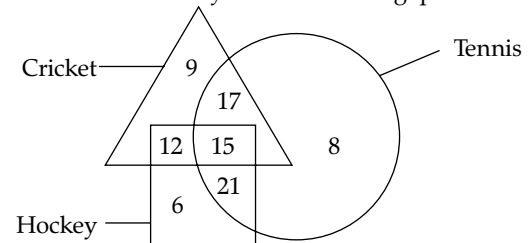
- (A) Rice (B) Wheat
(C) Chick peas (D) Corn

Ans. Option (C) is correct.

Explanation: Wheat, Rice, Corn are cereals. But Chick peas is grain.

Direction of questions (21–24):

Read details carefully for the following questions.



21. How many people like Cricket and Tennis both?

- (A) 17 (B) 32
(C) 15 (D) 27

Ans. Option (B) is correct.

Explanation: From the given figure, Number of people like Cricket and Tennis both = $15 + 17 = 32$

22. The percentage of people who like Cricket and Hockey both is _____

- (A) 36.36% (B) 30.68%
(C) 33.3% (D) 42.04%

Ans. Option (B) is correct.

Explanation: From the given figure,

$$\begin{aligned} \text{Required percentage} &= \frac{27}{88} \times 100 \\ &= 30.68\% \end{aligned}$$

23. Let C, H and T represents number of people who likes Cricket, Hockey and Tennis respectively. The ratio of C : H : T is

- (A) 53 : 54 : 61 (B) 61 : 54 : 53
(C) 54 : 53 : 61 (D) 54 : 61 : 53

Ans. Option (A) is correct.

Explanation: From the given figure,

$$\begin{aligned} C &= 9 + 12 + 15 + 17 = 53 \\ H &= 6 + 12 + 15 + 21 = 54 \\ T &= 8 + 17 + 15 + 21 = 61 \\ C : H : T &= 53 : 54 : 61 \end{aligned}$$

24. How many people like Cricket, Tennis and Hockey games all together.

- (A) 21 (B) 17
(C) 15 (D) 12

Ans. Option (C) is correct.

Explanation: The number of people like Cricket, Tennis and Hockey games all together = common area of all 3 games

$$= 15$$



CUET (UG) Question Paper - 2022

National Testing Agency

08th AUG 2022 – SHIFT 1

Section - III (General Test)

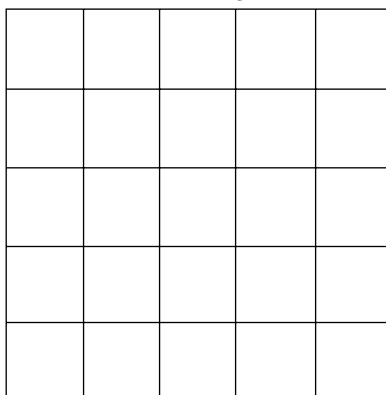
Logical Reasoning

General Instructions:

Marking scheme of the test:

- (a) Correct answer or the most appropriate answer: Five marks (+5)
- (b) Any incorrect option marked will be given minus one mark (-1).
- (c) Unanswered/Marked for review will be given no mark (0).

1. Find the number of rectangles in the below figure:



- (A) 25
- (B) 125
- (C) 225
- (D) 55

Ans. Option (C) is correct.

Explanation: In the given figure, total number of rows = 5
 And total number of columns = 5
 So, total number of rectangles
 $= 1^3 + 2^3 + 3^3 + 4^3 + 5^3 = 225$

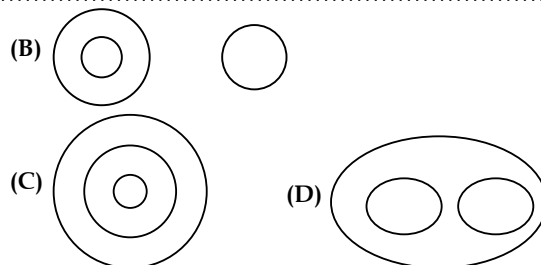
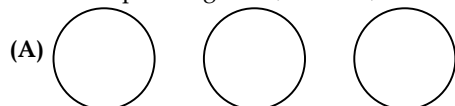
2. Time appears in the mirror 11:09. Then, what time it will appear in the clock?

- (A) 1 : 51
- (B) 12 : 09
- (C) 12 : 51
- (D) 1 : 09

Ans. Option (C) is correct.

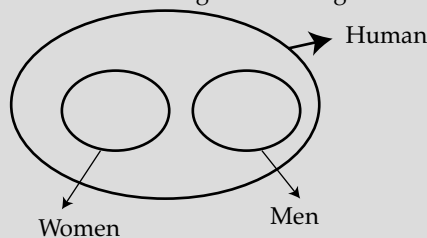
Explanation: Given that,
 Time in the mirror = 11:09
 So, Time in the clock = 11 : 60
 $\underline{- 11 : 09}$
 00 : 51
 So, Time in the clock = 12 : 51

3. Identify the diagram that best represents the relationship among: Men, Women, Human

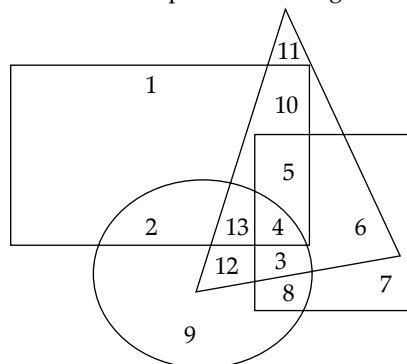


Ans. Option (D) is correct.

Explanation: Venn diagram for the given data,



4. In the following diagram, police represents circle, corrupt represents triangle, poet represents square and married represents rectangle

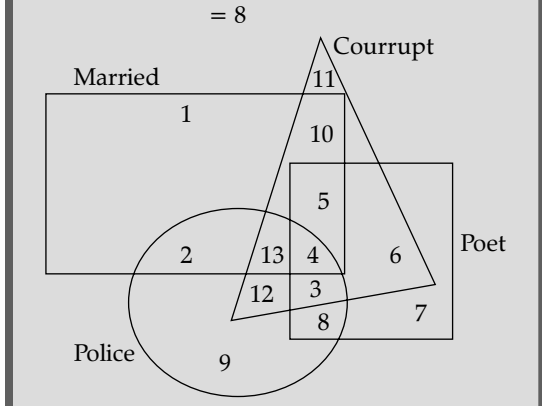


The number representing unmarried police officers who are not corrupt but are poets is

- (A) 8
- (B) 9
- (C) 2
- (D) 4

Ans. Option (A) is correct.

Explanation: As per the given question,
Required number = Common in circle and square but not in triangle and rectangle.
= 8



5. Arrange the following words in correct order:

- (a) Omelete (b) Hen
(c) Roll (d) serve
(e) Egg

Choose the correct answer from the options given below :

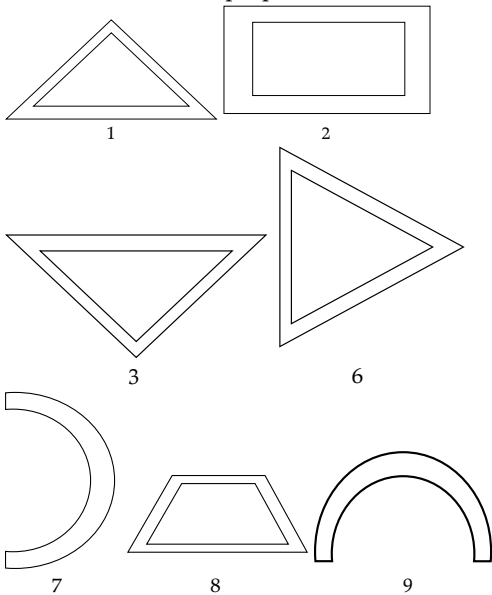
- (A) b, e, a, d, c (B) e, b, a, c, d
(C) b, e, a, c, d (D) b, a, e, c, d

Ans. Option (C) is correct.

Explanation: The correct arrangement is as follows:

- (b) Hen
(e) Egg
(a) Omelette
(c) Roll
(d) Serve

6. Group the following figures into three classes on the basis of identical proportions



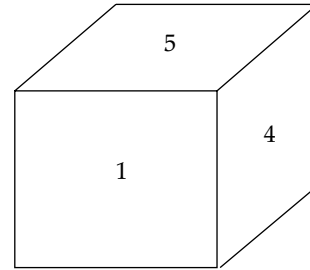
- (A) 1, 2, 3; 4, 5, 6; 7, 8, 9
(B) 1, 3, 6; 2, 4, 8; 5, 7, 9
(C) 2, 4, 5; 1, 3, 8; 7, 6, 9
(D) 1, 4, 5; 2, 3, 8; 7, 6, 9

Ans. Option (B) is correct.

Explanation: For the identical proportion, Triangle Figures 1, 3, 6 are in first group, Quadrilateral Figures 2, 8 are in second group and Hollow Semi Circle figures 7, 9 are in third group.

Identical proportion logic & available options, option (B) is the possible option.

7. In a dice, 1, 2, 3 and 4 are written on the adjacent faces, in a clockwise order and 5 and 6 at the top and bottom. When three is at the top, what will be at the bottom?



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

Ans. Option (D) is correct.

Explanation: It is given that, 1, 2, 3 and 4 are written on the adjacent faces, in a clockwise order and 5 and 6 at the top and bottom.

The pair of opposite faces from given data is –

- (A) 1 – 3
(B) 2 – 4
(C) 5 – 6

So, when three is at the top, then 1 will be at the bottom.

8. What is the mirror-image of SMILE?

- (A) 2MJEI (B) 2MIJEL
(C) 2WJJEI (D) 2SMJIE

Ans. Option (D) is correct.

Explanation: Here front mirror image of SMILE is not given in the options. So, the back mirror-image of SMILE is option (D).

9. Find the missing number

	9			11		15
5	52	8	9	46	3	9
	3			8		8

- (A) 64 (B) 71
(C) 48 (D) 23

Ans. Option (B) is correct.

Explanation: From the given figures,

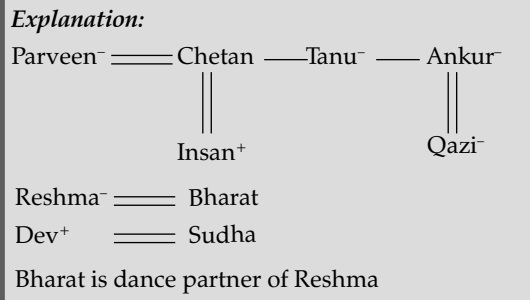
- (I) $8 \times 5 + 9 + 3 = 52$
(II) $9 \times 3 + 11 + 8 = 46$
So,
(III) $8 \times 6 + 15 + 8 = 71$

Passage:

Five men Ankur, Bharat, Chetan, Dev, Insan and their wives Parveen, Qazi, Reshma, Sudha and Tanu join a dance party, but it is not necessary that the order of husbands and wives are the same. This is the information that-

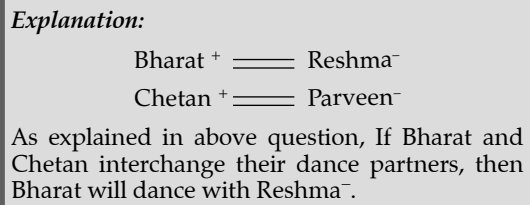
- I. – Husbands dance only with their wives
 - II. – Chetan has a sister Tanu and has only a brother Ankur
 - III. – If Dev has dance with Tanu, that means he danced –with another’s wife
 - IV. – Bharat does not dance with Qazi or Tanu or Sudha
 - V. – Praveen is wife of Ankur’s brother
 - VI. – Qazi did not dance with Dev
10. Who is the dance partner of Reshma?
 (A) Insan (B) Dev
 (C) Bharat (D) Chetan

Ans. Option (C) is correct.



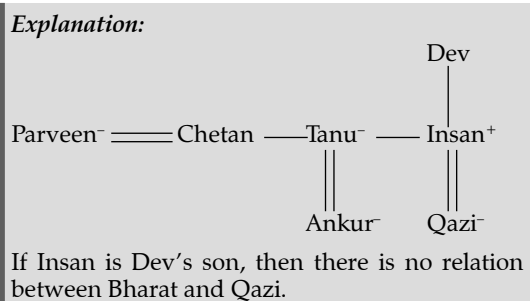
11. If Bharat and Chetan interchange their dance partners, who will dance with Bharat?
 (A) Reshma (B) Parveen
 (C) Sudha (D) Tanu

Ans. Option (B) is correct.



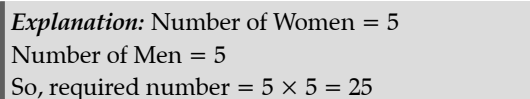
12. If Insan is Dev’s son, how Bharat is related to Qazi?
 (A) Brother-in-law (B) Son
 (C) Sister-in-law (D) Cannot determine

Ans. Option (D) is correct.



13. If such type of dance programme well organized, how many dances are possible that each woman dance with opposite sex?
 (A) 5 (B) 4
 (C) 51 (D) 25

Ans. Option (D) is correct.



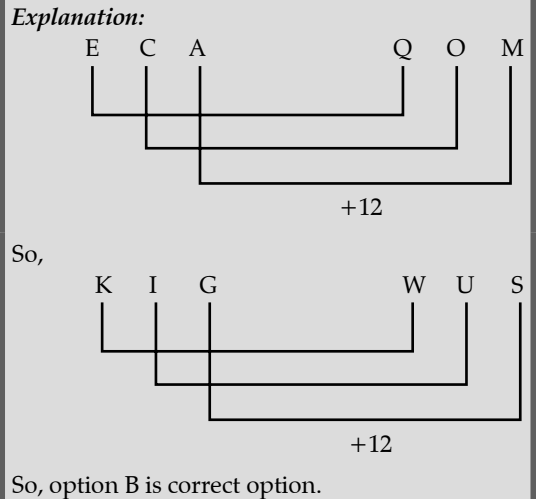
14. Find the missing term:
 31 : 961 :: ? : 1369
 (A) 33 (B) 37
 (C) 39 (D) 43

Ans. Option (B) is correct.

Explanation: From the given data, It is clear that the 2nd term is square of 1st term.
 So, missing term will be $\sqrt{1369} = 37$

15. ECA : QOM :: KIG : ?
 (A) SUV (B) WUS
 (C) TRP (D) XVT

Ans. Option (B) is correct.



16. Acquire : Obtain :: Secure : ?
 (A) Procure (B) Hover
 (C) Humorous (D) Amusing

Ans. Option (A) is correct.

Explanation: Acquire: Obtain :: Secure : Procure
 They are synonyms of each other.

17. Sweet : Sour :: Less : ?
 (A) More (B) High
 (C) Up (D) Full

Ans. Option (A) is correct.

Explanation: Sweet : Sour :: Less : More
 They are opposite to each other.

18. Fox : Vixen :: Drake : ?
 (A) Bee (B) Duck
 (C) Doe (D) Drone

Ans. Option (B) is correct.

Explanation: Fox : Vixen :: Drake : Duck
 They are male & female of each other.

19. Arrange the following words in the sequence they will appear in the dictionary:

- (A) Research (B) Resurgence
- (C) Respiration (D) Respective
- (E) Resources

Choose the correct answer from the options given below:

- (A) D, C, E, A, B (B) E, C, D, B, A
- (C) A, E, D, C, B (D) C, D, A, E, B

Ans. Option (C) is correct.

Explanation: The correct sequence of words is Research, Resources, Respective, Respiration and Resurgence.

20. If in a certain language, D is coded as 2, I is coded as 1, N is coded as 7, M is coded as 5, A is coded as 0, O is coded as 8, how is DIAMOND coded in that language?
 (A) 2105872 (B) 2015782
 (C) 2108752 (D) 2017582

Ans. Option (A) is correct.

Explanation: It is given that,

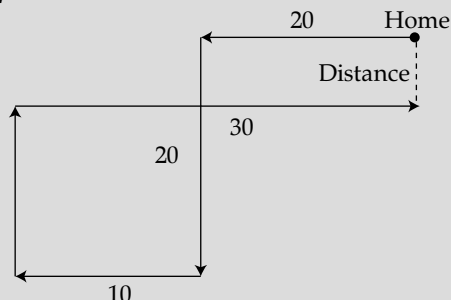
D	2
I	1
N	7
M	5
A	0
O	8

So, DIAMOND will be coded as 2105872.

21. Kiya drives her car 20 km west from her home, then turns left and goes 20 km more, then, she turns right and goes 10 km and then she turns right and goes 15 km, finally she goes 30 km more after turning right again. At what distance is she from the starting point?
 (A) 05 km (B) 10 km
 (C) 15 km (D) 25 km

Ans. Option (A) is correct.

Explanation:



$$\begin{aligned} \text{Required distance} &= 20 - 15 \\ &= 5 \text{ km} \end{aligned}$$

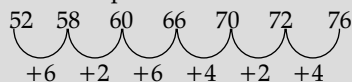
So, option A is correct option.

22. Complete the series;
 52, 58, 60, 66, 70, 72,

- (A) 74 (B) 76
 (C) 78 (D) 80

Ans. Option (B) is correct.

Explanation: The pattern will be as follows:



Hence, the next number will be 76.

23. If 9th day of a month is Sunday, What will be the last day of the month, on which Sunday will fall?
 (A) 28th (B) 29th
 (C) 30th (D) 31th

Ans. Option (C) is correct.

Explanation: It is given that the 9th day of a month is Sunday.

So, after 21 days again it will be Sunday on 30th of the month.

24. Complete the series;
 7, 23, 95, 479, 2879,

- (A) 11519 (B) 14399
 (C) 17279 (D) 20159

Ans. Option (D) is correct.

Explanation: The pattern is as follows:



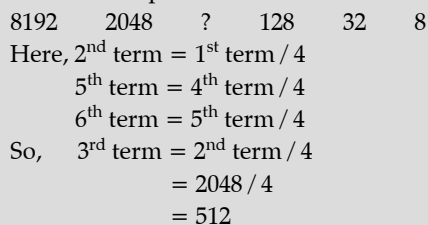
So, the next number = $2879 \times 7 + 6 = 20159$

25. Complete the series;
 8192, 2048, ...?..., 128, 32, 8

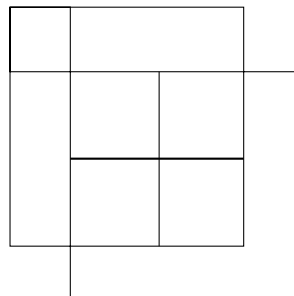
- (A) 256 (B) 248
 (C) 1024 (D) 512

Ans. Option (D) is correct.

Explanation: The pattern is as follows:



26. How many squares are there in a given shape?



- (A) 11 (B) 12
 (C) 13 (D) 15

Ans. Option (A) is correct.

Explanation: Total 11 squares are there in a given shape.

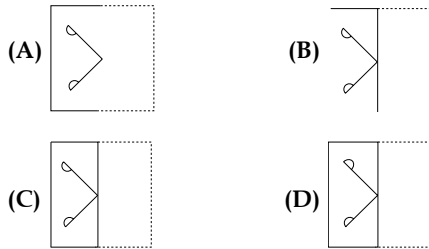
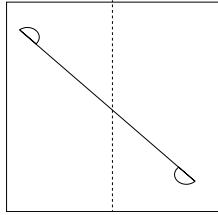
27. In this question, four words have been given of which three are alike in some way and one is different. Find the odd one out.

- (A) Rose
 (B) Lotus
 (C) Jasmine
 (D) Sunflower

Ans. Option (B) is correct.

Explanation: Lotus is grown in water, others are grown in land.

28. Which image will appear when the following transparent sheet will be folded

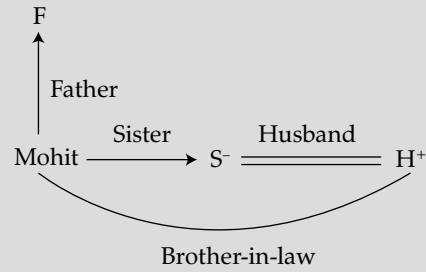


Ans. Option (C) is correct.

Explanation: Option C image will appear when the given transparent sheet will be folded.

29. Pointing towards a person in the photograph, Mohit said, "he is the husband of the only daughter of the father of my sister's brother." How is that person related to Mohit?
- (A) Uncle (B) Cousin
(C) Brother-in-law (D) Brother
- Ans. Option (C) is correct.

Explanation:



CUET (UG) Question Paper - 2022

National Testing Agency

06th AUG 2022 – SHIFT 1

Section - III (General Test)

Logical Reasoning

General Instructions:

Marking scheme of the test:

- (a) Correct answer or the most appropriate answer: Five marks (+5)
- (b) Any incorrect option marked will be given minus one mark (-1).
- (c) Unanswered/Marked for review will be given no mark (0).

1. Match List-I with List-II.

List-I (Pass)		List-II (State)	
(a)	OZ	(I)	23
(b)	KL	(II)	27
(c)	PK	(III)	16
(d)	DL	(IV)	41

Choose the correct answer from the options given below:

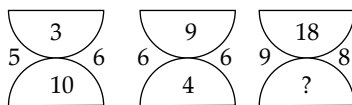
- (A) (a) – (IV), (b) – (II), (c) – (I), (d) – (III)
- (B) (a) – (III), (b) – (I), (c) – (II), (d) – (IV)
- (C) (a) – (IV), (b) – (I), (c) – (II), (d) – (III)
- (D) (a) – (I), (b) – (IV), (c) – (III), (d) – (II)

Ans. Option (C) is correct.

Explanation:

Place value of O = 15 and place value of Z = 26.
 Sum = 15 + 26 = 41
 In the same way sum of the place value of K and L
 = 11 + 12 = 23
 Sum of place value of P and K = 16 + 11 = 27
 Sum of place value of D and L = 4 + 12 = 16

2. Which number will replace the question mark ?



- (A) 9
- (B) 3
- (C) 8
- (D) 4

Ans. Option (D) is correct.

Explanation: We can clearly see that the multiplication of vertically opposite numbers and horizontally opposite numbers are same in each diagram.

$$9 \times 8 = 18 \times ?$$

$$\text{So, } ? = 72/18 = 4$$

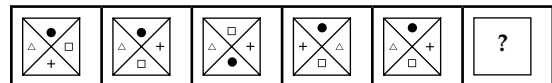
3. Bewilderness always comprise _____.

- (A) Difficulty
- (B) Anxiety
- (C) Helpless State
- (D) Sharpness

Ans. Option (B) is correct.

Explanation: Be-wilderness develops mental tension, and mental tension develops anxiety.

4. Find the next figure of given series.



- (A)
- (B)
- (C)
- (D)

Ans. Option (D) is correct.

Explanation: Second figure is obtained by interchanging horizontal shapes. Third is obtained by interchanging vertically shapes. Fourth is obtained by interchanging both horizontal and vertical shapes. After that they will change in the same manner. Finally we change vertically opposite shapes.

5. From the given options which word can't be formed by using the letters of the word :

"CATERING"

- (a) CREATING
- (b) REACTING
- (c) RETIRING
- (d) ARGENTIC

Choose the correct answer from the options given below :

- (A) (a)
- (B) (b)
- (C) (c)
- (D) (d)

Ans. Option (C) is correct.

Explanation: Only in option C (RETIRING) letter 'I' & 'R' are used twice. Whereas only one 'I' & 'R' are available in word CATERING.

6. There are three words which have something in common among themselves. Out of the four given alternatives choose the most appropriate description about these three words.

Knight : Rook : Bishop

- (A) These are missionaries
- (B) These are chessmen
- (C) These are churchmen
- (D) These are ranks of military

Ans. Option (B) is correct.

Explanation: These are chessmen. Knight, Rook, Bishop and Pawn are all the pieces used in chess or also known as chess pieces.

7. Arrange the given words in the sequence in which they occur in the dictionary.

- (a) Amphibian (b) Amorphous
- (c) Amphidextrous (d) Ambiguous
- (e) Ambivalent

Choose the correct answer from the options given below :

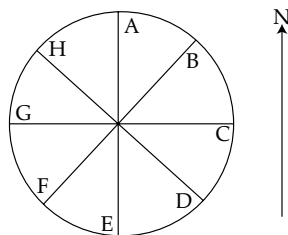
- (A) (a), (c), (d), (e), (b) (B) (e), (b), (c), (d), (a)
- (C) (a), (c), (d), (b), (e) (D) (d), (e), (b), (a), (c)

Ans. Option (D) is correct.

Explanation:

Options	Word	Correct sequences
(d)	Ambiguous	1
(c)	Ambivalent	2
(b)	Amorphous	3
(a)	Amphibian	4

8. Eight friends A, B, C, D, E, F G and H are placed in this manner.

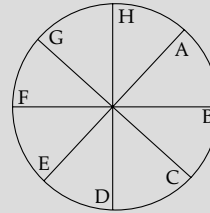


All are facing outward. If all of them move one position in clockwise direction, then the direction, E will be facing is:

- (A) South West (B) South East
- (C) South (D) West

Ans. Option (A) is correct.

Explanation: If all of them move one position in clockwise direction then 'E' will replace 'F'. They are facing outward, so E will be facing towards South West.



9. Which letters exactly are midway between F and S in the English alphabet?

- (A) LM (B) MN
- (C) KL (D) JK

Ans. Option (A) is correct.

Explanation: As there are 12 letters G, H, I, J, K, L, M, N, O, P, Q, R in between F and S. So, L and M letters exactly are midway between F and S.

10. Five statements are given below followed by options consisting of three statements put together in a specific order. Choose the option which indicates a conclusion drawn from the preceding two statements.

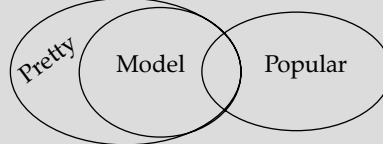
- (A) All models are Pretty
- (B) Some models are popular
- (C) Ruby is Pretty
- (D) Ruby is a popular heroine
- (E) Some popular girls are Pretty

Choose the correct answer from the options given below :

- (A) (A), (B), (E) (B) (A), (C), (D)
- (C) (D), (C), (A) (D) (E), (D), (C)

Ans. Option (A) is correct.

Explanation: Only statement E indicates the conclusion drawn from option A & B.



11. If A means Addition, B means Division, C means Multiplication and D means Subtraction. Then find the value of 49B7D9A15C6 = ?

- (A) -180 (B) 180
- (C) 88 (D) 38

Ans. Option (C) is correct.

Explanation:

Given that,
49B7D9A15C6
Where A → Addition, B → Division, C →
Multiplication and D → Subtraction
So, $49 \div 7 - 9 + 15 \times 6$
 $= 7 - 9 + 90$
 $= 88$

12. In the given question, select the related word from the alternatives :

Man : Biography :: Nation :

- (A) Population (B) Autobiography
(C) History (D) People

Ans. Option (C) is correct.

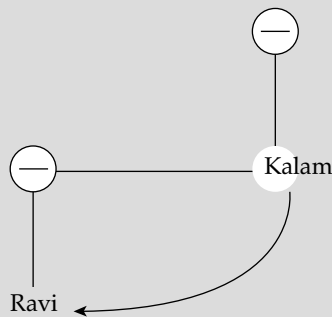
Explanation: The past collection of memories about man is biography, so the past collection of things about a nation would be history.

13. Kalam says, "Ravi's mother is the only daughter of my mother", How is Kalam related to Ravi?

- (A) Father (B) Brother
(C) Maternal Uncle (D) Uncle

Ans. Option (C) is correct.

Explanation: Kalam is maternal Uncle of Ravi.



14. If * stand for addition
⊗ stand for subtraction
⇔ stand for division
↑ stand for multiplication
≠ stand for equal to
Then which of the following alternatives is correct?

- (A) $2 \uparrow 5 \otimes 6^* 2 \neq 6$
(B) $5^* 7 \otimes 4 \Leftrightarrow 2 \neq 4$
(C) $3 \uparrow 6 \Leftrightarrow 2^* 3 \otimes 6 \neq 5$
(D) $4 \Leftrightarrow 7^* 4 \neq 2 3 \otimes 1$

Ans. Option (A) is correct.

Explanation: From option (A),
 $2 \times 5 - 6 + 2 = 6$
 $10 - 6 + 2 = 6$
 $6 = 6$

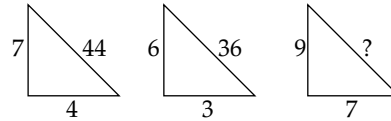
15. Introducing a man X, Y said "His wife is the only daughter of my father." How is X related to Y?

- (A) Brother (B) Uncle
(C) Husband (D) Father-in-law

Ans. Option (C) is correct.

Explanation: Daughter of my father is myself. So, X is the husband of Y.

16. Find the missing number from the following given options:



- (A) 64 (B) 63
(C) 16 (D) 66

Ans. Option (A) is correct.

Explanation: As per given figures,
In 1st Fig. = $(7 + 4) \times 4 = 44$
In 2nd Fig. = $(6 + 3) \times 4 = 36$
So, in 3rd Fig. = $(9 + 7) \times 4 = 64$

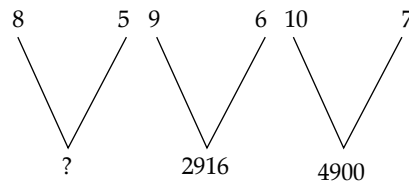
17. In the given question select the related letters / words / numbers from the given alternatives:
Mirage : Desert ::

- (A) Rain : Rainbow (B) Rainbow : Sky
(C) Image : Water (D) Sky : Illusion

Ans. Option (B) is correct.

Explanation: A mirage is seen in the desert. The same as a rainbow can be seen in the sky.

18. Find the missing number from the following given options.



- (A) 400 (B) 169
(C) 1600 (D) 80

Ans. Option (C) is correct.

Explanation: As per the given figures,
In 2nd Fig. $9^2 \times 6^2 = 2916$
In 3rd Fig. $10^2 \times 7^2 = 4900$
So, In 1st Fig. $8^2 \times 5^2 = 1600$

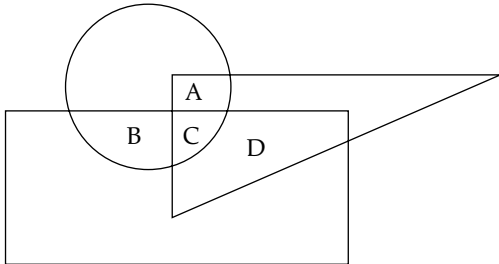
19. Among the four options given below, three have similarities. Find the odd one out.

- (A) Sepals (B) Petals
(C) Petiole (D) Stamen

Ans. Option (C) is correct.

Explanation: Petiole, it is stalk that attaches leaf to stem.

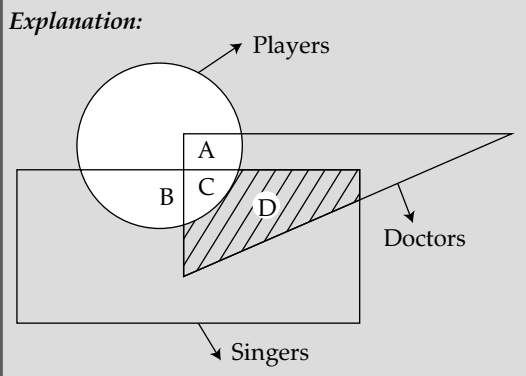
20. Please read the details carefully: In the following diagram, the triangle represents doctors, the circle represents players and the rectangle represents singers.



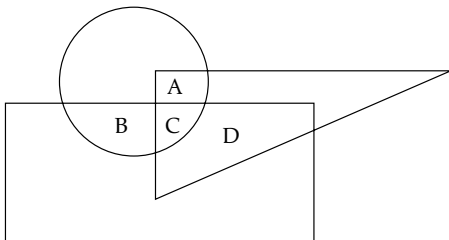
Which region represents doctors who are singers but not players?

- (A) A (B) B
(C) C (D) D

Ans. Option (D) is correct.



21. Please read the details carefully: In the following diagram, the triangle represents doctors, the circle represents players and the rectangle represents singers.

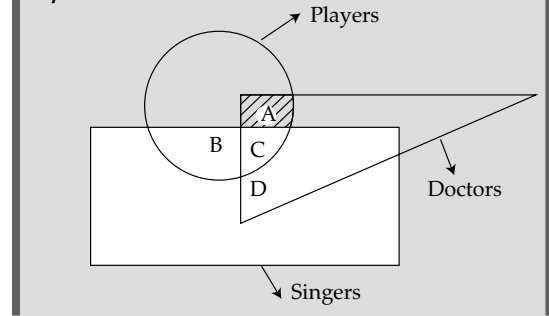


Which region represents the doctors who are players but not singers?

- (A) A (B) B
(C) C (D) D

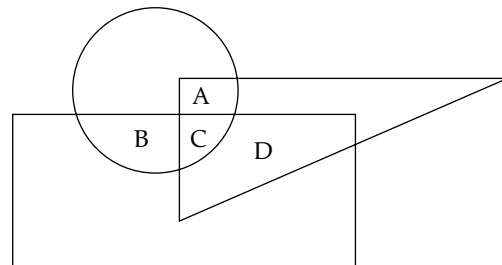
Ans. Option (A) is correct.

Explanation:



22. Please read the details carefully:

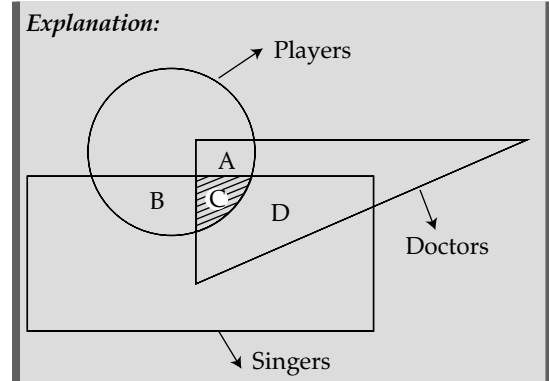
In the following diagram, the triangle represents doctors, the circle represents players and the rectangle represents singers.



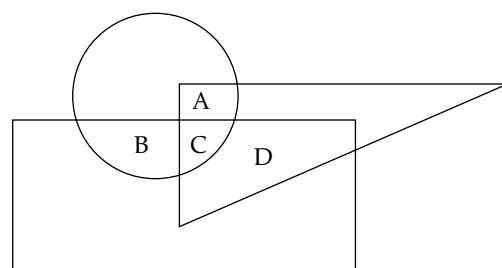
Which of the region represents doctors who are players as well as singers too?

- (A) A (B) B
(C) C (D) D

Ans. Option (C) is correct.



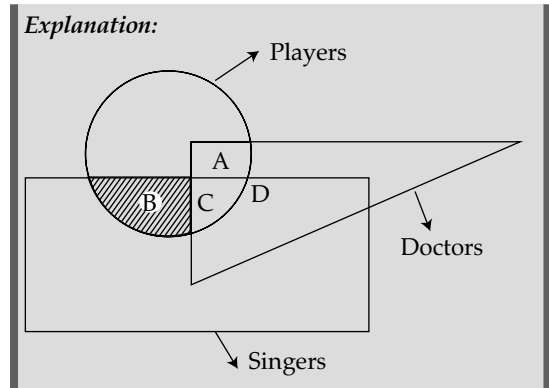
23. Please read the details carefully: In the following diagram, the triangle represents doctors, the circle represents players and the rectangle represents singers.



Which region represents the individual who are players as well as singers but not a doctor?

- (A) A (B) B
(C) C (D) D

Ans. Option (B) is correct.



CUET (UG) Question Paper 2021

National Testing Agency

UIQP02 23rd SEP 2021—SHIFT 1

Paper-1

(This includes Questions pertaining to General Test only)

Max. Marks : 60

Time allowed : 20 Min.

General Instructions:

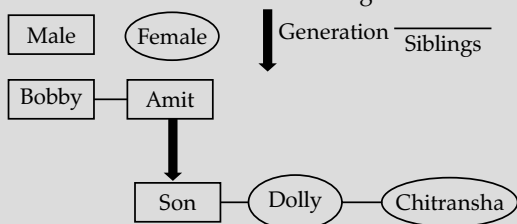
- (i) This paper consists of 15 MCQs, attempt.
- (ii) Correct answer or the most appropriate answer: Four marks (+4).
- (iii) Any incorrect option marked will be given minus One mark (-1).
- (iv) Unanswered/Marked for Review will be given No mark (0).
- (v) If more than one option is found to be correct then Four marks (+4) will be awarded to only those who have marked any of the correct options.
- (vi) If all options are found to be correct then Four marks (+4) will be awarded to all those who have attempted the question.
- (vii) If none of the options is found correct or a Question is found to be wrong or a Question is dropped then all candidates who have appeared will be given Four marks (+4).
- (viii) Calculator / any electronic gadgets are not permitted.

1. Amit and Bobby are brothers. Chitransha and Dolly are sisters. Amit's son is Dolly's brother. How is Bobby related to Chitransha?

- (1) Father (2) Uncle
(3) Grandfather (4) Brother

Ans. Option (2) is correct.

Explanation: According to question, Amit & Bobby are brothers and Chitransha & Dolly are sisters. We will make family diagram from the given information. We will use following conventions.



It is clearly seen from the family diagram that Bobby is the uncle of Chitransha.

2. Three of the following are alike in a certain way and therefore, form a group. Which is the one that does not belong to that group?

- (1) Snail (2) Tortoise
(3) Spider (4) Turtle

Ans. Option (3) is correct.

Explanation: All the given animals have protective shells except spider. Therefore, Spider does not belong to the group of other three.

3. What number will come in the blank in the following number series?

13, 14, 22, 31, _____, 120, 336

- (1) 35 (2) 45
(3) 65 (4) 95

Ans. Option (4) is correct.

Explanation:

$$\begin{aligned} 13+1^2 &= 14 \\ 14+2^3 &= 22 \\ 22+3^2 &= 31 \\ 31+4^3 &= 95 \\ 95+5^2 &= 120 \\ 120+6^3 &= 336 \end{aligned}$$

We are adding square and cube of natural numbers consecutively to the terms. So, the number will come at blank is 95.

4. 21 workers can make 1500 breads in 18 days. How many workers are required to make 1000 breads in 21 days?

- (1) 10 (2) 12
(3) 15 (4) 16

Ans. Option (2) is correct.

Explanation: 1500 breads are made in 18 days by 21 workers.

$$1 \text{ bread would be made in 1 day by } \frac{21 \times 18}{1500}$$

workers

$$1000 \text{ bread would be made in 1 day by } \frac{21 \times 18 \times 1000}{1500} \text{ workers}$$

$$1000 \text{ bread would be made in 21 days by } \frac{21 \times 18 \times 1000}{1500 \times 21} = 12 \text{ workers}$$

So, needed workers = 12 workers.

5. A bus covers the first 39 km of its journey in 45 minutes and the remaining 25 km in 35 minutes. What is the average speed of the car?
 (1) 30 km/hr (2) 48 km/hr
 (3) 50 km/hr (4) 54 km/hr

Ans. Option (2) is correct.

Explanation: Since, we know that

$$\text{Average speed} = \frac{\text{total distance}}{\text{total time}}$$

∴ Total distance = 39 + 25 = 64 km
 and total time = 45 + 35 = 80 min

$$= \frac{80}{60}$$

$$H = \frac{4}{3} H$$

∴ Average speed = $\frac{64}{\frac{4}{3}} = \frac{64 \times 3}{4} = 48 \text{ km/H}$

6. $8.2 \times 7.5 \times 9.3 =$ _____
 (1) 175.95 (2) 375.95
 (3) 571.95 (4) 751.95

Ans. Option (3) is correct.

Explanation: The given expression will be solved by multiplying numbers one by one. There are 2 total decimal places in first numbers. Ignore the decimal places and complete the multiplication as if operating on two integers. Thus, $82 \times 75 = 6150$
 Hence, rewrite the product with 2 total decimal places = 61.50
 Now, we will multiply 61.50 with 9.3
 There are 3 total decimal places in both numbers. Ignore the decimal places and complete the multiplication as if operating on two integers. Thus, $6150 \times 93 = 571950$
 Rewrite the product with 3 total decimal places. Therefore, $61.50 \times 9.3 = 571.950$
 Hence, $8.2 \times 7.5 \times 9.3 = 571.950$

7. A horse is taken out every morning by the owner whose home faces East. They walk 200 m West, then 500 m in the South direction. Which direction should they take to reach home?
 (1) South-East (2) South-West
 (3) North-East (4) North-West

Ans. Option (3) is correct.

Explanation: According to given information, we will make a diagram.

So, horse should move to North-East direction to reach home.

8. Where are the headquarters of international Union for Conservation of Nature and Natural Resources (IUCN) located?
 (1) New York (2) Sydney
 (3) Switzerland (4) Singapore

Ans. Option (3) is correct.

Explanation:

- International Union for Conservation of Nature (IUCN) is an international organization.
- It works in the field of conservation of the world's flora and fauna.
- It was created in 1948 as an important international body, especially in light of the IUCN Red List.
- It is headquartered in Gland, Switzerland.
- The IUCN Red List of Threatened Species is the world's most comprehensive checklist of the global conservation status of flora and fauna species.
- It provides scientific data on the status of species and subspecies of flora and fauna at a global level.

9. Dinesh is taller than Chinku and Elina. Akash is not as tall as Elina. Chinku is taller than Akash. Dinesh is not as tall as Bikash. Who among them is next to the tallest one?
 (1) Bikash (2) Chinku
 (3) Akash (4) Dinesh

Ans. Option (4) is correct.

Explanation:
 According to the question,

Dinesh > Chinku ... (i)
 Dinesh > Elina ... (ii)
 Akash < Elina ... (iii)
 Chinku > Akash ... (iv)
 Bikash > Dinesh ... (v)

Using all above conditions
 Bikash > Dinesh > Elina & Chinku > Akash
 As we can see, Bikash is tallest among them and Dinesh is next to Bikash.

10. Pox 186 is a
 (1) Glacier (2) Star
 (3) Galaxy (4) Satellite

Ans. Option (3) is correct.

Explanation:

- An image, obtained by NASA's Hubble Space Telescope, shows a 'late-blooming' galaxy, a small, distorted system of gas and stars that still appears to be in the process of development.
- This galaxy is named POX 186.
- The galaxy is 68 million light-years away in the constellation Virgo.
- It can be considered a dwarf galaxy (a small galaxy composed of about 1000 up to several billion stars).

- The Hubble Space Telescope images revealed that POX to be extremely small by galaxy standards.
- It is measuring only about 900 light-years across and containing just 10 million stars. While the Milky Way galaxy (our solar system is a part of the Milky Way) is about 100,000 light-years across and contains over 100 billion stars.

11. HRMN 99, recently figured in the news, is related to
 (1) fruit (2) animal
 (3) virus (4) disease

Ans. Option (1) is correct.

Explanation:

- HRMN 99, recently figured in news, is related to fruit.
- HRMN 99 is a self-pollinating variety of apple.
- It grows in low altitude at 1800 feet above the sea level and does not require chilling hours.
- It can be grown in plain, tropical and subtropical areas.
- Shri Hariman Sharma a renowned progressive farmer hailing from Paniala village of Bilaspur district in Himachal Pradesh has developed this variety of apple.

12. The most important text of vedic mathematics is
 (1) *Sulva Sutras* (2) *Atharvaveda*
 (3) *Satapatha Brahmana* (4) *Chandogya Upanishad*

Ans. Option (1) is correct.

Explanation:

- The most important text of Vedic mathematics is *Sulva Sutras*.
- The *Sulva Sutras* is a part of the larger corpus of texts called the *Shrauta Sutras*.
- They are the only known sources of knowledge of Indian mathematics from the Vedic period.
- These are sutra texts belonging to the *Srauta* ritual and containing geometry related to fire-altar construction.
- The four major *Sulva Sutras*, which are mathematically the most significant, are those composed by *Baudhayana*, *Manava*, *Apastamba* and *Katyayana*.
- Their language is late Vedic Sanskrit.

Atharvaveda

- The *Atharva Veda* (the fourth Veda) is the "knowledge store-house of atharvanas, the procedures for everyday life".
- The *Atharva Veda* was mainly composed by two groups of rishis known as the *Atharvanas* and the *Angirasa*.

Satpatha Brahmana

- The *Satpatha Brahmana* (belongs to *Shukla Yajurveda*) is a Hindu sacred text which describes details of Vedic rituals, including philosophical and mythological background.
- It is attributed to the Vedic sage *Yajnavalkya*.

Chandogya Upanishad

- The *Chandogya Upanishad* presents the *Madhu Vidya* (honey knowledge) in first eleven volumes of the third chapter.
- The Oldest *Upanishads* are *Brhadaran-yaka* and *Chandogya Upanishads* which date as back as the first millennium BC.

13. The words *Satyameva Jayate* in the State Emblem of India are taken from

- (1) *Samaveda* (2) *Rigveda*
 (3) *Ramayana* (4) *Upanishads*

Ans. Option (4) is correct.

Explanation:

- The words "*Satyameva Jayate*" (Truth alone triumphs), inscribed on the state emblem of India, has been taken from *Mundaka Upanishad*.
- It was adopted as the national motto of India on 26 January 1950, the day India became a republic.
- It is inscribed in the *Devanagari* script at the base of the *Lion Capital of Ashoka* and forms an integral part of the Indian national emblem.
- The Government of India adopted the *Lion Capital* as the National Emblem on 26 January 1950.
- The *Mundaka Upanishad* is an ancient Sanskrit Vedic text, embedded inside *Atharva Veda*.

Rigveda

- An ancient Indian collection of Vedic Sanskrit hymns.
- *Vyasa* is the compiler of the Vedas.

Samaveda

- The *Samaveda* is the Veda of melodies and chants.

Ramayana	<ul style="list-style-type: none"> The Ramayana was composed in Sanskrit by the poet Valmiki.
Upanishads	<ul style="list-style-type: none"> The Upanishads are philosophical books. They contain the teachings of many great religious teachers and saints. They are believed to be 108 in total.

14. Who was the leader of the Bardoli Satyagraha?

- (1) Rajendra Prasad
- (2) Vallabhbhai Patel
- (3) Mahatma Gandhi
- (4) Jivatram Bhagwandas Kripalani

Ans. Option (2) is correct.

Explanation:

- The leader of Bardoli Satyagraha was Sardar Vallabhbhai Patel.
- The Bardoli Satyagraha, 1928 was a movement in the independence struggle led by Sardar Patel for the farmers of Bardoli against the unjust raising of taxes.
- The Bardoli Taluk in modern-day Gujarat was hit by floods and famines in 1925.
- The floods and famines adversely affected crop yield and it affected the farmers financially.

- Ignoring the situation, the Bombay Presidency increased the tax rates by 22%.
- In January 1928, farmers in Bardoli invited Vallabhai Patel to launch the protest movement against the government.

15. PMJDY Scheme stands for

- (1) Pradhan Mitra Jeevan Dhan Yojana
- (2) Pradhan Mantri Jan Dhan Yojana
- (3) Pradhan Mitra Jan Dhan Yojana
- (4) Pradhan Mantri Jeevan Dhan Yojana

Ans. Option (2) is correct.

Explanation:

- PMJDY stands for Pradhan Mantri Jan Dhan Yojana.
- It is a National Mission for Financial Inclusion to ensure access to financial services, namely, a basic savings & deposit accounts, remittance, credit, insurance, pension in an affordable manner.
- It was launched by the Prime Minister Narendra Modi on 28th August 2014.
- The main objectives of the scheme are to ensure access of financial products & services at an affordable cost and use of technology to lower cost & widen reach.
- In August 2021, out of total 43.04 crore PMJDY accounts, 36.86 crore (85.6%) were operative.



CUET (UG) Question Paper 2021

National Testing Agency

UIQP02 23rd SEP 2021—SHIFT 2

Paper-2

(This includes Questions pertaining to General Test only)

Max. Marks : 356

Time allowed : 109 Min.

General Instructions:

- (i) This paper consists of 89 MCQs, attempt.
- (ii) Correct answer or the most appropriate answer: Four marks (+4).
- (iii) Any incorrect option marked will be given minus One mark (-1).
- (iv) Unanswered/Marked for Review will be given No mark (0).
- (v) If more than one option is found to be correct then Four marks (+4) will be awarded to only those who have marked any of the correct options.
- (vi) If all options are found to be correct then Four marks (+4) will be awarded to all those who have attempted the question.
- (vii) If none of the options is found correct or a Question is found to be wrong or a Question is dropped then all candidates who have appeared will be given Four marks (+4).
- (viii) Calculator / any electronic gadgets are not permitted.

1. There is a certain relation between two given words on one side of :: and one word is given on another side. The word is to be found from the given alternatives, having the same relation with this word as the given pair has. Select the best alternatives.

Darwin : Evolution :: Archimedes : ?

- (1) Friction (2) Lubrication
(3) Buoyancy (4) Liquids

Ans. Option (3) is correct.

Explanation:

The first word is the name of a scientist and the second word is his main invention or theory. Darwin gave the theory of evolution, in the same way, Archimedes gave the theory of buoyancy.

2. There is a certain relation between two given words on one side of :: and one word is given on another side. The word is to be found from the given alternatives, having the same relation with this word as the given pair bear. Choose the best alternative.

Virology : Virus :: Semantics : ?

- (1) Amoeba (2) Language
(3) Nature (4) Society

Ans. Option (2) is correct.

Explanation:

Virology is the study of viruses. While semantics is related to language. It is the study of the meanings of words and phrases. Option (b) is the correct option to establish the similar analogy in two pairs of words.

3. In the following question, a pair of words given followed by four pairs of words as alternatives. The candidate is required to choose the pair in which the words bear the same relationship to each other as the words of the given pair bear.

Apostate : Religion

- (1) Teacher : Education (2) Traitor : Country
(3) Potentate : Kingdom (4) Jailer : Law

Ans. Option (2) is correct.

Explanation:

Apostate is someone who has renounced religion or popular belief. Both the words have a negative relationship that reflects in option 2 as well. In the similar way, a traitor is averse to the cause of the nation.

All the other options give positive relationships. Teachers promote education. Potentate is a monarch belonging to a particular kingdom. A jailer is a custodian of law.

4. Choose the group of letters which is different from others.

- (1) DkUZ (2) LPuB
(3) FoMY (4) UXeN

Ans. Option (1) is correct.

Explanation:

In all given options small letter is a vowel except DkUZ. In this way DkUZ is different from others.

5. Choose the group of letters which is different from others.

- (1) DXCLQZ (2) PFZUBM
(3) XGKNTY (4) NWMBHJ

Ans. Option (2) is correct.

Explanation:

All other group of letters does not contain vowel except PFZUBM. In this way PFZUBM is different from others.

6. In a certain code language, BEAT is written as YVZG. What will be the code of MILD?

- (1) ONRW (2) OWER
(3) ONWR (4) NROW

Ans. Option (4) is correct.

Explanation:

According to question,

Word	B	E	A	T
Code	Y	V	Z	G

As we can see code is written by reversing the order of letters from the last.

Forward order position	1	2	3	4	5	6	7	8	9	10
Letter	A	B	C	D	E	F	G	H	I	J
Backward order position	26	25	24	23	22	21	20	19	18	17

Forward order position	11	12	13	14	15	16	17	18	19	20
Letter	K	L	M	N	O	P	Q	R	S	T
Backward order position	16	15	14	13	12	11	10	9	8	7

Forward order position	21	22	23	24	25	26
Letter	U	V	W	X	Y	Z
Backward order position	6	5	4	3	2	1

We can clearly see that B, E, A, T are respectively 2nd, 5th, 1st and 20th letters from the start and their codes Y, V, Z and G are respectively 2nd, 5th, 1st and 20th letters from the last.

Using the same coding method:

Word	M	I	L	D
Code	N	R	O	W

7. If BE QUICK is coded as ZC OSGAI, then the code of the last letter of the third word in the sentence I LOVE MY COUNTRY is:

- (1) A (2) T (3) U (4) W

Ans. Option (4) is correct.

Explanation:

Every letter of the given words is shifted 2 positions backwards to obtain the respective letter of the code. Similarly, the last letter of the third word COUNTRY is Y, which will be coded as W.

8. In a certain code language, THANKS is written as SKNTHA. How is STUPID written in that code language?

- (1) DIPUTS (2) DISPUT
(3) DIPUST (4) None of the above

Ans. Option (4) is correct.

Explanation:

According to question,

Word	T	H	A	N	K	S
Code	S	K	N	T	H	A

We can clearly see first three letters of word became last three letters of code in same order and last three letters of word became first three letters of code in reverse order.

Therefore,

Word	S	T	U	P	I	D
Code	D	I	P	S	T	U

9. A man is facing West. He turns 45° in the clockwise direction and then another 180° in the same direction and then 270° in the anti-clockwise direction. Which direction is he facing now?

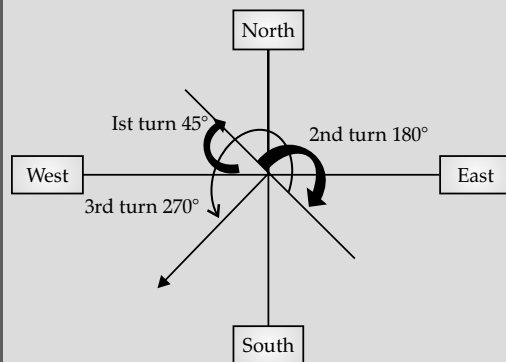
- (1) South (2) North-West
(3) West (4) South-West

Ans. Option (4) is correct.

Explanation:

According to the question, we will make direction diagram for the question.

Since, person is facing to the west so, we have coloured it.



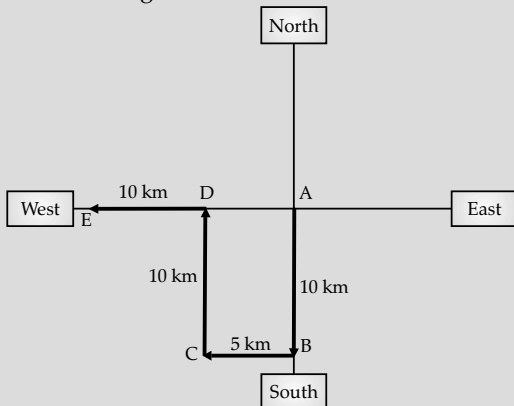
As per the diagram, he is facing South-west direction.

10. One day, Ravi left home and cycled 10 km southwards, turned right and cycled 5 km and turned right and cycled 10 km and turned left and cycled 10 km. How many kilometers will he have to cycle to reach his home straight?
- (1) 10 km (2) 15 km
(3) 20 km (4) 25 km

Ans. Option (2) is correct.

Explanation:

As per the given information we will make a direction diagram.



Ravi cycled from point A to B, B to C, C to D and finally from D to E. We can see from the figure that the distance between A & E = 5 + 10 = 15 km

So, he has to cycle 15 km to reach home.

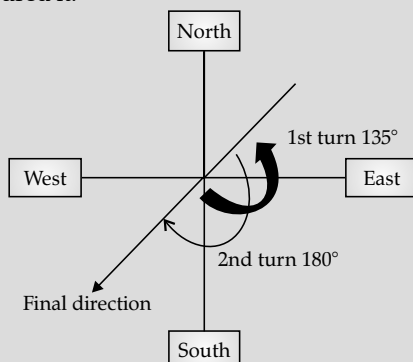
11. A man is facing South. He turns 135° in the anti-clockwise direction and then 180° in the clockwise direction. Which direction is he facing now?
- (1) North-East (2) North-West
(3) South-East (4) South-West

Ans. Option (4) is correct.

Explanation:

According to the question, we will make direction diagram for the question.

Since person is facing to the south so we have coloured it.



As per the diagram, he is facing South-West direction.

12. In the following question, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and replace the question mark (?) in the given series.

4832, 5840, 6848, ?

- (1) 7815 (2) 7846
(3) 7856 (4) 7887

Ans. Option (3) is correct.

Explanation:

We are adding 1008 to previous term to get next term

Since, $5840 - 1008 = 4832$

$6848 - 1008 = 5840$

$\therefore ? - 1008 = 6848$

$\Rightarrow ? = 6848 + 1008 = 7856$

13. In the following question, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and replace the question mark (?) in the given series.

2, 15, 41, 80, ?

- (1) 111 (2) 120
(3) 121 (4) 132

Ans. Option (4) is correct.

Explanation:

Since, $15 - 2 = 13 \times 1$

$41 - 15 = 26 = 13 \times 2$

$80 - 41 = 39 = 13 \times 3$

$\therefore ? - 80 = 52 = 13 \times 4$

$\Rightarrow ? = 52 + 80 = 132$

14. In the following question, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and replace the question mark (?) in the given series.

4, 6, 9, 13.5, ?

- (1) 17.5 (2) 19.0
(3) 20.25 (4) 22.75

Ans. Option (3) is correct.

Explanation:

As we can analyse from the given numbers that they are forming a G.P.

Since, $\frac{6}{4} = 1.5, \frac{9}{6} = 1.5, \frac{13.5}{9} = 1.5$

$\therefore \frac{?}{13.5} = 1.5 = ? = 1.5 \times 13.5 = 20.25$

15. If in the English alphabet, every even letter beginning from B is replaced by odd number beginning with 3, which letter/number will be the third to the right of the tenth number/letter counting from your right?

- (1) M (2) S
(3) 11 (4) None of these

Ans. Option (4) is correct.

Explanation:

According to question, the new sequence is
A 3 C 5 E 7 G 9 I 11 K 13 M 15 O 17 Q 19 S 21 U
23 W 25 Y 27

Counting from the right the tenth character is Q and the third character to the right of Q is 21. So, no option is matching with 21. Correct option will be "none of these".

16. If the positions corresponding to the multiples of 5 in the English alphabet are replaced by symbols and that of multiples of 7 by digits, how many letters will be left?

- (1) 15 (2) 17
(3) 18 (4) 21

Ans. Option (3) is correct.

Explanation:

Multiple of 5 are 5, 10, 15 and 25 (less than 26). So, total five letters will be replaced by symbols.

Multiple of 7 are 7, 14 and 21 (less than 26). So, total 3 letters will be replaced by numbers.

Total $5 + 3 = 8$ will be replaced by either symbols or numbers.

Total number of letters left = $26 - 8 = 18$

17. A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series:

36, 34, 30, 28, 24, _____

- (1) 20 (2) 23
(3) 22 (4) 26

Ans. Option (3) is correct.

Explanation:

As we can see,

$$36 - 2 = 34$$

$$34 - 4 = 30$$

$$30 - 2 = 28$$

$$28 - 4 = 24$$

We are subtracting 2 and 4 alternatively from previous terms to get the next term.

$\therefore 24 - 2 = 22$ which will be the next term.

18. A series is given with two terms missing. Choose the correct alternatives from the given ones that will complete the series:

3, 5, 35, 10, 12, 35, _____, _____

- (1) 19, 35 (2) 17, 19
(3) 19, 24 (4) 22, 35

Ans. Option (2) is correct.

Explanation:

This is an alternating addition series, with a arbitrary number 35, fixed as every third number. The pattern of addition is

$$3(1^{\text{st}} \text{ number}) + 7 = 10 (4^{\text{th}} \text{ number})$$

$$5(2^{\text{nd}} \text{ number}) + 7 = 12 (5^{\text{th}} \text{ number})$$

$$\therefore 10(4^{\text{th}} \text{ number}) + 7 = 17 (7^{\text{th}} \text{ number})$$

$$12(4^{\text{th}} \text{ number}) + 7 = 19 (8^{\text{th}} \text{ number})$$

So, the required numbers are 17 and 19.

19. Select the related number form the given alternatives that will complete the series:

$$Y^2 : 4 :: V^2 : ?$$

- (1) 49 (2) 25
(3) 16 (4) 9

Ans. Option (2) is correct.

Explanation:

When we count English alphabets in the reverse order.

Z 1	Y 2	X 3	W 4	V 5	U 6	T 7	S 8
R 9	Q 10	P 11	O 12	N 13	M 14	L 15	K 16
J 17	I 18	H 19	G 20	F 21	E 22	D 23	C 24
B 25	A 26						

Y is coded as 2 and $2^2 = 4$.

V is coded as 5 and $5^2 = 25$.

$$Y^2 : 4 :: V^2 : 25$$

20. A series is given with some letters missing. Choose the correct alternatives from the given ones that will complete the series:

BR __ NB _ O _ NB

- (1) WNWN (2) OWRW
(3) OWOW (4) RORO

Ans. Option (2) is correct.

Explanation:

We will put options in blank one by one. On putting the 2nd option, we get BROWN/BROWN. So OWRW is the correct form.

21. A series is given with some letters missing. Choose the set of letters which when sequentially placed shall complete it:

a __ dba __ bcad __ da __ cd

- (1) cbcddcba (2) bccdbcab
(3) aabbccdd (4) abccddcba

Ans. Option (2) is correct.

Explanation:

The given sequence is

a _ _ dba _ _ bcda _ _ da _ _ cd

It has 20 alphabets in it that can be grouped in 4 letters or 5 letters (multiple of 20). We will group them and put options to get a pattern.

Group of 4 alphabets

a b c d/b a c d/b c d a /b c d a/a b c d.

So, the missing letters are bccdbcab.

22. A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series:

4, 6, 10, 16, 24, ?

- (1) 40 (2) 34
(3) 30 (4) 28

Ans. Option (2) is correct.

Explanation:

The given numbers are in the following pattern:

$$4 + 2 = 6$$

$$6 + 4 = 10$$

$$10 + 6 = 16$$

$$16 + 8 = 24$$

$$24 + 10 = 34$$

So, the required number is 34.

23. Select the related word(s) from the given alternatives

Kidneys : Nephron :: Central Nervous System

- (1) Cerebrum (2) Brain
(3) Neurons (4) Spinal cord

Ans. Option (3) is correct.

Explanation:

Nephron is the functioning unit of the kidney, and Neuron is the working unit of the Central Nervous System.

24. Select the related letter from the given alternatives:

JOKE : GLHB :: RISK : ?

- (1) QHRJ (2) SJTL
(3) ULVN (4) OFPH

Ans. Option (4) is correct.

Explanation:

As we can observe, each letter in the second term is three letters behind the letters in the first term.

J O K E : G L H B :: R I S K : O F P H

So, the correct option is OFPH i.e. 4th option.

25. Select the related letters from the given alternatives:

MAN : PDQ :: WAN : ?

- (1) NAW (2) ZDQ
(3) YDQ (4) YQD

Ans. Option (2) is correct.

Explanation:

The given alphabets are following pattern which is given below:

M A N
+3↓ +3↓ +3↓
P D Q

Similarly,

W A N
+3↓ +3↓ +3↓
Z D Q

So, correct option is ZDQ.

26. Select the related word from the given alternatives:

Pride of Lions : : ? of Cats

- (1) Clowder (2) Herd
(3) School (4) Bunch

Ans. Option (1) is correct.

Explanation:

Groups, of Lions is called Pride, Similarly, Group of cats are called Clowder.

27. Select the related number from the given alternatives:

F : 216 :: L : ?

- (1) 1728 (2) 1700
(3) 1600 (4) 1723

Ans. Option (1) is correct.

Explanation:

F is the 6th letter and $6^3 = 216$

L is the 12th letter and $12^3 = 1728$.

So, correct option is 1728.

28. Find the alternatives which will replace the question mark:

Anatomy : Zoology :: Paediatrics : ?

- (1) Chemistry (2) Medicine
(3) Palaentology (4) Mechanics

Ans. Option (2) is correct.

Explanation:

Anatomy is a sub-discipline of Zoology. Paediatrics, too, is a medicine speciality. Therefore, medicine is our correct answer.

29. In a certain code, GARNISH is written as RGAINHS.

How will GENIOUS be written in that code?

- (1) ENGOIUS (2) NEGIOUS
(3) NGEOISU (4) GENOISU

Ans. Option (3) is correct.

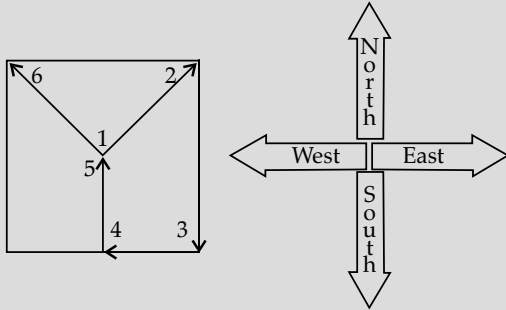
In the halfway, he turns to his left and reaches a new far end. In what direction is Raj now?

- (1) North (2) South
(3) North-West (4) South-West

Ans. Option (3) is correct.

Explanation:

We will draw a direction diagram and then move according to the given instruction as per the question.



He starts from 1 then move to 2, 2 to 3, 3 to 4, 4 to 5 and finally 5 to 6. It is clear from the diagram that Raj is in the North-West direction.

36. A and B are brothers. C and D are sisters. A's son is D's brother. How is B related to C?

- (1) Father (2) Brother
(3) Grandfather (4) Uncle

Ans. Option (4) is correct.

Explanation:

After carefully examining the statements, it was discovered that B is A's brother, and A's son is D's brother, implying that D is A's daughter. Because C and D are sisters, C is also A's daughter. As a result, B is C's uncle.

37. A is B's sister. C is B's mother. D is C's father. E is D's mother. Then, how is A related to D?

- (1) Grandmother (2) Grandfather
(3) Daughter (4) Grand daughter

Ans. Option (4) is correct.

Explanation:

A is B's sister, and C is their mother, based on the information provided. Their grandfather is D, and their great-grandmother is E. As a result, A is D's granddaughter.

38. Choose the odd pair of words.

- (1) Blacksmith : Anvil (2) Carpenter : Saw
(3) Barber : Scissor (4) Goldsmith : Ornaments

Ans. Option (4) is correct.

Explanation:

According to given information, first is profession and second is tool used by them. But Goldsmith does not use ornaments but it makes ornaments. So, this is incorrect match.

39. Choose the odd pair of words.

- (1) Volume : Litre (2) Time : Second
(3) Resistance : Ohm (4) Pressure : Barometer

Ans. Option (4) is correct.

Explanation:

According to given information, first entity is measured in the units given as second word. For example, volume is measured in litre, time is measured in second and resistance is measured in ohm. But pressure is measured by the device barometer which is not a unit.

40. Arrange the following words as per the order in the dictionary:

- A. Consume B. Consciousness
C. Conscience D. Conservation
E. Consequence
(1) C, B, A, E, D (2) C, A, B, E, D
(3) C, E, B, D, A (4) C, B, E, D, A

Ans. Option (4) is correct.

Explanation:

To solve this question, we will start to compare first letter of the given words, if they are same then move to second letter and decide on the basis of it. If second is also same then move to the third one and so on.

So, the correct order as per the dictionary:

(C) Conscience → (B) Consciousness →
(E) Consequence → (D) Conservation →
(A) Consume

41. Select the missing number from the given responses:

1	216	343
8	125	512
27	64	?
35	401	1575

- (1) 615 (2) 729
(3) 575 (4) 340

Ans. Option (2) is correct.

Explanation:

First column:

$$1 + 8 + 27 = 36 \Rightarrow 36 - 1^2 = 35$$

Second column:

$$216 + 125 + 64 = 405 \Rightarrow 405 - 2^2 = 401$$

Third column

$$343 + 512 + ? - 3^2 = 1575$$

$$\Rightarrow 343 + 512 + ? = 1575 + 3^2$$

$$\Rightarrow 855 + ? = 1584$$

$$\Rightarrow ? = 1584 - 855 = 729$$

42. Choose a similar word:

Sitar : Guitar :: Tanpura : ?

- (1) Trumpet (2) Violin
(3) Harmonium (4) Mridanga

Ans. Option (2) is correct.

Explanation:
Sitar, Guitar and Tanpura are all string instruments. **Violin** is also a string instrument.

43. Choose a similar word:

Jute : Cotton :: Wool : ?

- (1) Terytene (2) Silk
(3) Rayon (4) Nylon

Ans. Option (2) is correct.

Explanation:
All Jute, Cotton, Wool and **Silk** are natural fibres.
Hence, **Silk** is the correct answer.

44. Choose a similar word:

Marble : Slate :: Gneiss : ?

- (1) Quartzite (2) Limestone
(3) Coal (4) Sandstone

Ans. Option (1) is correct.

Explanation:
All marble, slate, gneiss and **quartzite** are metamorphic rocks.

45. In this question, three statements followed by two conclusions numbered I and II have been given. You have to take the given statements to be true even if they seem to be at variance from the commonly facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statements: Some flats are apartments.

No apartment is a hall.

Some halls are rooms.

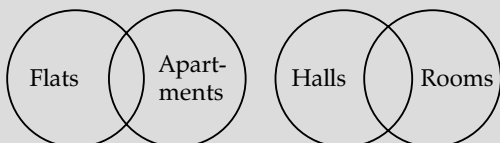
Conclusions: I. At least some rooms are flats.

II. No apartment is a room.

- (1) Only Conclusion I is true.
(2) Only Conclusion II is true.
(3) Both Conclusion I and II are true.
(4) Neither Conclusion I nor II is true.

Ans. Option (4) is correct.

Explanation:
According to given information, we will draw Venn-diagram and answer the question.



- We cannot conclude that some rooms are flats as no relationship is given between them.
- We also cannot conclude that no apartment is room as we have no information about them. So, neither conclusion I nor II is true.

46. There are deers and peacocks in a zoo. By counting heads they are 80. The number of their legs is 200. How many peacocks are there?

- (1) 10 (2) 30
(3) 50 (4) 60

Ans. Option (4) is correct.

Explanation:
Let x and y be the numbers of deers and peacocks, respectively.
According to the question,
 $x + y = 80$... (i)
and $4x + 2y = 200$... (ii)
Solving equations (i) and (ii),
We get, $y = 60$
Hence, there are 60 peacocks.

47. A certain number of horses and an equal number of men are going somewhere. Half of the owners are on their horses' back while the remaining ones are walking along leading their horses. If the number of legs walking on the ground is 70, how many horses are there?

- (1) 10 (2) 12
(3) 14 (4) 16

Ans. Option (3) is correct.

Explanation:
Let the number of horses be x .
Given: No. of Horses = No. of Men
Then number of legs on the ground
 $= 4x + 2 \times \frac{x}{2} = 70$
 $\Rightarrow 5x = 70$
 $\Rightarrow x = 14$
Hence, there are 14 horses.

48. A, B, C, D and E play a game of cards. A says to B, "If you give me three cards, you will have as many as E has and if I give you three cards, you will have as many as D has". A and B together have 10 cards more than what D and E together have. It B has two cards more than what C has and the total number of cards be 133, how many cards does B have?

- (1) 22 (2) 23
(3) 25 (4) 35

Ans. Option (3) is correct.

Explanation:
According to the question,
 $B - 3 = E$... (i)
 $B + 3 = D$... (ii)
 $A + B = D + E + 10$... (iii)
 $B = C + 2$... (iv)
 $A + B + C + D + E = 133$... (v)
From (i) and (ii),
 $B - E = D - B$
 $\Rightarrow 2B = D + E$... (vi)
From (iii) and (vi)
 $A + B = 2B + 10$

Explanation:

- Venus is the hottest planet in our solar system.
- Its atmosphere is full of the greenhouse gas carbon dioxide, and it has clouds of sulfuric acid.
- The atmosphere traps heat, making it feel like a furnace on the surface.
- One of the nicknames of Venus is "the Morning Star".
- It's also known as the Evening Star.
- Mercury is the closest planet to the sun.
- Earth is the third planet from the Sun and the fifth largest planet in the solar system in terms of size and mass.
- Jupiter is the fifth planet from the Sun and the largest planet in the Solar System.

54. COVID-19 is caused by the virus:

- (1) SARS-CoV-2 (2) SARS-CoV
(3) SARS-CoV-3 (4) SARS

Ans. Option (a) is correct.

Explanation:

- COVID- 19 is caused by the virus (SARS-CoV-2).
- It is also known as Severe Acute Respiratory Syndrome Coronavirus 2.
- It is called coronavirus disease 2019 (COVID-19).
- A virus is an infectious agent of small size and simple composition that can multiply only in living cells of animals, plants, or bacteria.
- Antibiotics do not work against viruses.
- The first known infection from SARS-CoV-2 was discovered in Wuhan, China.

55. Subhas Chandra Bose was unhappy with Congress resolution at Ramgarh in March 1940, because:

- A. Gandhi agreed to give support to the British war effort
B. Gandhi did not give a call for an immediate struggle
C. Subhas Chandra Bose did not want to compromise with imperialism and wanted the people to be ready for action

Select the code(s) for correct statement.

- (1) A only (2) B only
(3) A and C only (4) A, B and C

Ans. Option (4) is correct.

Explanation:

- Subhash Chandra Bose was unhappy with the Congress resolution at Ramgarh in March 1940 and said, "As soon as the war began, Mahatma Gandhi proceeded to Shimla without caring to consult the Congress Working Committee and informed HE the Viceroy that he was in favor of rendering unconditional help to Great Britain in the prosecution of war."
- **There were some reasons of his anger as follows:**
 1. Mahatma Gandhi promised to support British in war effort.
 2. Mahatma Gandhi did not call for an immediate struggle even it was the great time to oppose and fight British because they were engaged in the World War II.
 3. SC Bose did not want to compromise with imperialism and wanted the people ready for action.

56. The British Cabinet Mission which came to India in March 1946 did not have as its member:

- (1) Lord Pethick-Lawrence
(2) Sir Stafford Cripps
(3) A.V. Alexander
(4) Campbell H. Johnson

Ans. Option (4) is correct.

Explanation:

- Cabinet Mission was sent in February 1946 to India by the Atlee Government (British Prime Minister).
- It had three British cabinet members – Pethick Lawrence, Stafford Cripps, & and A.V. Alexander.
- Its aim was to discuss the transfer of power from British to Indian leadership.
- Another person, Lord Wavell was not a member of the Cabinet Mission but was involved in it.
- Its main objectives were to formulate a constitution-making body, to establish an Executive Council, and to make an agreement with the Indian leaders for framing of a constitution for India.

57. What was the main agenda of the Swaraj Party?

- A. Council entry
B. Politics of obstruction from within
C. Constructive rural work

- (1) A only (2) C only
(3) A and B only (4) A, B and C

Ans. Option (3) is correct.

Explanation:

- The Swaraj Party or the Congress-Khilafat Swarajya Party was formed by C. R. Das and Motilal Nehru on 1st January 1923.
- Mahatma Gandhi withdrew the Non-Cooperation Movement (because of the Chauri Chaura incident) in 1922.
- It created a lot of disagreements among leaders of the Congress Party.
- Some wanted to continue non-cooperation, others wanted to end the legislature boycott and contest elections.
- The former were called no-changers and such leaders included Rajendra Prasad, Sardar Vallabhai Patel, C. Rajagopalachari, etc.
- The others who wanted to enter the legislative council and obstruct the British government from within were called the pro-changers. These leaders included C. R. Das, Motilal Nehru, Srinivasa Iyengar, etc.

58. Who is regarded as India's first labour leader much before the beginning of Trade Union Movement?

- (1) Sorabjee Shapoorjee Bengalee
- (2) Naryana Meghaji Lokhande
- (3) Lala Lajpat Rai
- (4) B.P. Wadia

Ans. Option (2) is correct.

Explanation:

- Narayan Meghaji Lokhande was the first leader to organize labour movement in India.
- He is considered the father of trade union movement in India.
- The trade union movement in India started with the forming of Bombay Mill Hands Association in 1890 by N.K. Lokhands.
- The first clearly registered trade-union is considered to be the Madras Labour Union founded by B.P. Wadia in 1918.
- Lala Lajpat Rai was an freedom fighter, and politician; and was popularly known as Punjab Kesari.
- In 1878, Sorabjee Shapoorji Bengalee drafted a bill for providing better working conditions to the labourers and tried to pass in the Bombay Legislative Council.

59. UNESCO is:

- (1) an Indian company
- (2) a union of scientific organization
- (3) an international organization associated with UNO
- (4) a body of cultural societies

Ans. Option (3) is correct.

Explanation:

- UNESCO (United Nations Educational, Scientific and Cultural Organization) is an international organization associated with UNO (United Nations Organization).
- It seeks to build peace through international cooperation in Education, the Sciences and Culture.
- UNESCO was founded on 16 November 1945.
- UNESCO's Headquarters are located in Paris.
- It has 193 Members and 11 Associate Members.
- It is also a member of the United Nations Sustainable Development Group (UNSDG).
- The United Nations (UN) is an international organization founded in 1945.
- It is currently has 193 Member States.

60. Reducing infant mortality helps control the growth of population by:

- (1) controlling repeated childbirth to compensate for the mortality
- (2) protecting the health of the mother
- (3) increasing the gap between two births
- (4) preventing the tendency to chose the sex of the prenatal child

Ans. Option (1) is correct.

Explanation:

- Reducing infant mortality helps control the growth of population by controlling repeated childbirth to compensate for the mortality.
- The demographic transition theory describes that the reduction of the mortality of children less than five years of age is followed by the reduction of fertility with delay.
- The child survival hypothesis states that if child mortality is reduced, then eventually fertility reduction follows, with the net effect of lower growth of population.
- Bangladesh data have demonstrated that if not a single child died in a family then the average total fertility rate (TFR) was 2.6 children; when 1 child died the number was 4.7 children; 2 child deaths meant 6.2 children; and more than 3 child deaths boosted the TFR to 8.3 children.

61. It is often argued that population growth is not merely a question of numbers but that of the age composition of population. This is because:

- (1) more numbers will inevitably mean more production
- (2) more people in the productive age group means net addition to wealth

- According to Dr. Jeffrey Utz, Neuroscience, pediatrics, Allegheny University, different people have different percentages of their bodies made up of water.
- Babies have the most, being born at about 78%. By one year of age, that amount drops to about 65%. In adult men, about 60% of their bodies are water.

66. The mascot Tokyo 2020 Olympics is:

- (1) Cobot (2) Doll
(3) Miraitowa (4) Someity

Ans. Option (3) is correct.

Explanation:

- The cartoony Miraitowa was the official mascot of the Tokyo Olympics 2020.
- The word 'Miraitowa' is derived from the Japanese words "mirai" (future) and "towa" (eternity).
- The Olympics were held in Tokyo in 2021.
- Tokyo has two mascots: Miraitowa for the Olympics and Someity for the Paralympic Games.
- Tokyo became the first city in Asia to hold the Summer Games twice.
- Paris and Los Angeles will host the Olympic Games 2024 and 2028 respectively.

67. It is not advisable to sleep under a tree at night because of the

- (1) release of less oxygen
(2) release of more oxygen
(3) release of carbon dioxide
(4) release of carbon monoxide

Ans. Option (3) is correct.

Explanation:

- It is not advisable to sleep under a tree at night because of the release of carbon dioxide (CO₂).
- At night photosynthesis does not occur, oxygen is not being produced by the trees.
- The trees continue respiring oxygen in night thereby causing the amount of carbon dioxide to be increased and the amount of oxygen to be reduced.
- So the amount of carbon dioxide in the air becomes more which leads to respiratory problems.

68. Most abundant blood cells in the human body are:

- (1) WBCs (2) RBCs
(3) platelets (4) plasma cells

Ans. Option (2) is correct.

Explanation:

- The most abundant blood cells in the human body are RBCs (Red Blood Corpuscles).
- Red blood cells (erythrocytes) are an important element of blood.
- Their job is to transport oxygen to the body's tissues in exchange for carbon dioxide, which they carry to the lungs to be expelled.
- White blood cells help the body fight infection and other diseases.
- Platelets play a major role in blood clotting.

White Blood Cell (WBC)	5,000 – 10,000/mL
Red Blood Cell (RBC)	4.5 – 5.5 × 10 ⁶ /mL
Platelet	1.4 – 4.0 × 10 ⁵ /mL

69. Overall increase in blood pressure, both in men and women, is due to:

- (1) Bad dietary habits
(2) escalating sedentary behavior
(3) increasing salt intake
(4) excessive consumption of sugar, salt and fats

Ans. Option (4) is correct.

Explanation:

- Overall increase in blood pressure, both in man and woman, is due to excessive consumption of sugar, salt and fats.
- It can happen because of unhealthy lifestyle choices, such as not getting enough regular physical activity.
- Blood pressure is the pressure of circulating blood against the walls of blood vessels.
- High blood pressure, also called hypertension, is blood pressure that is higher than normal.
- A normal blood pressure level is less than 120/80 mmHg.

70. Indigo is used in the:

- (1) perfumery industry
(2) pharmaceutical industry
(3) dyeing industry
(4) food industry

Ans. Option (3) is correct.

Explanation:

- Indigo dye is the oldest to be used in textile dyeing and printing.
- India is the oldest centre for indigo dyeing in the whole world.
- Indigofera tinctoria, also called true indigo, is a species of plant that was one of the original sources of indigo dye.

- The chemical formula of indigo is $C_{16}H_{10}N_2O_2$.
- It is insoluble in water, alcohol, or ether, but soluble in DMSO (dimethyl sulfoxide), chloroform, nitrobenzene, and concentrated sulfuric acid.

71. The gas evolved during the fermentation of a sugar solution is:

- (1) oxygen (2) carbon monoxide
(3) carbon dioxide (4) methane

Ans. Option (3) is correct.

Explanation:

- The gas evolved during the fermentation of a sugar solution is carbon dioxide.
- Yeast ferments the sugar into alcohol.
- Fermentation is the process in which a substance breaks down into a simpler substance.
- Microorganisms like yeast and bacteria usually play a role in the fermentation process.
- Fermentation process is used in making of beer, wine, bread, kimchi, yogurt and other foods.

72. The Rajya Sabha has equal powers with the Lok Sabha in:

- (1) the matter of creating new All India services
(2) amending the Constitution
(3) the removal of the government
(4) making cut motions

Ans. Option (2) is correct.

Explanation:

- The Rajya Sabha (Upper House) has equal powers with the Lok Sabha (Lower House) in the matter of amending the constitution.
- The Rajya Sabha enjoys equal powers with Lok Sabha in other matters like the impeachment of the President, removal of the vice-president, and removal of the judges of the Supreme Court and the High Courts.
- Article 312 in the Constitution of India deals with the creation of new All India Services.
- In matter of creating All India Services, the Rajya Sabha enjoys special powers.
- If the Rajya Sabha passes a resolution by a majority of not less than two-thirds of the members present and voting declaring that it is necessary or expedient in the national interest to create one or more All India Services.
- A cut motion is a special power vested in members of the Lok Sabha to oppose a demand being discussed for specific allocation by the government in the Finance Bill as part of the Demand for Grants.

73. Javelin throw competition at Tokyo 2000 Olympics was won by:

- (1) Sakshi Malik (2) Yogeshwar Dutt
(3) Dutee (4) Neeraj Chopra

Ans. Option (4) is correct.

Explanation: Javelin throw competition at Tokyo 2020 Olympics was won by Neeraj Chopra.

- The men's javelin throw event at the 2020 Summer Olympics took place on 4 and 7 August 2021 at the Japan National Stadium.
- Subedar Neeraj Chopra is the first track and field athlete to win a gold medal for India at the Olympics.
- Neeraj Chopra, who has a personal best of 88.07 metres, clinched the historic gold with a throw of 87.58m in his second attempt at Tokyo Games.

74. Among the following tiger reserves, which one has largest area under 'Critical Tiger Habitat'?

- (1) Corbett (2) Ranthambore
(3) Nagarjunsagar (4) Sunderbans

Ans. Option (3) is correct.

Explanation:

- Among the following tiger reserves, Nagarjunsagar-Srisaïlam has the largest area under critical tiger habitat.
- The total area of the tiger reserve is 3,728 km² (1,439 sq mi).
- Nagarjunsagar-Srisaïlam Tiger Reserve is the largest tiger reserve in India which is located in Andhra Pradesh.
- Critical Tiger habitats are wildlife habitat means created in areas of National Parks and Sanctuaries which are required to be kept as inviolate for the purposes of wildlife conservation.

Jim Corbett National Park	Uttarakhand
Ranthambore National Park	Rajasthan
The Sunderbans National Park	West Bengal

75. Which of the following pairs is/are correctly matched?

- A. Angami-Assam
B. Toda-Tamil Nadu
C. Moptah-Lakshadweep
D. Birhor-Arunachal Pradesh
(1) A and D only (2) B only
(3) C only (4) All of these

Ans. Option (2) is correct.

Explanation:

- The Angamis are a major Naga ethnic group native to the state of Nagaland in North-East India.
- Toda people are a Dravidian ethnic group who live in the Nilgiri Mountains of the Indian state of Tamil Nadu.

- Mappila, also known as as Moplah, found in Kerala.
- Birhor people (Birhul) are a tribal/Adivasi forest people living primarily in the Indian state of Jharkhand.
- Diverse tribes like Bodo, Kachari, Karbi, Miri, Mishimi, Rabha, etc co-exist in Assam.
- The major tribal communities that dwell in Lakshadweep comprise Aminidivi, Koyas, Malmis and Melacheris.
- The Nyishi are the largest ethnic group in Arunachal Pradesh in north-eastern India.

76. The percentage of literates in India is:
- (1) lower among males than females
 - (2) lower in urban areas than in rural areas
 - (3) higher among males
 - (4) almost equal among males and females

Ans. Option (3) is correct.

Explanation:

- The percentage of literates in India is higher among males.
- The 15th official census in India was calculated in the year 2011.
- The year 1872 has been popularly labeled as the first population census of India. However, the first synchronous census in India was held in 1881.
- The Census of 1881 which was undertaken on 17th February, 1881 by W.C. Plowden, Census Commissioner of India was the first census of India.
- The literacy rate in the country is 74.04 per cent, 82.14% for males and 65.46% for females.
- According to Census 2011, Kerala has the highest total literacy rate (93.91%) and female literacy rate (91.98%) whereas Lakshadweep had the highest male literacy rate (96.11%).
- Bihar has the lowest literacy rate in India.

77. Which of the following indices are released by NITI Aayog?
- A. State Energy Index
 - B. District Hospital Index
 - C. State Health Index
 - D. Composite Water Management Index
 - E. SDG India Index
- (1) C, D and E only
 - (2) A, C, D and E only
 - (3) A, B and E only
 - (4) A, B, C, D and E

Ans. Option (4) is correct.

Explanation:

- The NITI Aayog serves as the apex public policy think tank of the Government of India.
- Planning Commission was replaced by a new institution – NITI Aayog on January 1, 2015.
- It has emphasis on 'Bottom –Up' approach to envisage the vision of Maximum Governance, Minimum Government, echoing the spirit of 'Cooperative Federalism'.
- Chairperson: Prime Minister
- Vice-Chairperson: Dr. Rajiv Kumar
- Some of the indices launched by NITI Aayog are School Education Quality Index, State Health Index, Composite Water Management Index, Sustainable Development Goals India Index, India Innovation Index and Export Competitiveness Index, District Hospital Index, State Energy Index, and Multidimensional Poverty Index.

78. The Speaker of the Lok Sabha can be removed from the office by the:

- (1) simple majority
- (2) special majority
- (3) absolute majority
- (4) effective majority

Ans. Option (4) is correct.

Explanation:

- As per Article 93 of the Indian Constitution, the Lok Sabha has a Speaker and a Deputy Speaker.
- In the Lok Sabha, the Speaker and the Deputy Speaker are elected from among its members by a simple majority of members present and voting in the House.
- As per Article 94, the Speaker can be removed by the Lok Sabha by a resolution passed by the effective majority of the house.
- The Speaker can also be removed on being disqualified for being the Lok Sabha member under sections 7 and 8 of the Representation of the People Act, 1951.
- The Speaker may, at any time, resign from Office by writing under his/her hand to the Deputy Speaker.

79. For an Indian citizen, the duty to pay taxes is a:

- (1) constitutional obligation
- (2) moral obligation
- (3) legal obligation
- (4) fundamental duty

Ans. Option (3) is correct.

Explanation:

- For a citizen of India the duty to pay taxes is a legal obligation.
- As per the Direct taxation laws; income and other kinds of taxes are a legal obligation for an Indian citizen as he uses public services, receives social and political security from the state etc.
- The Swaran Singh Committee suggested inclusion of duty to pay taxes under fundamental duties, but it was not agreed upon.
- The fundamental duties were originally included in the constitution through the 42nd amendment, 1976.
- The Fundamental duties are more in the nature of moral obligations of citizens to help promote a spirit of patriotism and to uphold the unity of India.

80. Match List-I with List-II:

- | | |
|--------------------------------|-------------------|
| List-I | List-II |
| (A) Bhitarkanika National Park | (I) Rhinoceros |
| (B) Kaziranga National Park | (II) Bengal tiger |
| (C) Sunderbans National Park | (III) Red panda |
| (D) Singalila National Park | (IV) Crocodills |
- Choose the correct answer from the options given below.

- (1) (A)-(I); (B)-(II); (C)-(III); (D)-(IV)
- (2) (A)-(I); (B)-(IV); (C)-(II); (D)-(III)
- (3) (A)-(IV); (B)-(II); (C)-(III); (D)-(I)
- (4) (A)-(IV); (B)-(I); (C)-(II); (D)-(III)

Ans. Option (4) is correct.

Explanation:

National Parks	Famous For	State
(A) Bhitarkani-ka National Park	(IV) Saltwater Crocodile	Odi-sha
(B) Kaziranga National Park	(I) One Horned rhinoceros	Assam

(C) Sunderbans national Park	(II) Bengal Tiger	West Bengal
(D) Singalila National Park	(III) Red Panda	West Bengal

81. The mating and nesting around of 50% of the world's olive ridley turtles, the smallest and abundant sea turtles, is located in:

- (1) Goa coast
- (2) Odisha coast
- (3) Malabar coast
- (4) Gulf of Kutch

Ans. Option (2) is correct.

Explanation:

- The coast of Orissa in India is the largest mass nesting site for the Olive-ridley, followed by the coasts of Mexico and Costa Rica.
- The Olive Ridley turtles are the smallest and most abundant of all sea turtles found in the world.
- These turtles got their name from their olive-colored carapace, and they are carnivores in nature.
- They are found in warm waters of the Pacific, Atlantic and Indian oceans.
- The Gahirmatha Marine Sanctuary located in Odisha is known as the world's largest breeding colony (rookery) of sea turtles.
- Protection Status:
 1. Wildlife Protection Act, 1972: Scheduled 1
 2. IUCN Red List: Vulnerable
 3. CITES: Appendix I

82. 'Cattle rustling' refers to:

- (1) infertile cattle of no use to man
- (2) poaching
- (3) theft of cattle
- (4) stray cattle

Ans. Option (3) is correct.

Explanation:

- Cattle rustling' refers to theft of cattle.
- Cattle rustling occur when 'a group of individuals plan, organise and steal livestock forcefully from another person or from the grazing field.
- A cattle raiding is the act of stealing cattle.
- In Australia, such stealing is often referred to as duffing, and the perpetrator as a duffer.
- In North America, especially in the Wild West cowboy culture, cattle theft is dubbed rustling, while perpetrator as a rustler.
- Cattle rustling or raiding is no longer a cultural practice, but a form of organised crime committed by international criminal networks.

83. The overfishing and destruction of the Grand Banks; the destruction of salmon runs on the rivers having been dammed; and the devastation of sturgeon fishery on the Columbia river in the Northwest United States exemplify.

- (1) resource depletion
- (2) overfishing and over population
- (3) overpopulation in companion animals
- (4) tragedy of the commons

Ans. Option (4) is correct.

Explanation:

- The tragedy of the commons refers to a situation in which individuals with access to a shared resource (also called a common) act in their own interest and, in doing so, ultimately deplete the resource.
- This economic theory was first conceptualized in 1833 by British writer William Forster Lloyd.
- Situations exemplifying the "tragedy of the commons" include the overfishing and destruction of the Grand Banks of Newfoundland, the destruction of salmon runs on rivers that have been dammed, the devastation of the sturgeon fishery, etc.
- Solutions to the tragedy of the commons include the imposition of private property rights, government regulation, or the development of a collective action arrangement.

84. The greatest threat to organisms and biodiversity is:

- (1) process of habitat loss
- (2) species extinction all over the world
- (3) reduced carrying capacity of the habitat
- (4) biodiversity hot spots

Ans. Option (1) is correct.

Explanation:

- The greatest threat to organisms and biodiversity is the process of habitat loss.
- Habitat loss is the loss and degradation of the natural habitat of the species and ecological communities that naturally occur there.
- It reduces or eliminates the food resources and living space for most species.
- It often results in the extinction of species and, as a result, the loss of biodiversity.
- Habitat loss is the single greatest threat to biodiversity on Earth today and in fact, it is the second-largest threat to our existence on this planet next to Climate Change.

85. Hazardous effects of a substance can be reduced by:

- (1) increasing its bioavailability
- (2) minimizing its biodiversity
- (3) using protecting groups
- (4) using solvents

Ans. Option (3) is correct.

Explanation:

- Protecting groups are used in synthesis to temporarily mask the characteristic chemistry of a functional group because it interferes with another reaction.

- Protecting groups can be used to reduce the hazardousness of any substance.
- A good protecting group should be easy to put on, easy to remove and in high yielding reactions, and inert to the conditions of the reaction required.
- It plays an important role in multistep organic synthesis.

86. Which of the following is the major soil pollutant?

- (1) Radioactive waste
- (2) Pesticides
- (3) Nitrates
- (4) Dioxins

Ans. Option (1) is correct.

Explanation:

- Radioactive waste is the major soil pollutant.
- Radioactive substances such as Radium, Thorium, Uranium, Nitrogen, etc. can infiltrate the soil and create toxic effects.
- The soil of the crops is polluted to a large extent with pesticides, fertilizers, herbicides, slurry, debris, and manure.
- These chemicals penetrate into soil and damage the soil.
- Soil pollution is defined as the presence of toxic chemicals in soil, in high enough concentrations to pose a risk to the ecosystem.

87. The contaminant not present in leaking gasoline is:

- (1) benzene
- (2) ethanol
- (3) toluene
- (4) methyl tertiary butyl ether

Ans. Option (2) is correct.

Explanation: Ethanol is not a contaminant present in leaking gasoline.

- Ethanol is a renewable fuel made from various plant materials collectively known as "biomass."
- Ethanol is an important industrial chemical; it is used as a solvent, in the synthesis of other organic chemicals, and as an additive to automotive gasoline.
- Spills, leaks, or improper disposal of gasoline can cause contamination of soil, groundwater, surface water, and air.
- Benzene, toluene, ethylbenzene, and xylenes (together referred to as the BTEX compounds) constituents of gasoline are the typical contaminants of concern.
- Benzene is the most hazardous of these compounds.

88. Which of the following is the most toxic air pollutant?

- (1) Arsenic
- (2) Asbestos
- (3) Benzene
- (4) Potassium chloride

Ans. Option (3) is correct.

Explanation:

- Hazardous air pollutants, also known as toxic air pollutants, are those pollutants that are known or suspected to cause cancer or other serious health effects.
- Benzene is the most toxic air pollutant among the given options.
- Examples of toxic air pollutants include:
 1. benzene, found in gasoline;
 2. perchloroethylene, emitted from some dry cleaning facilities; and
 3. methylene chloride, used as a solvent and paint stripper by a number of industries.
- Other air toxics include dioxin, asbestos, toluene, and metals such as cadmium, mercury, chromium, and lead compounds.

89. The air pollutant not obtained by combustion is:

- (1) carbon dioxide
- (2) nitrogen dioxide
- (3) ammonia
- (4) sulphur dioxide

Ans. Option (3) is correct.

Explanation:

- The air pollutant not obtained by combustion is ammonia (NH_3).
- The production of ammonia from natural gas is conducted by reacting methane (natural gas) with steam and air, coupled with the subsequent removal of water and CO_2 .
- In the environment, ammonia is part of the nitrogen cycle and is produced in soil from bacterial processes.
- Ammonia is also produced naturally from decomposition of organic matter, including plants, animals and animal wastes.
- It is a colourless gas with a distinct pungent smell.



WRITING YOUR NOTES

**Just in case you have forgotten today, takedown your notes!
But why is it so important?**

Tools for the hands are tools for the brain writes Hetty Roessingh.
Handwritten notes are a powerful tool for encrypting embodied cognition and in turn supporting the brain's capacity for recuperation of information. If that sounds so scientific then in simple words:
Writing notes by hand help you in:

- ◆ Increasing your comprehension
- ◆ Strengthening your memory
- ◆ Igniting your creativity
- ◆ Engaging your mind
- ◆ Increasing your attention span

Are these reasons enough to get you started?

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