

CUET (UG) Question Paper - 2024

National Testing Agency

15th MAY 2024 – SHIFT 1

Section - III (General Test)

Examination Duration: 60 Minutes

Maximum Marks - 250

General Instructions:

Marking scheme of the test:

- (a) There are 60 questions asked in the section- III. Attempt only 50 questions.
- (b) Correct answer or the most appropriate answer will be given five marks (+5).
- (c) Any incorrect option marked will be given minus one mark (-1).
- (d) Unanswered/Marked for review will be given no mark (0).

1. Simplify : $24 \div 4 \times 2 + 8 - 4 = ?$

- (A) 1 (B) 7 (C) 16 (D) 56

Ans. Option (C) is correct.

Explanation:

Value of expression by using BODMAS rule
 $24 \div 4 \times 2 + 8 - 4 = 6 \times 2 + 8 - 4$
 $= 12 + 8 - 4$
 $= 16$

2. The difference of the greatest and the smallest of the fractions $\frac{1}{2}, \frac{8}{11}, \frac{7}{8}, \frac{7}{9}, \frac{5}{6}$ is:

- (A) $\frac{3}{8}$ (B) $\frac{6}{7}$ (C) $\frac{7}{9}$ (D) $\frac{1}{3}$

Ans. Option (A) is correct.

Explanation:

Given fractions are $\frac{1}{2}, \frac{8}{11}, \frac{7}{8}, \frac{7}{9}, \frac{5}{6}$

Now, $\frac{1}{2} = 0.5, \frac{8}{11} = 0.72,$

$\frac{7}{8} = 0.87, \frac{7}{9} = 0.777,$

$\frac{5}{6} = 0.86$

So, required difference

$$= \frac{7}{8} - \frac{1}{2} = \frac{7-4}{8} = \frac{3}{8}$$

3. The sum of the LCM and HCF of two numbers is 854. If the LCM is 60 times the HCF and one of the numbers is 70, then the other number is.

- (A) 160 (B) 164 (C) 168 (D) 172

Ans. Option (C) is correct.

Explanation:

Let the HCF of given numbers = x

Then LCM = $60x$

According to the question,

$$x + 60x = 854$$

$$\Rightarrow 61x = 854$$

$$\Rightarrow x = 14$$

$$\text{So, HCF} = 14$$

$$\text{and LCM} = 60 \times 14 = 840$$

$$\text{Using, LCM} \times \text{HCF} = 1^{\text{st}} \text{ No.} \times 2^{\text{nd}} \text{ No.}$$

$$\Rightarrow 14 \times 840 = 70 \times 2^{\text{nd}} \text{ No.}$$

$$\Rightarrow 2^{\text{nd}} \text{ No.} = 168$$

4. The present age of Harish is 8 times the sum of the ages of his two sons. After 8 years, his age will be 2 times the sum of the ages of his two sons. The present age of Harish (in years) is:

- (A) 31 (B) 32 (C) 33 (D) 34

Ans. Option (B) is correct.

Explanation:

Let the sum of the ages of his two sons at present = x year

So, present age of Harish = $8x$ years

According to the question, after 8 years,

$$8x + 8 = 2(x + 8 + 8)$$

$$8x + 8 = 2x + 32$$

$$\Rightarrow 6x = 24$$

$$\Rightarrow x = 4$$

So, present age of Harish = 8×4

$$= 32 \text{ years}$$

5. In an examination, it is required to get 300 marks to pass. A student gets 225 marks and is declared fail by 10% marks. What are the maximum marks of the examination?

- (A) 700 (B) 750 (C) 800 (D) 850

Ans. Option (B) is correct.

Explanation:

Given that passing marks = 300

Let the total marks = x

According to the question,

$$225 + \frac{10}{100} \times x = 300$$

$$\Rightarrow x = 750$$

So, maximum marks = 750

6. In a class of 40 students, ratio of boys and girls is 3 : 2 and the average marks scored by boys is 42 and the average marks scored by girls is 46. Then the average marks scored by the whole class is:
(A) 43.4 (B) 43.6 (C) 43.8 (D) 44

Ans. Option (B) is correct.

Explanation:

The average marks scored by boys = 42
The average marks scored by girls = 46
And ratio of boys to girls (n_1, n_2) = 3 : 2
using the formulae

$$\text{Average} = \frac{(n_1x_1 + n_2x_2)}{(n_1 + n_2)}$$

$$\text{So, required average} = \frac{42 \times 3 + 46 \times 2}{2 + 3} = 43.6$$

7. The sum of three numbers is 136. If the ratio between the first number and the second number is 2 : 3 and the ratio between the second and the third number is 5 : 3 then the first number is:
(A) 42 (B) 40 (C) 36 (D) 32

Ans. Option (B) is correct.

Explanation:

Since ratio of first and second number is given, and ratio of second and third number is given so to make ratio of second number equal, multiply each ratio by 5 to make the ratio of the second number equal.
Given that ratio 1st and 2nd no.

$$= 2 : 3 = 10 : 15$$

And ratio 2nd and 3rd no.

$$= 5 : 3 = 15 : 9$$

So, ratio of 1st, 2nd and 3rd no.

$$= 10 : 15 : 9$$

Let 1st, 2nd and 3rd no. are $10x$, $15x$ and $9x$.

According to the question,

$$10x + 15x + 9x = 136$$

$$\Rightarrow 34x = 136$$

$$\Rightarrow x = 4$$

So, the 1st number = $10 \times 4 = 40$

8. An item is sold for ₹ 504 after allowing 20% discount and still a profit of 5% has been earned. The marked price is how much more than the cost price?
(A) ₹ 120 (B) ₹ 135 (C) ₹ 150 (D) ₹ 160

Ans. Option (C) is correct.

Explanation:

Let the marked price = ₹ x

According to the question,

$$x \times \frac{100 - 20}{100} = 504$$

$$\Rightarrow x = 630$$

So, marked price = ₹ 630

Let the cost price = ₹ y

Again, according to the question,

$$y \times \frac{105}{100} = 504$$

$$\Rightarrow y = 480$$

So, cost price = ₹ 480

Now, required difference

$$= 630 - 480 = ₹ 150$$

9. A certain sum becomes ₹ 2,356 in 3 years and 2,660 in 5 years on simple interest. The value of sum is :
(A) ₹ 1,800 (B) ₹ 1,880 (C) ₹ 1,900 (D) ₹ 1,980

Ans. Option (C) is correct.

Explanation:

According to the question, SI earned in two years

$$= 2660 - 2356$$

$$= ₹ 304$$

$$\text{So, SI earned per year} = \frac{304}{2} = ₹ 152$$

Now, SI earned in 3 years

$$= 152 \times 3 = ₹ 456$$

Principal = Amount - simple interest

$$\text{So,} = 2356 - 456$$

$$= ₹ 1,900$$

10. In a square, lengths of the diagonals are $(4k + 6)$ cm and $(7k - 3)$ cm. The area of the square (in cm^2) is :
(A) 144 (B) 162 (C) 169 (D) 172

Ans. Option (B) is correct.

Explanation:

We know that both the diagonals of square are equal length.

According to the question,

$$4k + 6 = 7k - 3$$

$$\Rightarrow 3k = 9$$

$$\Rightarrow k = 3$$

So, length of diagonal = $4 \times 3 + 6$

$$= 18 \text{ cm}$$

Using, length of diagonal of square

$$= \sqrt{2} \times \text{side}$$

$$\Rightarrow \text{side} = \frac{18}{\sqrt{2}} = 9\sqrt{2}$$

So, area of square = side^2

$$= 9\sqrt{2} \times 9\sqrt{2}$$

$$= 162 \text{ cm}^2$$

11. The volume of a cylinder having base radius 3 cm is 396 cm^3 . Find its curved surface area (in cm^2).

$$\left(\text{Use } \pi = \frac{22}{7} \right)$$

- (A) 280 (B) 301.5 (C) 264 (D) 320.6

Ans. Option (C) is correct.

Explanation:

Given that,

Radius of base of cylinder = 3 cm

Let the height of cylinder = h cm

Using, volume = $\pi r^2 h$

$$\Rightarrow 396 = \frac{22}{7} \times 3 \times 3 \times h$$

$$\Rightarrow h = 14 \text{ cm}$$

So, curved surface area = $2\pi rh$

$$= 2 \times \frac{22}{7} \times 3 \times 14$$

$$= 264 \text{ cm}^2$$

12. A tap can fill a tank in 6 hours. After half the tank is filled, three more similar taps are opened. What is the total time taken to fill the tank completely?

(A) 4 hours (B) 5 hours
(C) 3 hours 30 minutes (D) 3 hours 45 minutes

Ans. Option (D) is correct.

Explanation:

Given that half the tank is filled.
So, given tap can fill the remaining tank in
= 3 h
Hence, time taken by 4 similar taps to fill
half the tank

$$= \frac{3}{4} \text{ h} = \frac{3}{4} \times 60 \text{ min}$$

$$= 45 \text{ min}$$

So, total time taken to fill the tank
= 3 h 45 min

13. A train running at the speed of 80 km/h crosses a 350 m long tunnel in 36 seconds. The length of the train (in m) is

(A) 350 (B) 380 (C) 420 (D) 450

Ans. Option (D) is correct.

Explanation:

Speed of the train = 80 kmph

$$= 80 \times \frac{5}{18} \text{ m/s}$$

$$= \frac{200}{9} \text{ m/s}$$

Length of tunnel = 350 m

Let the length of train = x m

Using, distance = speed $\times$ time

$$\Rightarrow 350 + x = \frac{200}{9} \times 36$$

$$\Rightarrow x = 800 - 350 = 450$$

So, the length of train = 450 m

14. If the mean of 3, 4, 9, $2k$, 10, 8, 6 and $(k + 6)$ is 8, and mode of 2, 2, 3, $2p$, $(2p + 1)$, 4, 4, 5 and 6 (p is a natural number) is 4, then the value of $(k - 2p)$ is:

(A) 0 (B) 1 (C) 2 (D) 3

Ans. Option (D) is correct.

Explanation:

$$\text{Mean} = \frac{\text{sum of all observations}}{\text{total number of observations}}$$

Given that the mean of 3, 4, 9, $2k$, 10, 8, 6 and $k + 6$ is 8 and $k + 6 = 8$

$$\Rightarrow \frac{3 + 4 + 9 + 2k + 10 + 8 + 6 + k + 6}{8}$$

$$= 8$$

$$\Rightarrow 46 + 3k = 64$$

$$\Rightarrow k = 6$$

Also given that the mode of 2, 2, 3, $2p$, $(2p + 1)$, 4, 4, 5, 6 = 4

$$\text{Means } 2p + 1 = 4$$

$$\Rightarrow p = \frac{3}{2}$$

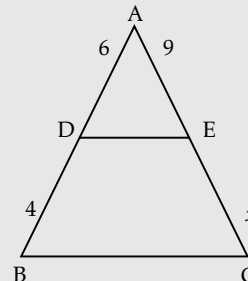
$$\text{So, } k - 2p = 6 - 2 \times \frac{3}{2} = 3$$

15. In triangle ABC, points D and E are on AB and AC, respectively such that DE is parallel to BC. If AD = 6 cm, DB = 4 cm, AE = 9 cm, then the length of EC (in cm) is:

(A) 7 (B) 6.4 (C) 6 (D) 5.5

Ans. Option (C) is correct.

Explanation:



According to the given conditions,

$$\triangle ABC \sim \triangle ADE.$$

$$\text{So, } \frac{AD}{AB} = \frac{AE}{AC}$$

$$\Rightarrow \frac{6}{10} = \frac{9}{9 + x}$$

$$\Rightarrow 54 + 6x = 90$$

$$\Rightarrow x = 6$$

$$\text{So, } EC = 6 \text{ cm}$$

16. If $\sin A = \frac{4}{5}$ then $(3 - \tan A)(2 + \cos A) =$

(A) $\frac{12}{5}$ (B) $\frac{13}{3}$ (C) $\frac{13}{5}$ (D) 3

Ans. Option (B) is correct.

Explanation:

$$\text{Given that } \sin A = \frac{4}{5}$$

$$\text{So, } \cos A = \sqrt{1 - \sin^2 A} = \sqrt{1 - \frac{16}{25}} = \frac{3}{5}$$

$$\text{Hence, } \tan A = \frac{(\sin A)}{(\cos A)} = \frac{4}{3}$$

So, the value of $(3 - \tan A)(2 + \cos A)$

$$= \left(3 - \frac{4}{3}\right) \left(2 + \frac{3}{5}\right) = \frac{5}{3} \times \frac{13}{5} = \frac{13}{3}$$

17. A man can row a boat at 8 km/h in still water. If the speed of the water current is 2 km/h and it taken he takes 2 hours to row to a place and come back, then how far off (in km) is the place?

(A) 7.5 (B) 6 (C) 9.5 (D) 10

Ans. Option (A) is correct.

Explanation:

Given that speed of boat = 8 km/h

And speed of stream = 2 km/h

So, downstream speed = $8 + 2$
 $= 10 \text{ km/h}$
 And upstream speed = $8 - 2$
 $= 6 \text{ km/h}$
 Let the distance is $x \text{ km}$ from starting point.
 According to the question,

$$\frac{x}{10} + \frac{x}{6} = 2$$

 $\Rightarrow 8x = 60$
 $\Rightarrow x = 7.5 \text{ km}$

18. From the given options, which pass connects Jammu with Srinagar?

- (A) Banihal Pass (B) Nathu La Pass
 (C) Niti Pass (D) Rohtang Pass

Ans. Option (A) is correct.

Explanation: Banihal Pass links Jammu with Srinagar in the Indian union territory of Jammu and Kashmir. The Jawahar Tunnel passes through it, making it a vital transportation corridor between the Kashmir Valley and the rest of India. Banihal Pass, a well-known pass in Jammu and Kashmir, is located in the Pir Panjal Range. It links Banihal with Qazigund.

Ans. Option (B) is correct.

Explanation:

Column A	Column B	Column C
Vishakhadatta	A famous Sanskrit poet known for his work "his work- 'Mudrakshasa' and 'Devichandraguptam'.	Poet
Kartikeya Sarabhai	An Indian industrialist and environmentalist known for his work in sustainable development.	Environmentalist
Charaka	An ancient Indian physician considered the "father of Indian medicine" and author of the Charaka Samhita, a foundational text of Ayurveda.	Medicine
Satyendra Nath Bose	A renowned Indian physicist who made significant contributions to quantum mechanics. He is famous for the Bose-Einstein condensate theory.	Physics/Mathematics

21. The following states were formed after 1960. What was the correct sequence of their formation?

- (A) Haryana (B) Sikkim
 (C) Nagaland (D) Goa

Choose the answer from the options given below:

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

Ans. Option (B) is correct.

Explanation: Here's the timeline of when these states were formed:

1. Nagaland: Formed on December 1, 1963.

19. Which of the following is not correctly matched regarding Padma Awards-2024?

- (A) Padma Vibhushan Award → Shri Konidela Chiranjeevi
 (B) Padma Shri Award → Mithun Chakraborty
 (C) Padma Bhushan Award → M. Fathima Beevi
 (D) Padma Bhushan Award → Sitaram Jindal

Ans. Option (B) is correct.

Explanation: Padma Awards are one of the country's highest civilian awards. These are conferred in three categories: Padma Vibhushan, Padma Bhushan and Padma Shri. Mithun Chakraborty was awarded with the Padma Bhushan Award, not the Padma Shri Award.

20. Match List-I with List-II :

	LIST-I (Person)		LIST-II (Area of work)
A.	Vishakhadatta	I.	Medicine
B.	Kartikeya Sarabhai	II.	Poet
C.	Charaka	III.	Environmentalism
D.	Satyendra Nath Bose	IV.	Mathematics

Choose the answer from the options given below:

- (A) A-I, B-III, C-IV, D-II (B) A-II, B-III, C-I, D-IV
 (C) A-II, B-I, C-III, D-IV (D) A-III, B-IV, C-I, D-II

2. Haryana: Formed on November 1, 1966.
 3. Sikkim: Became a state on May 16, 1975.
 4. Goa: Became a state on May 30, 1987.
 Therefore, the chronological order is Nagaland, Haryana, Sikkim and Goa.

22. Out of the given options, which scheme's objective is to conduct an annual survey at the gram panchayat level to monitor the progress in the development process of rural areas?

- (A) Mission Antyodaya (2022-23)
 (B) Mission Karmayogi (2022-23)
 (C) Mission Rashtriya Gokul (2022-23)
 (D) Mission Atmanirbhar Bharat (2022-23)

Ans. Option (A) is correct.

Explanation: Mission Antyodaya aims to identify the poorest individuals in rural India and ensure their inclusion in development programs while monitoring progress at the village level (gram panchayat). Mission Karmayogi focuses on civil service reforms, whereas Mission Rashtriya Gokul aims to enhance the quality and productivity of indigenous cows. Additionally, Mission Atmanirbhar Bharat is a comprehensive mission aimed at achieving self-reliance across various sectors.

23. Which one of the following countries is not a member of the "Quadrilateral Security Dialogue", also known as "QUAD" ?

(A) China (B) Japan (C) India (D) Australia

Ans. Option (A) is correct.

Explanation: China is not a member of the Quadrilateral Security Dialogue (QSD), also known as the Quad. The Quad is an informal, intergovernmental security forum established in 2007-08 among United States, Japan, Australia, and India. The Quad's primary objective is to work for a free, open, prosperous, and inclusive Indo-Pacific region.

24. Who has become the first woman chairperson of the Railway Board of Indian Railways in 2023 ?

(A) Jaya Verma Sinha (B) Mita Vashishth
(C) Ravneet Kaur (D) Vasudha Gupta

Ans. Option (A) is correct.

Explanation: The government has appointed Jaya Verma Sinha as the first woman Chairperson of the Railway Board, the highest decision-making body in the Ministry of Railways. Ms. Sinha is the first woman to lead the Board in its 118-year history, since its establishment in 1905.

25. Match List-I with List-II :

	LIST-I (Country)		LIST-II (Currency)
A.	Myanmar	I.	Ruble
B.	Russia	II.	Ngultrum
C.	Malaysia	III.	Kyat
D.	Bhutan	IV.	Ringgit

Choose the answer from the options given below:

(A) A-III, B-I, C-II, D-IV (B) A-III, B-I, C-IV, D-II
(C) A-IV, B-I, C-III, D-II (D) A-II, B-I, C-IV, D-III

Ans. Option (B) is correct.

Explanation: Here is the correct matching in column format:

List-I	List-II
(A) Myanmar	(III) Kyat
(B) Russia	(I) Ruble
(C) Malaysia	(IV) Ringgit
(D) Bhutan	(II) Ngultrum

26. "Jhulaghat Suspension Bridge" between India and which country has become fully operational now?

(A) Bhutan (B) Nepal
(C) China (D) Myanmar

Ans. Option (B) is correct.

Explanation: The Jhulaghat transit in the Baitadi district, connecting Nepal and India, commenced full operation on Wednesday, October 18, 2023. Previously under construction, the suspension bridge over the Mahakali River had been partially operational.

27. Due to ocean acidification when the ocean becomes more acidic, what happens to the pH level of the ocean?

(A) The pH level goes down.
(B) The pH level stays the same.
(C) The pH level goes up.
(D) The pH level becomes zero.

Ans. Option (A) is correct.

Explanation: As the ocean becomes more acidic, its pH level decreases. The pH scale is logarithmic, meaning a one-point change represents a tenfold change in acidity concentration. Since 1950, the average pH of the ocean surface has decreased from approximately 8.15 to 8.05, indicating a 15% increase in acidity.

28. Who is the first para-athlete to receive the Padma Bhushan award in India?

(A) Bhavina Patel
(B) Devendra Jhajharia
(C) Avani Lekhara
(D) Mariyappan Thangavelu

Ans. Option (B) is correct.

Explanation: Devendra Jhajharia made history by becoming the first para-athlete to be conferred with the Padma Bhushan, India's third-highest civilian award. Devendra is a 40-year old javelin thrower, Jhajharia celebrated for his achievements as a multiple-time Paralympic medalist.

29. Zemu Glacier is located in which state of India?

(A) Uttarakhand (B) Himachal Pradesh
(C) Sikkim (D) Arunachal Pradesh

Ans. Option (C) is correct.

Explanation: Zemu Glacier is situated at the base of Kangchenjunga in the Himalayan region of Sikkim, India. It is the largest glacier in the Eastern Himalayas. It spans approximately 26 kilometres (16 miles) in length. The Zemu Glacier drains the east side of Kangchenjunga, the world's third-highest mountain.

30. Who among the following is Chile's first woman President?

(A) Mary Robinson (B) Michelle Bachelet
(C) Kim Campbell (D) Jennifer Shipley

Ans. Option (B) is correct.

Explanation: Michelle Bachelet served as the first female president of Chile from 2006 to 2010 and was re-elected in December 2013, securing over 62% of the vote. Her re-election marked the first time since 1932 that the president of Chile had won two competitive elections.

31. Which organisation developed and launched 'Ugram' Indigenous Assault Rifle for the armed forces?

(A) ISRO (B) BEL (C) HAL (D) DRDO

Ans. Option (D) is correct.

Explanation: The Defence Research and Development Organisation (DRDO) has introduced an indigenous assault rifle named 'Ugram' aimed at fulfilling the operational needs of the armed forces, paramilitary forces, and state police organisations.

32. Which of the following substances is a bad conductor of electricity?

(A) Diamond (B) Gold
(C) Silver (D) Graphite

Ans. Option (A) is correct.

Explanation: Gold, silver and graphite are excellent conductors of electricity because they have free-flowing electrons that can easily carry electric current. However, diamond, despite being an exceptional conductor of heat, has a tightly packed crystal structure that restricts the movement of electrons. This structural characteristic makes a diamond a poor conductor of electricity.

33. Which of the following diseases is caused due to the deficiency of proteins?

(A) Arthritis (B) Kwashiorkor
(C) Goitre (D) Night Blindness

Ans. Option (B) is correct.

Explanation: Kwashiorkor is a disease resulting from severe protein deficiency and is also referred to as edematous malnutrition due to its link with edema. Symptoms include swollen ankles and feet, a distended abdomen, fatty liver, thinning hair, dermatitis and tooth loss. Children may additionally exhibit anorexia and irritability as part of the condition.

34. Match List I with List II.

	LIST I		LIST II
A.	INS Chilka	I.	Goa
B.	INS Hansa	II.	Andhra Pradesh
C.	INS Satavahana	III.	Kerala
D.	INS Garuda	IV.	Odisha

Choose the most appropriate answer from the options given below:

(A) A-III, B-I, C-II, D-IV (B) A-I, B-IV, C-II, D-III
(C) A-IV, B-I, C-III, D-II (D) A-IV, B-I, C-II, D-III

Ans. Option (D) is correct.

Explanation: Here is the corrected matching of the locations:

List-I	List-II
(A) INS Chilka	(IV) Odisha (For training Sailors)
(B) INS Hansa	(I) Goa (For Naval Aviation)
(C) INS Satavahana	(II) Visakhapatnam, Andhra Pradesh (For Submarines)
(D) INS Garuda	(III) Kochi, Kerala (For Naval Air Station)

35. DRDO has conducted the first successful flight test of Agni-5 missile equipped with MIRV technology. What is the full form of MIRV?

(A) Multiple Independently Targetable Re-Entry Vehicle
(B) Mission India Target Re-Entry Vehicle
(C) Multiple Independently Technology Re-Entry Vehicle
(D) Multiple Indirect Targetable Re-Entry vehicle

Ans. Option (A) is correct.

Explanation: The Defence Research and Development Organisation (DRDO) successfully conducted the first flight test of the indigenously developed Agni-5 missile equipped with Multiple Independently Targetable Re-entry Vehicle (MIRV) technology. Named Mission Divyastra, the test took place at Dr APJ Abdul Kalam Island in Odisha. Telemetry and radar stations monitored multiple re-entry vehicles throughout the mission, which met all specified parameters.

36. Which Indian has won the "Ramon Magsaysar Award-2023"?

(A) Korvi Rakshand (B) Ashwini Kumar
(C) Dipti Ranjan Sahoo (D) Dr. Ravi Kannan R

Ans. Option (D) is correct.

Explanation: Dr R Ravi Kannan, a surgical oncologist based in Assam, has been awarded the Ramon Magsaysay Award 2023 for his transformative work in cancer treatment. His people-centred and pro-poor programmes have revolutionised cancer care in Assam, earning him this prestigious recognition.

37. Who has been appointed the Chairman of the 16th Finance Commission of India?

(A) Ajay Narayan Jha
(B) Smt. Annie George Mathew
(C) Pradip Kumar Mohanty
(D) D. Arvind Panagariya

Ans. Option (D) is correct.

Explanation: The Sixteenth Finance Commission was established on December 31, 2023, with Shri Arvind Panagariya, former Vice-Chairman of NITI Aayog, appointed as its Chairman. This Commission has been tasked with presenting its recommendations by October 31, 2025, covering a 5-year award period starting from April 1, 2026.

38. Sri Rangnathswamy Temple which is situated in Tamil Nadu, is dedicated to which deity?

- (A) Lord Shiva (B) Lord Vishnu
(C) Goddess Durga (D) Goddess Lakshmi

Ans. Option (B) is correct.

Explanation: The Sri Ranganathaswamy Temple, also known as Thiruvavangur Tirupati, is one of the most revered Vaishnavite temples in India. It is dedicated to Ranganatha, an aspect of the Hindu deity Vishnu depicted in a reclining posture.

39. The Election Commission of India gets the power to conduct elections from which of the following articles?

- (A) Article 324 (B) Article 280
(C) Article 264 (D) Article 26

Ans. Option (A) is correct.

Explanation: The Election Commission of India gets the power to conduct elections from Article 324 of the Indian Constitution. This article empowers the Election Commission to supervise and conduct elections to the Parliament of India, State Legislatures and the offices of the President and Vice President of India.

40. Match List I with List II.

	LIST-I		LIST-II
A.	Mon	I.	Arunachal Pradesh
B.	Nalbari	II.	Assam
C.	Pasighat	III.	Meghalaya
D.	Tura	IV.	Nagaland

Choose the most appropriate answer from the options given below:

- (A) A-IV, B-II, C-I, D-III (B) A-I, B-III, C-IV, D-II
(C) A-IV, B-III, C-I, D-II (D) A-I, B-II, C-IV, D-III

Ans. Option (A) is correct.

Explanation: Here is the corrected matching of locations with their descriptions:

List-I	List-II
(A) Mon	(IV) Nagaland – This town is known for its rich handicraft traditions, including textiles, woodcarvings, and metalwork.
(B) Nalbari	(II) Assam – This district is famous for its bamboo and cane crafts, including furniture, utensils and decorative items.

(C) Pasighat	(I)	Arunachal Pradesh – This town is known for its weaving, woodcarving and metalwork, and is a centre for the production of traditional dresses and souvenirs.
(D) Tura	(III)	Meghalaya – This city is a hub for weaving and other handicrafts, particularly known for its production of colourful textiles, baskets, and other woven goods.

41. In which state is “Amachang Wildlife Sanctuary” located?

- (A) Assam (B) Rajasthan
(C) Odisha (D) Manipur

Ans. Option (A) is correct.

Explanation: The Amchang Wildlife Sanctuary is situated on the eastern outskirts of Guwahati, Assam, India. Its name is derived from Arleng village, known as Amcheng, which lies within the sanctuary. This protected area is renowned for its diverse wildlife, including rare and endangered birds and animals.

42. India’s first 3D-printed Post Office has been inaugurated in:

- (A) Guwahati (B) Kolkata
(C) Mumbai (D) Bengaluru

Ans. Option (D) is correct.

Explanation: The 3D-printed Post Office in India was inaugurated at Cambridge Layout in east Bengaluru by Ashwini Vaishnaw, Union Minister for Railways, Communications, Electronics & Information Technology. This innovative facility is noted as the first commercial building in India constructed using 3D-printing technology and spans a built-up area of 1,000 square feet.

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

A1X, B4P, E25J, J100F, ?

- (A) O289D (B) O225E (C) Q289D (D) Q225E

Ans. Option (C) is correct.

Explanation:

Given series, A1X, B4P, E25J, J100F, ?

Pattern followed:

$$A + 1 = B + 3 = E + 5 = J$$

$$\Rightarrow J + 7 = Q$$

$$\text{And } X - 8 = P - 6 = J - 4 = F$$

$$\Rightarrow F - 2 = D$$

And numbers are the square of first alphabet in given series.

So, missing term = Q289D

44. In the given analogy, choose the word which will replace the question mark:
NEGI : MVTR : SING : ?

(A) TRNS (B) TRNT (C) FRMT (D) HRMT

Ans. Option (D) is correct.

Explanation:

Given, NEGI : MVTR :: SING : ?

Pattern followed:

Each alphabet of second word is opposite alphabet of first word.

N $\Rightarrow$ M

E $\Rightarrow$ V

G $\Rightarrow$ T

I $\Rightarrow$ R

Now, S $\Rightarrow$ H

I $\Rightarrow$ R

N $\Rightarrow$ M

G $\Rightarrow$ T

Hence, missing term = HRMT

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

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

Ans. Option (B) is correct.

Explanation:

Given code,

Ki ru pi $\Rightarrow$ nobody like cruel(1)

Ki mi cha $\Rightarrow$ king was cruel(2)

Ru pi cha $\Rightarrow$ nobody like king(3)

From (1) and (2), code for cruel $\Rightarrow$ ki

From (2) and (3), code for king $\Rightarrow$ cha

From (1) and (3), code for nobody $\Rightarrow$ pi

So, code for was $\Rightarrow$ mi

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

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

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

'P $\times$ Q' means that 'P is the husband of Q'

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

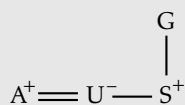
Which of the following means 'A' is the son-in-law of G?

(A) A $\times$ U + S $\times$ G (B) A + S % U $\times$ G

(C) A - S + U $\times$ G (D) A $\times$ U % S + G

Ans. Option (D) is correct.

Explanation:



According to the above diagram, A is son-in-law of G.

From the given options, only option (D) showing that A is son in law of G.

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

(A) Sunday (B) Monday

(C) Tuesday

(D) Wednesday

Ans. Option (B) is correct.

Explanation:

Total number of odd days between 26th January and 16th March

$$= 5 + 29 + 16 = 50$$

Number of odd days

$$= \text{remainder of } \frac{50}{7} = 1$$

So, day on 16th March

= Sunday + 1

= Monday

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

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

Ans. Option (C) is correct.

Explanation:

Angle between minute hand and hour hand at quarter past three

$$= 30 \times 3 - \frac{11}{2} \times 15$$

$$= 7\frac{1}{2}^\circ$$

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

(A) FPXFSMSM

(B) FPWESMSM

(C) FPWESNSN

(D) FPWFTNSM

Ans. Option (B) is correct.

Explanation:

Given pattern:

$$M + 1 = N$$

$$E + 2 = G$$

$$R + 3 = U$$

$$C + 4 = G$$

$$U + 5 = Z$$

$$R + 6 = X$$

$$Y + 7 = F$$

So, $E + 1 = F$

$$N + 2 = P$$

$$T + 3 = W$$

$$A + 4 = E$$

$$N + 5 = S$$

$$G + 6 = M$$

$$L + 7 = S$$

$$E + 8 = M$$

Hence, the code for ENTANGLE will be: FPWESMSM

50. The problem given below consists of a question and two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question.

(I) Sunny is the only son of his parents.

(II) Sunny's parents have three children.

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

Ans. Option (C) is correct.

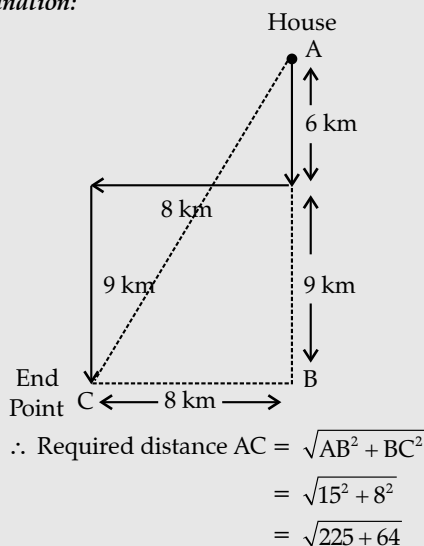
Explanation: From statement I: it is clear that Sunny is the only son.
 From statement II: it is clear that Sunny has two sisters.
 Statements I and II together are sufficient to answer the question.

51. A boy leaves his house. He travels 6 km towards South, then travels 8 km towards West and further travels 9 km towards South. How far and in which direction is he from his house now?

- (A) 13 km, South West (B) 17 km, South West
 (C) 17 km, North West (D) 13 km, West

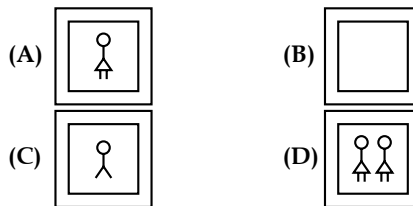
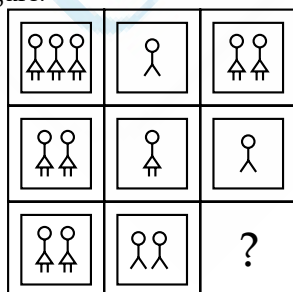
Ans. Option (D) is correct.

Explanation:



So, he is 17 km away in south west direction from his house.

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



Ans. Option (B) is correct.

Explanation:

Given pattern: Difference between the number of persons in 1st and 2nd columns will be in 3rd column.

Number of persons in 1st column - Number of persons in 2nd column = Number of persons in 3rd column

So, option (B) is correct.

53. A clock seen through a mirror shows 'quarter to seven' What is the correct time shown by the clock?

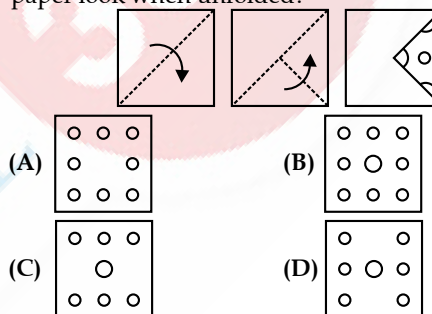
- (A) 6:15 (B) 6:17 (C) 5:17 (D) 5:15

Ans. Option (D) is correct.

Explanation:

Given that the time seen through mirror = 6:45
 So, actual time = 11:60 - 6:45 = 5:15

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



Ans. Option (B) is correct.

Explanation:

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

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

	C		C	
A	80	?	44	F
	5		20	
?	G	8	13	E
			I	

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

Ans. Option (B) is correct.

Explanation:

Given Pattern:

For numbers: Starting from 5, next number in anticlockwise direction is obtained by adding consecutive prime numbers, i.e.,

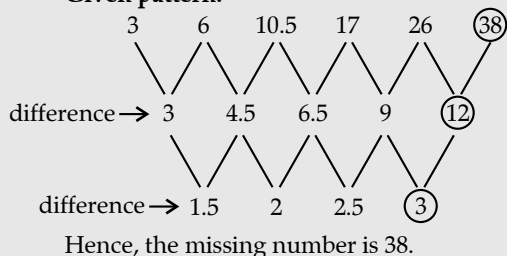
$5 + 3 = 8$
 $8 + 5 = 13$
 $13 + 7 = 20$
 $20 + 11 = 31$
 $31 + 13 = 44$
 So, missing number = $44 + 17 = 61$
 For alphabets: in every rectangle, the difference in alphabets is in increasing order, i.e.,
 $A + 2 = C$
 $C + 3 = F$
 $E + 4 = I$
 So, missing alphabet = $G + 5 = L$

56. What will be the next number of the series.
 3, 6, 10.5, 17, 26, ?
 (A) 31 (B) 38 (C) 40 (D) 41

Ans. Option (B) is correct.

Explanation:

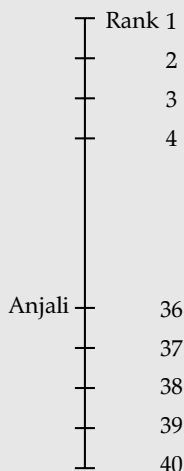
Given pattern:



57. In a class of 40 students, Anjali's rank is thrice that of Anita. There are 4 students who have ranks worse than that of Anita's rank in the class is:
 (A) 9th (B) 10th (C) 18th (D) 12th

Ans. Option (D) is correct.

Explanation:



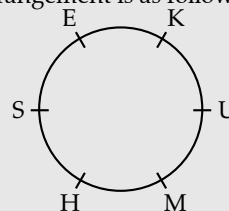
According to the question,
 $(\text{Anita rank}) \times 3 = \text{Anjali rank}$
 $\therefore \text{Anita rank} = \frac{36}{3} = 12^{\text{th}}$

58. Six people E, H, K, M, S and U are seated in a circle facing the centre. U and H are immediate neighbours of M, E is the only person sitting between K and S. H is to the immediate right of S. Who is to the immediate right of U?
 (A) M (B) E (C) K (D) S

Ans. Option (C) is correct.

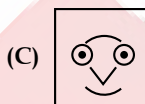
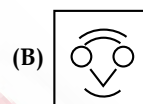
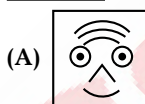
Explanation:

Sitting arrangement is as follows:



So, K is the immediate right of U.

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



Ans. Option (D) is correct.

Explanation:

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

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

Statements:

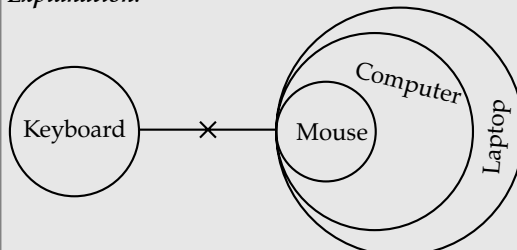
No keyboard is a mouse.
 All mice are computers.
 All computers are laptops.

Conclusions:

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

Ans. Option (D) is correct.

Explanation:



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