CUET UG (General Test)

29 May 2024 Shift 1

Question 1

The sum of the digits of a two-digit number is 10. If 18 is subtracted from it, the digits in the resulting number will be equal. The number is :

Options:

A. 75

B. 73

C. 65

D. 64

Answer: D

Solution:

Given:

The sum of the digits of a two-digit number is 10.

If 18 is subtracted from it, the digits in the resulting number will be equal.

Formula Used:

Let the two-digit number be 10a + b, where a and b are the digits of the number.

a + b = 10

(10a + b) - 18 = 10b + a

Calculation:

From the second equation:

10a + b - 18 = 10b + a

⇒ 10a - a + b - 10b = 18

⇒ 9a - 9b = 18

⇒ a - b = 2

Now, we have two equations:

1) a + b = 10

2) a - b = 2

Adding these two equations:

a + b + a - b = 10 + 2

⇒ 2a = 12

⇒ a = 6

Substitute a = 6 in equation 1:

6 + b = 10

⇒ b = 4

The number is 10a + b = 10×6 + 4 = 64

The number is 64.

Question 2

In the given question, a statement is given followed by some conclusions. Choose the conclusion(s) which logically follow(s) the given statement.

Statement : Few shops on this road have neon lights, but they all have signboards.

Conclusions :

I. Some shops have either signboards or neon lights.

II. Some shops have no signboards.

III. Some shops have no neon lights.

IV. Some shops have both signboards and neon lights.

The conclusion(s) correctly drawn is/are :

Options:

A. IV alone

B. I alone

C. II and III

D. III and IV

Answer: D

Solution:

Given,

Statement:

Few shops on this road have neon lights, but they all have signboards.

Conclusions:

I. Some shops have either signboards or neon lights. **- False**(Becausethe statement says that Few shops on this road have neon lights, but they all have signboards. Therefore, all shops have signboards, and some of those shops have neon lights.)

II. Some shops have no signboards. **- False** (Because, the statement says that all shops have signboards.)

III. Some shops have no neon lights. **- True** (Because, the statement says that only a few shops have neon lights, implying that some shops do not have neon lights.)

IV. Some shops have both signboards and neon lights. **- True** (Because, the statement says that all shops have signboards and few have neon lights. Therefore, some shops have both signboards and neon lights)

So, Conclusions I, III and IV follow.

Hence, the correct answer is **"Option 4"** (III and IV).

Question 3

Anubhav spent 14% of his income on electricity bills, 28% on rent and 18% on shopping. If $\frac{1}{4}^{th}$ remaining amount is Rs. 5120, how much did he spend on electricity bills ?

Options:

A. Rs.7160

B. Rs.7168

C. Rs.8160

D. Rs.9000

Answer: B

Solution:

Given:

Anubhav spent 14% of his income on electricity bills, 28% on rent, and 18% on shopping.

$\frac{1}{4}$th of the remaining amount is Rs. 5120.

Formula Used:

Total Income = Total Expenses + Remaining Amount

Remaining Amount = Total Income - (Electricity Bills + Rent + Shopping)

Electricity Bills = 14% of Total Income

Calculation:

Let Anubhav's total income be x .

Expenses on electricity bills = 14% of x = 0.14x

Expenses on rent = 28% of x = 0.28x

Expenses on shopping = 18% of x = 0.18x

Remaining Amount = x - (0.14x + 0.28x + 0.18x)

Remaining Amount = x - 0.60x = 0.40x

$\frac{1}{4}$th of Remaining Amount = Rs. 5120

$\frac{1}{4}\times$ 0.40x = 5120

0.10x = 5120

⇒ x = 5120/0.10

⇒ x = 51200

Anubhav's total income = Rs. 51200

Expenses on electricity bills = 14% of 51200

⇒ 0.14 × 51200 = 7168

Therefore, Anubhav spent Rs. 7168 on electricity bills.

Question 4

If the average of p numbers is q^2 and that of q numbers is p^2, then the average of (p + q) numbers is :

Options:

A. $\frac{p}{q}$

B. p + q

C. pq

D. p – q

Answer: C

Solution:

Given:

The average of p numbers = q^2

The average of q numbers = p^2

Formula Used:

Average of (p + q) numbers = (Sum of p numbers + Sum of q numbers) / (p + q)

Calculation:

Sum of p numbers = p × q^2

Sum of q numbers = $q \times p^2$

Total Sum = $p \times q^2 + q \times p^2$

Total numbers = p + q

Average of (p + q) numbers = $(p \times q^2 + q \times p^2) / (p + q)$

Average of (p + q) numbers = $pq(p + q) / (p + q)$

Average of (p + q) numbers = pq

The correct answer is option 3.

Question 5

Ajay walks at a speed of 4 km/hr. He doubles his speed after reaching exactly half way. He walks for 12 hours in all. What is the total distance travelled by him ?

Options:

A. 32 km

B. 30 km

C. 64 km

D. 60 km

Answer: C

Solution:

Given:

Ajay's initial speed = 4 km/hr

Total time walked = 12 hours

He doubles his speed after reaching halfway.

Formula Used:

Total Distance = Distance at initial speed + Distance at doubled speed

Calculation:

Let the total distance be D km.

Time to cover the first half (D/2) at 4 km/hr:

Time = Distance / Speed

$Time_1 = (D/2) / 4$

$Time_1 = D / 8$

Time to cover the second half (D/2) at 8 km/hr:

$Time_2 = (D/2) / 8$

$Time_2 = D / 16$

Total time walked = $Time_1 + Time_2$

$12 = D / 8 + D / 16$

$\Rightarrow 12 = (2D + D) / 16$

$\Rightarrow 12 = 3D / 16$

$\Rightarrow 12 \times 16 = 3D$

$\Rightarrow 192 = 3D$

$\Rightarrow D = 192 / 3$

$\Rightarrow D = 64$ km

The total distance travelled by Ajay is 64 km.

Question 6

Aman can go downstream thrice as fast as he can go upstream between two specific points on a river. If the river flows at 8 kmph, what is the speed of the boat in still water (in kmph) ?

Options:

A. 14 kmph

B. 15 kmph

C. 16 kmph

D. 18 kmph

Answer: C

Solution:

Given:

Aman can go downstream thrice as fast as he can go upstream between two specific points on a river.

Speed of the river flow = 8 kmph

Formula Used:

Let the speed of the boat in still water be x kmph.

Downstream speed = x + 8 kmph

Upstream speed = x - 8 kmph

According to the given condition: Downstream speed = 3 × Upstream speed

Calculation:

Given:

x + 8 = 3 ×(x - 8)

Solving the equation:

⇒ x + 8 = 3x - 24

⇒ 8 + 24 = 3x - x

⇒ 32 = 2x

⇒ x = 16

The speed of the boat in still water is 16 kmph.

Question 7

A shopkeeper earned a profit (in ₹) by selling an item, which is three times the discount offered (in ₹). If the discount offered is 6.25%, what is his profit percentage ?

Options:

A. 20%

B. 25%

C. 10%

D. 12%

Answer: B

Solution:

Given:

Discount % = 6.25%

Profit = 3 × Discount

Formula used:

Profit % = $\frac{Profit}{CostPrice} \times 100$

Calculation:

Let MRP = ₹100

Discount = 6.25% of 100 = ₹6.25

Selling Price = 100 - 6.25 = ₹93.75

Profit = 3 × 6.25 = ₹18.75

Cost Price = 93.75 - 18.75 = ₹75

Profit % = $\frac{18.75}{75} \times 100$

⇒ Profit % = 25%

∴ The correct answer is option (2).

Question 8

The total population of a town is 50,000. The number of males and females increases by 10% and 15% respectively and consequently the

population of the town becomes 56,000. What was the number of males in the town ?

Options:

A. 20,000

B. 30,000

C. 35,000

D. 40,000

Answer: B

Solution:

Given:

Total population of the town = 50,000

Population after increase = 56,000

Increase in males = 10%

Increase in females = 15%

Calculation:

Let the number of males be M.

Let the number of females be F.

Total population: M + F = 50,000

After increase: M ×1.10 + F × 1.15 = 56,000

We have two equations:

1) M + F = 50,000

2) 1.10M + 1.15F = 56,000

From equation (1): F = 50,000 - M

Substitute F in equation (2):

1.10M + 1.15(50,000 - M) = 56,000

Simplify:

1.10M + 57,500 - 1.15M = 56,000

⇒ -0.05M + 57,500 = 56,000

⇒ -0.05M = 56,000 - 57,500

⇒ -0.05M = -1,500

⇒ M = -1,500 / -0.05

⇒ M = 30,000

The number of males in the town was 30,000.

Question 9

A 6-digit number has digits as consecutive natural numbers. The number is always divisible by :

Options:

A. 3

B. 4

C. 5

D. 2

Answer: A

Solution:

Given:

A 6-digit number is formed using consecutive natural numbers.

Formula used:

Any number with digits as consecutive natural numbers (e.g., 123456, 234567, etc.) follows a pattern and must be tested for divisibility.

Calculation:

Take example: 123456

Check divisibility:

123456 ÷ 3 = 41152 → divisible

123456 ÷ 6 = 20576 → divisible

123456 ÷ 9 = 13717.33 → not divisible

Try another: 234567

234567 ÷ 3 = 78189 → divisible

234567 ÷ 6 = 39094.5 → not divisible

So only consistent divisibility for all such numbers is by 3

∴ **The correct answer is option (2) 3.**

Question 10

The average of 101 consecutive odd numbers is 303. Find the largest number.

Options:

A. 373

B. 401

C. 403

D. 409

Answer: C

Solution:

Given:

Average of 101 consecutive odd numbers = 303

Formula used:

Average = Middle term (when count is odd)

Largest number = Middle term + (n - 1)/2 × 2

Calculation:

Middle term = 303

Total numbers = 101

⇒ Largest number = 303 + (101 - 1)/2 × 2

⇒ Largest number = 303 + 50 × 2

⇒ Largest number = 303 + 100

⇒ Largest number = 403

∴ **The correct answer is 403.**

Question 11

If A : B = 5 : 6 and B : C = 6 : 7, then A + B : B + C : A + C is :

Options:

A. 10 : 12 : 11

B. 9 : 11 : 10

C. 11 : 13 : 12

D. 19 : 21 : 20

Answer: C

Solution:

Given:

If A : B = 5 : 6 and B : C = 6 : 7,

Formula Used:

If A : B = p : q and B : C = r : s, then A : B : C = p : q : (qs / r)

Calculation:

A : B = 5 : 6

B : C = 6 : 7

⇒ A : B : C = 5 : 6 : (7)

Let A = 5k, B = 6k, C = 7k

⇒ A + B = 5k + 6k = 11k

⇒ B + C = 6k + 7k = 13k

⇒ A + C = 5k + 7k = 12k

Therefore, A + B : B + C : A + C = 11k : 13k : 12k

⇒ A + B : B + C : A + C = 11 : 13 : 12

The correct answer is option 3: 11 : 13 : 12

Question 12

Aman can do 50% of the job in 16 days, and Bhanu can do 25% of the job in 24 days. In how many days can they do $\frac{1}{4}^{th}$ of the job working together ?

Options:

A. 6 days

B. 8 days

C. 10 days

D. 12 day

Answer: A

Solution:

Given:

Aman does 50% job in 16 days ⇒ 100% in 32 days

Bhanu does 25% job in 24 days ⇒ 100% in 96 days

Formula used:

Work together rate = (1/Aman's time) + (1/Bhanu's time)

Time = Work / Rate

Calculation:

Aman's 1 day work = 1/32

Bhanu's 1 day work = 1/96

⇒ Combined 1 day work = 1/32 + 1/96

⇒ LCM of 32 and 96 = 96

⇒ (3 + 1)/96 = 4/96 = 1/24

They complete 1/24 of job per day

Time to do 1/4 of job = (1/4) ÷ (1/24)

⇒ 1/4 × 24 = 6 days

∴ **The correct answer is 6 days.**

Question 13

In 80 litres mixture of milk and water, the ratio of amount of milk to that of amount of water is 7 : 3. In order to make this ratio 2 : 1, how many litres of water should be added ?

Options:

A. 5 litres

B. 6 litres

C. 4 litres

D. 10 litres

Answer: C

Solution:

Given:

Total mixture = 80 litres

Milk : Water = 7 : 3

Target ratio = 2 : 1

Formula used:

Milk quantity remains unchanged, only water is added

Calculation:

Milk = (7/10) × 80 = 56 litres

Water = (3/10) × 80 = 24 litres

Let x litres of water be added

⇒ New water = 24 + x

⇒ New ratio = 56 : (24 + x) = 2 : 1

⇒ 56 / (24 + x) = 2 / 1

⇒ 56 = 2 × (24 + x)

⇒ 56 = 48 + 2x

⇒ 2x = 8

⇒ x = 4

∴ **The correct answer is 4 litres.**

Question 14

In a triangle PQR, if ∠P +∠R = 150° and ∠P + 3∠Q = 170°, then ∠P is equal to :

Options:

A. 70°

B. 80°

C. 75°

D. 65°

Answer: B

Solution:

Given:

In a triangle PQR, if ∠P + ∠R = 150º and ∠P + 3∠Q = 170º

Formula Used:

Sum of all angles in a triangle = 180º

Calculation:

Let ∠P = P, ∠Q = Q, and ∠R = R

Given:

P + R = 150º ...(i)

P + 3Q = 170º ...(ii)

From the sum of angles in a triangle:

P + Q + R = 180º ...(iii)

From (i), R = 150º - P

Substitute R in (iii):

P + Q + (150º - P) = 180º

Q = 30º

Substitute Q in (ii):

P + 3 × 30º = 170º

P + 90º = 170º

P = 80º

Therefore, ∠P is equal to 80º.

Question 15

Aman invested Rs. (P + 3000) for 3 years at 8% simple interest. Anuj invested an amount of Rs. P for 2 years at 12% compound interest and received the same amount of interest as Aman received. Find the amount that is invested by Anuj. (1) ₹(2) ₹(3) ₹(4) ₹

Options:

A. Rs.60,000

B. Rs.45,000

C. Rs.50,000

D. Rs.55,000

Answer: C

Solution:

Given:

Aman's investment = (P + 3000)

Time = 3 years, Rate = 8% (Simple Interest)

Anuj's investment = P

Time = 2 years, Rate = 12% (Compound Interest)

Interest earned by both is same

Formula used:

SI = (P × R × T)/100

CI = $P(1 + \frac{r}{100})^t - 1$

Calculation:

Aman's SI = (P + 3000) × 8 × 3 / 100

⇒ Aman’s SI = (P + 3000) × 24 / 100

⇒ Aman’s SI = (24P + 72000)/100

Anuj’s CI = P × [(1 + 12/100)^2 - 1]

⇒ CI = P × [(1.12)^2 - 1]

⇒ CI = P × [1.2544 - 1] = P × 0.2544

Equating both:

⇒ (24P + 72000)/100 = 0.2544P

⇒ 24P + 72000 = 25.44P

⇒ 72000 = 25.44P - 24P

⇒ 72000 = 1.44P

⇒ P = 72000 / 1.44

⇒ P = 50000

∴ The correct answer is ₹50000

Question 16

In the Delhi zoo, there are some ducks and rabbits. If the heads are counted there are 160, while the legs are 450. What will be number of ducks in the zoo ?

Options:

A. 90

B. 92

C. 95

D. 99

Answer: C

Solution:

Given:

Total heads = 160

Total legs = 450

Ducks have 2 legs, Rabbits have 4 legs

Formula used:

Let number of ducks = x, then rabbits = 160 - x

Total legs = (Ducks × 2) + (Rabbits × 4)

Calculation:

⇒ 2x + 4(160 - x) = 450

⇒ 2x + 640 - 4x = 450

⇒ -2x + 640 = 450

⇒ -2x = 450 - 640

⇒ -2x = -190

⇒ x = 95

∴ **The number of ducks is 95.**

Question 17

Ankit and Raju decided to start a business and they invested Rs. 5500 and Rs. 6500 respectively. After 11 months, the difference between their profits is Rs. 680. Find the total profit.

Options:

A. Rs.8160

B. Rs.7260

C. Rs.7000

D. Rs.6500

Answer: A

Solution:

Given:

Ankit's investment = ₹5500

Raju's investment = ₹6500

Time = 11 months for both

Difference in profit = ₹680

Formula used:

Profit share ∝ Investment × Time

Difference in profit = (Raju's share - Ankit's share)

Calculation:

Ankit's share = 5500 × 11 = 60500

Raju's share = 6500 × 11 = 71500

Ratio = 60500 : 71500 = 121 : 143

Difference in ratio = 143 - 121 = 22 parts

⇒ 22 parts = ₹680

⇒ 1 part = ₹680 ÷ 22 = ₹30.91

Total parts = 121 + 143 = 264

Total profit = 264 × 30.91 = ₹8160.24

∴ **The total profit is approximately ₹8160**

Question 18

PQR is a triangle. The bisectors of the internal angle ∠Q and external angle ∠R intersect at M. If ∠QMR = 40°, then ∠P is :

Options:

A.

75°

B.

60°

C.

65°

D.

80°

Answer: D

Solution:

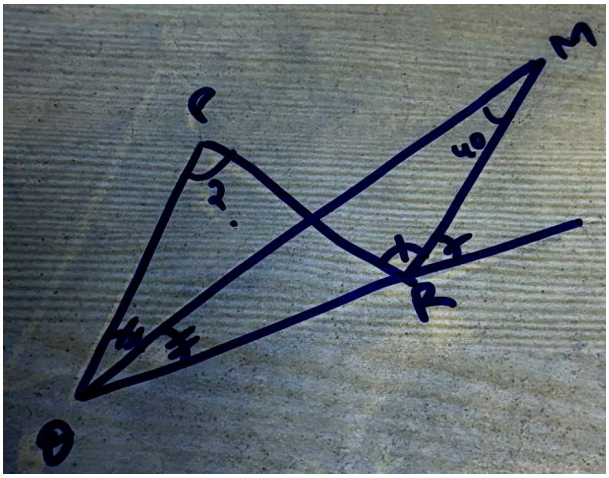
Given:

∠QMR = 40°, MQ and MR are internal and external angle bisectors

Formula used:

Triangle angle sum = ∠P + ∠Q + ∠R = 180°

Calculation:



∠QMR = ½(∠Q + 180° − ∠R)

⇒ 40° = ½(∠Q + 180° − ∠R)

⇒ 80° = ∠Q + 180° − ∠R

⇒ ∠Q = ∠R − 100°

⇒ ∠P + ∠Q + ∠R = 180°

⇒ ∠P + (∠R − 100°) + ∠R = 180°

⇒ ∠P = 280° − 2∠R

Let ∠R = 100°, then ∠P = 280° − 200° = 80°

∴ The correct answer is ∠P = 80°

Question 19

What is the name of the alloy which is obtained after mixing mercury with another metal ?

Options:

A. Solder

B. Amalgam

C. Duralumin

D. Pewter

Answer: B

Solution:

The correct answer is **Amalgam**.

Key Points

- An **amalgam** is an **alloy of mercury** with one or more other metals.
- These alloys are formed through the **process of amalgamation**, where mercury reacts with other metals.
- Amalgams are commonly used in **dental fillings** due to their durability and ease of application.
- They are also used in the extraction of **precious metals like gold and silver** from their ores.
- The use of amalgams dates back to ancient times and has been pivotal in various **industrial applications**.

Additional Information

- **Solder**
  - **Solder** is a fusible metal alloy used to join metal workpieces together.
  - It typically consists of a combination of **tin and lead**, although other metals can be used.
  - Solder is widely used in **electronics** to create strong, conductive joints.
- **Duralumin**
  - **Duralumin** is an alloy primarily composed of **aluminum** and **copper**, with small amounts of manganese, magnesium, and iron.
  - It is known for its **lightweight** and **high strength**, making it ideal for **aerospace** applications.
- **Pewter**
  - **Pewter** is a malleable metal alloy, traditionally composed of **tin** with **copper**, **antimony**, and sometimes **bismuth**.
  - It has been used for **tableware** and **decorative objects** for centuries.

Question 20

What is the name of the scheme launched by the Defence Minister at DefConnect 2024 to foster innovation in defence technology ?

Options:

A. INNOVATE

B. TECHBOOST

C. ADITI

D. DEFEND

Answer: C

Solution:

The correct answer is **ADITI**.

Key Points

- The **ADITI** scheme is an initiative launched by the **Defence Minister** of India.
- It was introduced during the **DefConnect 2024** event.
- The main objective of the ADITI scheme is to **foster innovation in defence technology**.
- The scheme aims to provide a platform for **startups, entrepreneurs, and innovators** to contribute to the defence sector.
- ADITI stands for **Advanced Defence Innovation and Technology Incubation**.
- It focuses on **research and development** and aims to encourage **technological advancements** in defence.
- The scheme is part of India's efforts to strengthen **self-reliance in defence** and reduce dependency on foreign technology.

Additional Information

- **INNOVATE**
  - The term **Innovate** generally refers to the act of introducing something new, such as a new idea, method, or device.
  - In the context of schemes, it could refer to initiatives aimed at promoting creativity and new solutions.
- **TECHBOOST**
  - **TechBoost** could imply a program designed to enhance technological capabilities.
  - Such a scheme would likely focus on accelerating technological growth and development.
- **DEFEND**
  - **DEFEND** might refer to a program aimed at strengthening defence mechanisms.
  - It could involve initiatives to improve defence strategies, technologies, and infrastructure.

Question 21

Who is the author of the book “Kashmir : Travels in Paradise on Earth” ?

Options:

A. Romesh Bhattacharji

B. Vikram Seth

C. Jhumpa Lahiri

D. Shamas Faqir

Answer: A

Solution:

The Correct answer is **Romesh Bhattacharji**.

Key Points

- **Romesh Bhattacharji** is the author of the book "**Kashmir: Travels in Paradise on Earth**".
- The book provides a detailed account of the author's travels and experiences in **Kashmir**.
- It offers insights into the **culture, landscapes, and people** of the region.
- The book is well-regarded for its **vivid descriptions** and the author's deep understanding of Kashmir.
- **Romesh Bhattacharji** is known for his expertise in travel writing and has authored several other notable travel books.

Additional Information

- **Vikram Seth**
  - **Vikram Seth** is an Indian author and poet, best known for his novel "**A Suitable Boy**".
  - He has also written other notable works such as "**An Equal Music**" and "**The Golden Gate**".
- **Jhumpa Lahiri**
  - **Jhumpa Lahiri** is an acclaimed author known for her works on the Indian diaspora.
  - She is the author of the Pulitzer Prize-winning collection "**Interpreter of Maladies**".
  - Other notable works include "**The Namesake**" and "**The Lowland**".
- **Shamas Faqir**
  - **Shamas Faqir** was a Kashmiri Sufi poet known for his mystical poetry.
  - His works are significant in the context of **Kashmiri literature** and Sufi traditions.

Question 22

Which state became the 25th state of India on 30th May, 1987 ?

Options:

A. Telangana

B. Haryana

C. Gujarat

D. Goa

Answer: D

Solution:

The Correct answer is **Goa**.

Key Points

- **Goa** became the **25th state of India** on **30th May 1987**.
- Prior to this, Goa was a **Union Territory** along with Daman and Diu.
- On **30th May 1987**, Goa was granted **statehood**, while Daman and Diu remained a Union Territory.
- It is the **smallest state** in India by area and the **fourth smallest** by population.
- Goa is known for its **tourism**, with its **beaches, Portuguese heritage, and vibrant culture**.
- The capital of Goa is **Panaji**, and its largest city is **Vasco da Gama**.

Additional Information

- **Telangana**
  - **Telangana** was formed on **2nd June 2014**, making it the 29th state of India.
  - It was carved out of the northwestern part of **Andhra Pradesh**.
  - The capital city is **Hyderabad**.
- **Haryana**
  - **Haryana** was formed on **1st November 1966**.
  - It was carved out from the **state of Punjab**.
  - The capital city is **Chandigarh**, which is also the capital of Punjab.
- **Gujarat**
  - **Gujarat** was formed on **1st May 1960**.
  - It was created out of the **state of Bombay**.
  - The capital city is **Gandhinagar**.

Question 23

Which of these temples is not located in Uttarakhand ?

Options:

A. Nanda Devi

B. Surkanda Devi

C. Kalighat Kali

D. Tungnath

Answer: C

Solution:

The Correct answer is **Kalighat Kali**.

Key Points

- **Kalighat Kali** temple is located in **Kolkata, West Bengal**, and not in Uttarakhand.
- It is one of the 51 **Shakti Peethas** in India, dedicated to Goddess Kali.
- The temple is situated on the banks of the **Adi Ganga**, a small canal that connects to the Hooghly River.
- Kalighat is an important pilgrimage site and is believed to be over 200 years old.
- The temple attracts millions of devotees each year, especially during the festival of **Kali Puja**.

Additional Information

- **Nanda Devi**
  - **Nanda Devi** temple is located in **Uttarakhand**, India.
  - The temple is dedicated to **Goddess Nanda Devi**, the presiding deity of the region.
  - It is a significant part of the **Nanda Devi Raj Jat Yatra**, a grand pilgrimage that takes place every 12 years.
- **Surkanda Devi**
  - The **Surkanda Devi** temple is located near **Dhanaulti** in **Uttarakhand**.
  - It is dedicated to **Goddess Parvati** and is part of the **Kedarkhand** region of the Skanda Purana.
  - The temple offers a panoramic view of the **Himalayas** and is accessible after a 2 km trek from the village of **Kaddukhal**.
- **Tungnath**
  - **Tungnath** is one of the highest Shiva temples in the world and is located in the **Rudraprayag** district of **Uttarakhand**.
  - It is part of the **Panch Kedar** pilgrimage circuit.
  - Legend has it that the temple was built by the **Pandavas** to atone for their sins after the Kurukshetra war.

Question 24

Which of these states do not share a border with Chhattisgarh ?

Options:

A. Karnataka

B. Madhya Pradesh

C. Telangana

D. Jharkhand

Answer: A

Solution:

The Correct answer is **Karnataka**.

Key Points

- **Chhattisgarh** is a state located in central India and shares its borders with several states.
- The states that share a border with Chhattisgarh are **Madhya Pradesh** to the northwest, **Uttar Pradesh** to the north, **Jharkhand** to the northeast, **Odisha** to the east, **Telangana** to the south, and **Maharashtra** to the southwest.
- **Karnataka** is located in the southwestern region of India and does not share a border with Chhattisgarh.
- Understanding the geographical boundaries and neighboring states is crucial for various competitive exams.

Additional Information

- **Madhya Pradesh**
  - **Madhya Pradesh** is a state located in the central part of India.
  - It shares its borders with Chhattisgarh to the southeast.
- **Telangana**
  - **Telangana** is a state in southern India.
  - It shares its northern border with Chhattisgarh.
- **Jharkhand**
  - **Jharkhand** is a state located in eastern India.
  - It shares its western border with Chhattisgarh.

Question 25

Which bowler became second Indian bowler to take 500 wickets in Test matches in February, 2024 ?

Options:

A. Harbhajan Singh

B. Ravichandran Ashwin

C. Ishant Sharma

D. Mohammed Shami

Answer: B

Solution:

The Correct answer is **Ravichandran Ashwin**.

Key Points

- **Ravichandran Ashwin** is an Indian international cricketer.

- He became the **second Indian bowler** to take **500 wickets in Test matches** in February 2024.
- He is a right-arm off-break bowler known for his **skill and variations**.
- He has been a crucial part of the Indian Test team and has performed consistently over the years.
- In addition to his bowling, Ashwin is also a useful lower-order batsman, making him a valuable all-rounder for the team.
- His achievement places him among the elite bowlers in the history of cricket.

Additional Information

- **Harbhajan Singh**
  - **Harbhajan Singh** is a former Indian cricketer and an off-spin bowler.
  - He was the first Indian bowler to take **400 Test wickets**.
  - Harbhajan has been known for his **aggressive and passionate style of play**.
- **Ishant Sharma**
  - **Ishant Sharma** is a right-arm fast bowler for the Indian cricket team.
  - He is known for his **height and ability to extract bounce** from the pitch.
  - Ishant has been a key bowler for India in Test cricket, especially in overseas conditions.
- **Mohammed Shami**
  - **Mohammed Shami** is an Indian international cricketer who bowls right-arm fast.
  - He is known for his **pace, swing, and seam movement**.
  - Shami has been a vital part of the Indian pace attack in both Test and limited-overs cricket.

Question 26

Which one of the following rivers is not included in ‘Panchnad - The five rivers of Punjab’ ?

Options:

A. The Luni

B. The Jhelum

C. The Chenab

D. The Sutlej

Answer: A

Solution:

The correct answer is **The Luni**.

Key Points

- The **Luni River** is not included in the 'Panchnad' - the five rivers of Punjab.

- **Luni** is a river in **Rajasthan** and is also known as the **Sarasvati River** in its upper course.
- The river is called Luni because of its **high salinity**.
- The Luni originates from the **Naga hills** in the Aravalli Range in Rajasthan and flows through the Thar Desert.
- It is an **inland river** that does not drain into any sea or ocean but ends in the Rann of Kutch.

Additional Information

- **The Jhelum**
  - The Jhelum is one of the five rivers of Punjab.
  - It originates from **Verinag Spring** at the foot of the Pir Panjal in the southeastern part of the Kashmir Valley.
  - It flows through **Kashmir** and enters Pakistan.
- **The Chenab**
  - The Chenab is another river included in the 'Panchnad'.
  - It is formed by the confluence of two rivers, **Chandra and Bhaga**, in the Lahaul and Spiti district of Himachal Pradesh.
  - It flows through the Jammu region of Jammu and Kashmir.
- **The Sutlej**
  - The Sutlej is the longest of the five rivers that flow through the historic crossroad region of Punjab in northern India and Pakistan.
  - It originates from **Lake Rakshastal** in Tibet.
  - The Sutlej River merges with the Chenab River in Pakistan to form the Panjnad River.

Question 27

Where was the 15th BRICS Summit-2023 organised ?

Options:

A. South Africa

B. Brazil

C. Russia

D. China

Answer: A

Solution:

The Correct answer is **South Africa**.

Key Points

- The **15th BRICS Summit** in 2023 was **organized in South Africa**.
- BRICS is an acronym for an association of five major emerging economies: **Brazil, Russia, India, China**, and **South Africa**.
- South Africa hosted the summit in the city of **Johannesburg**.
- This summit aimed at strengthening cooperation among the BRICS countries in various fields such as **economy, trade, and political coordination**.
- The summit also focused on the theme of **"BRICS and Africa: Partnership for Mutually Accelerated Growth, Sustainable Development, and Inclusive Multilateralism"**.
- South Africa's role in BRICS is significant as it represents the African continent in the group.

Additional Information

- **Brazil**
  - Brazil is a member of BRICS and is the largest country in South America.
  - It hosted the BRICS Summit previously, with the most recent one being the 11th BRICS Summit in 2019.
- **Russia**
  - Russia is a founding member of BRICS.
  - It hosted the 12th BRICS Summit in 2020.
- **China**
  - China, a key member of BRICS, hosted the 14th BRICS Summit in 2022.
  - China is the world's most populous country and the second-largest economy.

Question 28

Match List I with List II :

List - I **Indian Notes (New Currency)**		**List - II** **Pictures**	
(A)	Rs.10	(I)	Ellora Caves
(B)	Rs.100	(II)	Konark, Sun Temple
(C)	Rs.500	(III)	Rani Ki Vav
(D)	Rs.20	(IV)	Red Fort

Choose the correct answer from the options given below :

Options:

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

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

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

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

Answer: D

Solution:

The Correct answer is **(A) - (II), (B) - (III), (C) - (IV), (D) - (I)**.

Key Points

- The**Rs. 10 note**features the**Konark Sun Temple**, which is a 13th-century temple located in the**Puri district of Odisha**.
- The **Rs. 100 note** showcases the **Rani Ki Vav**, which is an intricately constructed stepwell situated in **Gujarat**. This stepwell is also a UNESCO World Heritage Site.
- The **Rs. 500 note** depicts the **Red Fort**, a historic fort in the city of **Delhi** that served as the main residence of the Mughal Emperors.
- The**Rs. 20 note**features the**Ellora Caves**. The Ellora Caves are a UNESCO World Heritage Site located in the**Aurangabad district of Maharashtra**.

Additional Information

- **Ellora Caves**
  - The Ellora Caves represent one of the largest rock-cut monastery-temple cave complexes in the world.
  - They feature artworks from **Buddhism, Hinduism, and Jainism**.
- **Rani Ki Vav**
  - Rani Ki Vav is an exceptional example of a distinctive form of subterranean water architecture of the Indian subcontinent.
  - It was built as a memorial to an 11th-century AD king.
- **Red Fort**
  - The Red Fort is a symbol of India’s sovereignty and is the location where the Prime Minister hoists the national flag on Independence Day.
  - It was designated a UNESCO World Heritage Site in 2007.
- **Konark Sun Temple**
  - The Konark Sun Temple is designed in the shape of a gigantic chariot with intricately carved stone wheels, pillars, and walls.
  - It is dedicated to the **Hindu Sun God Surya**.

Question 29

From the given options, name the longest river in Asia.

Options:

A. Yangtze River

B. Lena River

C. Indus River

D. Brahmaputra River

Answer: A

Solution:

The Correct answer is **Yangtze River**.

Key Points

- **Yangtze River** is the longest river in **Asia** and the third-longest in the **world**, after the Nile and the Amazon.
- It has a total length of about **6,300 kilometers (3,917 miles)**.
- The river flows from the **glaciers of the Qinghai-Tibet Plateau** in China to the East China Sea at Shanghai.
- The Yangtze River basin is home to one-third of the **population of China** and is a major water source for agriculture, industry, and daily life.
- The river is also known for its diverse and rich **ecosystem**, which includes several endangered species like the Chinese alligator and the Yangtze river dolphin.
- It has significant historical and cultural importance in China, often referred to as the cradle of Chinese civilization.

Additional Information

- **Lena River**
  - The **Lena River** is one of the longest rivers in the **world** and the longest river in **Russia**.
  - It flows across eastern Siberia and eventually empties into the **Arctic Ocean**.
  - The river has a length of about **4,400 kilometers (2,736 miles)**.
- **Indus River**
  - The **Indus River** flows through **China, India, and Pakistan**.
  - It is one of the longest rivers in the world, with a length of about **3,180 kilometers (1,976 miles)**.
  - The river is crucial for **agriculture** and has been the cradle of the ancient **Indus Valley Civilization**.
- **Brahmaputra River**
  - The **Brahmaputra River** flows through **Tibet, India, and Bangladesh**.
  - It has a length of about **2,900 kilometers (1,800 miles)**.
  - The river is known for its **strong currents** and is also prone to **flooding** during the monsoon season.

Question 30

Arrange the following important days according to their chronological order from January to December :

A. Indian Airforce Day

B. Kargil Victory Day

C. World Soil Day

D. National Youth Day

E. International Women's Day

Select the correct answer from the options given below :

Options:

A. A – D – B – C – E

B. D – E – B – A – C

C. D – B – E – C – A

D. E – A – D – C – B

Answer: B

Solution:

The correct answer is **D – E – B – A – C**.

Key Points

- **National Youth Day** is observed on **January 12**. It marks the birth anniversary of **Swami Vivekananda**.
- **International Women's Day** is celebrated on **March 8** every year, highlighting the achievements and contributions of women globally.
- **Kargil Victory Day** is observed on **July 26** to commemorate India's victory over Pakistan in the **Kargil War** in 1999.
- **Indian Airforce Day** is celebrated on **October 8** each year to mark the establishment of the **Indian Air Force (IAF)** in 1932.
- **World Soil Day** is observed on **December 5** to raise awareness about the importance of soil health and sustainable management of soil resources.

Additional Information

- **Swami Vivekananda**
  - **Swami Vivekananda** was a key figure in the introduction of the **Indian philosophies of Vedanta and Yoga** to the Western world.

    - He is best known for his speech at the **Parliament of the World's Religions** in Chicago in 1893, which began with "Sisters and brothers of America...".
- **Indian Air Force**
    - The **Indian Air Force (IAF)** is the air arm of the **Indian Armed Forces**.
    - Its primary mission is to secure Indian airspace and to conduct **aerial warfare** during armed conflict.
- **Kargil War**
    - The **Kargil War**, also known as the **Kargil conflict**, was an armed conflict between India and Pakistan that took place between May and July 1999 in the **Kargil district** of Jammu and Kashmir.
    - During the conflict, the Indian Army, with the support of the Indian Air Force, recaptured most of the positions on the Indian side of the LOC (Line of Control) that had been occupied by Pakistani troops and militants.

Question 31

Which Railway Minister from the following, resigned immediately after the 1956 Ariyalur train accident ?

Options:

A. Jagjivan Ram

B. Lal Bahadur Shastri

C. S.K. Patil

D. Lalit Narayan Mishra

Answer: B

Solution:

The correct answer is **Lal Bahadur Shastri**.

Key Points

- **Lal Bahadur Shastri** was the Railway Minister of India during the Ariyalur train accident in 1956.
- The **Ariyalur train accident** occurred on November 23, 1956, in Tamil Nadu, resulting in significant casualties.
- As a mark of his **moral responsibility**, Lal Bahadur Shastri resigned from his position immediately after the accident.
- His resignation was seen as a demonstration of **ethical leadership** and accountability.
- Lal Bahadur Shastri later became the **Prime Minister of India** from 1964 to 1966.

Additional Information

- **Jagjivan Ram**
  - **Jagjivan Ram** was a prominent Indian politician and a senior leader in the Indian National Congress.
  - He served as the **Deputy Prime Minister of India** from 1977 to 1979.
- **S.K. Patil**
  - **S.K. Patil** was an Indian politician and a senior leader of the Indian National Congress.
  - He served as the **Minister of Railways** and the **Minister of Food and Agriculture**.
- **Lalit Narayan Mishra**
  - **Lalit Narayan Mishra** was an Indian politician from the state of Bihar.
  - He served as the **Minister of Railways** in the Government of India.
  - Lalit Narayan Mishra was **assassinated** in 1975.

Question 32

Which of the following countries won the FIH Hockey Men's World Cup 2023 ?

Options:

A. Germany

B. Netherlands

C. Belgium

D. Australia

Answer: A

Solution:

The Correct answer is **Germany**.

Key Points

- **Germany** won the **FIH Hockey Men's World Cup 2023**.
- The **tournament** was held in **Bhubaneswar and Rourkela, India**.
- Germany defeated **Belgium** in the final match to claim the title.
- This victory marked Germany's **third title** in the history of the FIH Hockey Men's World Cup.
- The final score was **5-4** in a thrilling penalty shootout.
- Germany's previous titles were won in **2002 and 2006**.

Additional Information

- **Netherlands**
  - The **Netherlands** has won the FIH Hockey Men's World Cup **three times** (1973, 1990, 1998).

    - The team is known for its strong performance in international hockey.
- **Belgium**
    - **Belgium** was the **runner-up** in the 2023 tournament.
    - They won their first FIH Hockey Men's World Cup title in **2018**.
- **Australia**
    - **Australia** has won the FIH Hockey Men's World Cup **three times** (1986, 2010, 2014).
    - The team is one of the most successful in the history of the tournament.

Question 33

Who won the title of the 6th Khelo India Youth Games 2024 ?

Options:

A. Haryana

B. Maharashtra

C. Karnataka

D. Tamil Nadu

Answer: B

Solution:

The correct answer is **Maharashtra**.

Key Points

- The **Khelo India Youth Games** is an annual event conducted by the **Ministry of Youth Affairs and Sports** in India.
- The aim of the games is to identify and nurture young sporting talent in the country.
- **Maharashtra** has consistently performed well in various editions of the Khelo India Youth Games.
- In the 6th edition held in 2024, Maharashtra emerged as the overall winner, showcasing exceptional talent across various sports disciplines.
- The event includes a wide range of sports, providing a platform for young athletes to compete at a national level.
- Winning the title of the 6th Khelo India Youth Games is a testament to Maharashtra's strong sporting infrastructure and effective youth sports development programs.

Additional Information

- **Haryana**
    - **Haryana** is known for producing numerous athletes in sports like wrestling, boxing, and kabaddi.

    - Haryana has a strong tradition in sports and has performed well in previous editions of the Khelo India Youth Games.
- **Karnataka**
    - **Karnataka** has been notable for its contributions in sports such as swimming, athletics, and hockey.
    - The state has a good sports infrastructure and has produced several national and international level athletes.
- **Tamil Nadu**
    - **Tamil Nadu** excels in sports like chess, athletics, and table tennis.
    - The state has a robust sports culture and encourages youth participation in various sports activities.

Question 34

In January 2024, which Indian state was the host of the Purple Fest, the first inclusive festival for persons with disabilities ?

Options:

A. Goa

B. Gujarat

C. Kerala

D. Maharashtra

Answer: A

Solution:

The correct answer is **Goa**.

Key Points

- **Goa** hosted the **Purple Fest** in January 2024.
- The Purple Fest is the first **inclusive festival for persons with disabilities** in India.
- The festival aimed to promote **inclusivity and accessibility** for individuals with disabilities.
- Various **cultural, sports, and educational activities** were organized as part of the festival.
- The event provided a platform for **advocacy and awareness** regarding the rights and needs of persons with disabilities.
- It was a significant step towards making Goa a more **accessible and inclusive destination**.

Additional Information

- **Gujarat**
    - **Gujarat** is known for hosting the **Vibrant Gujarat Global Summit**, an international business summit.

    - The state is famous for its **rich cultural heritage** and landmarks such as the **Statue of Unity**.
- **Kerala**
    - **Kerala** is renowned for its **backwaters** and **Ayurvedic treatments**.
    - The state celebrates several festivals, including the famous **Onam** festival.
- **Maharashtra**
    - **Maharashtra** is home to the bustling city of **Mumbai**, the financial capital of India.
    - The state is also known for its **historical sites** like the **Ajanta and Ellora Caves**.

Question 35

In December 2023, Sultan Haitham bin Tarik was on a State visit to India. He is the Sultan and Prime Minister of which country ?

Options:

A. Iran

B. Yemen

C. Qatar

D. Oman

Answer: D

Solution:

The correct answer is **Oman**.

Key Points

- **Sultan Haitham bin Tarik** is the current **Sultan** and **Prime Minister** of **Oman**.
- He ascended to the throne on **11 January 2020**, following the death of his cousin, Sultan Qaboos bin Said.
- Oman is a country located on the southeastern coast of the **Arabian Peninsula** in Western Asia.
- It shares land borders with the **United Arab Emirates** to the northwest, **Saudi Arabia** to the west, and **Yemen** to the southwest, and has maritime borders with **Iran** and **Pakistan**.
- The capital city of Oman is **Muscat**.
- Oman's economy is primarily driven by **oil and gas** resources, but it is also diversifying into sectors like **tourism, manufacturing, and logistics**.
- Oman is known for its rich **cultural heritage**, historical sites, and beautiful landscapes, including deserts, mountains, and coastlines.

Additional Information

- **Iran**
    - **Iran** is a country in Western Asia, also known as Persia.

    - Its capital is **Tehran**.
    - Iran is an Islamic Republic and has significant **oil and natural gas reserves**.
- **Yemen**
    - **Yemen** is located on the southern end of the Arabian Peninsula.
    - Its capital city is **Sana'a**.
    - Yemen has been experiencing a prolonged **civil war** since 2014.
- **Qatar**
    - **Qatar** is a small but wealthy country in the Middle East, known for its reserves of **natural gas and oil**.
    - Its capital is **Doha**.
    - Qatar will host the **FIFA World Cup 2022**.

Question 36

Which of the following states launched the ‘Mukhyamantri Seekho-Kamao Yojana’ (MMSKY) in 2023 ?

Options:

A. Uttar Pradesh

B. Himachal Pradesh

C. Madhya Pradesh

D. Bihar

Answer: C

Solution:

The correct answer is **Madhya Pradesh**.

Key Points

- The **Mukhyamantri Seekho-Kamao Yojana (MMSKY)** is an initiative launched by the state government of **Madhya Pradesh** in 2023.
- The scheme aims to provide **skill development** and **employment opportunities** to the youth of Madhya Pradesh.
- It focuses on **training** young individuals in various trades and sectors to enhance their **employability**.
- The scheme is part of the government's efforts to **reduce unemployment** and **boost the economy** by creating a skilled workforce.
- Beneficiaries of the scheme receive **vocational training**, which is aligned with industry requirements to ensure better job prospects.

Additional Information

- **Uttar Pradesh**
  - **Uttar Pradesh** is the most populous state in India.
  - The state has a diverse range of **cultural heritage** and is known for its significant **historical landmarks**.
- **Himachal Pradesh**
  - **Himachal Pradesh** is known for its scenic **mountain landscapes**.
  - The state is a popular **tourist destination** for those seeking adventure and natural beauty.
- **Bihar**
  - **Bihar** has a rich **historical** and **cultural heritage**.
  - It is known for its role in the formation of early Indian civilization and important **Buddhist sites**.

Question 37

Rabindranath Tagore had renounced his knighthood because _____.

Options:

A. of execution of Bhagat Singh

B. of Chauri-Chaura incident

C. he wanted to join the Congress

D. of the Jallianwala Bagh tragedy

Answer: D

Solution:

The Correct answer is **of the Jallianwala Bagh tragedy**.

Key Points

- **Rabindranath Tagore** was a renowned Indian poet, philosopher, and polymath.
- He was awarded a knighthood by the British government in **1915** for his contributions to literature.
- The **Jallianwala Bagh tragedy** occurred on **April 13, 1919**, when British troops, under the command of General Dyer, fired on a peaceful gathering, killing hundreds of unarmed Indian civilians.
- Tagore was deeply affected by this brutal incident and felt it was a grave injustice to the Indian people.
- In protest, he renounced his knighthood, stating that such honors from the British government were meaningless in the face of such atrocities.
- His renouncement was a significant act of defiance and inspired many Indians in their struggle for independence.

Additional Information

- **Execution of Bhagat Singh**
  - **Bhagat Singh** was a prominent Indian revolutionary who played a significant role in the Indian independence movement.
  - He was executed by the British government on **March 23, 1931**, but this event occurred much later than the Jallianwala Bagh tragedy.
- **Chauri-Chaura incident**
  - The **Chauri-Chaura incident** took place on **February 4, 1922**, when a group of protesters clashed with police, leading to the death of three civilians and 22 policemen.
  - This incident led Mahatma Gandhi to call off the Non-Cooperation Movement, but it was not related to Tagore's renouncement of his knighthood.

Question 38

In which of the following cities of Madhya Pradesh was the 17th edition of Pravasi Bharatiya Divas (PBD) organized ?

Options:

A. Bhopal

B. Indore

C. Jabalpur

D. Gwalior

Answer: B

Solution:

The Correct answer is **Indore**.

Key Points

- The **17th edition** of **Pravasi Bharatiya Divas (PBD)** was organized in **Indore**, a prominent city in **Madhya Pradesh**.
- **Pravasi Bharatiya Divas** is celebrated to recognize the contribution of the overseas Indian community in the development of India.
- The event provides a platform to the **diaspora** to engage with the government and people of the land of their ancestors.
- Indore is known for its **rich cultural heritage** and has been a significant center for trade and commerce in central India.
- The city is also famous for its **cleanliness** and has been awarded the title of **India's cleanest city** multiple times.

Additional Information

- **Bhopal**
  - **Bhopal** is the **capital city** of Madhya Pradesh.
  - It is known as the **City of Lakes** due to its numerous natural and artificial lakes.
  - The city has a significant historical background with landmarks like the **Taj-ul-Masajid** and the **Upper Lake**.
- **Jabalpur**
  - **Jabalpur** is known for its **marble rock formations** at **Bhedaghat**.
  - The city is an important administrative, industrial, and business hub in Madhya Pradesh.
  - It is also home to several **military establishments** and the **High Court of Madhya Pradesh**.
- **Gwalior**
  - **Gwalior** is known for its **historic fort** which has existed since the 6th century.
  - The city has been a significant center for **classical music** and is known for the famous **Tansen Music Festival**.
  - Gwalior is also a major educational center with institutions like the **Scindia School** and **Jiwaji University**.

Question 39

In the joint military exercise ‘Desert Cyclone’, 2024, which two nations collaborated to enhance interoperability through knowledge exchange ?

Options:

A. India and Qatar

B. India and Vietnam

C. India and Australia

D. India and UAE

Answer: D

Solution:

The Correct answer is **India and UAE**.

Key Points

- The joint military exercise **'Desert Cyclone'** was conducted in **2024** between **India and UAE**.
- This exercise aimed at enhancing **interoperability** between the two nations.
- It involved **knowledge exchange** and the sharing of **best practices** in military operations.

- The exercise focused on **tactical maneuvers**, **combat strategies**, and **logistical coordination**.
- India and UAE have been strengthening their **defense cooperation** over the years, and this exercise is a testament to their growing military partnership.

Additional Information

- **India and Qatar**
  - **India and Qatar** have a robust bilateral relationship, especially in the sectors of **energy** and **trade**.
  - They conduct joint military exercises, but **'Desert Cyclone' was not one of them**.
- **India and Vietnam**
  - **India and Vietnam** have a strong defense relationship, characterized by regular **naval exercises** and **military exchanges**.
  - They focus on **maritime security** and **counter-terrorism**.
- **India and Australia**
  - **India and Australia** conduct joint military exercises like **'AUSINDEX'** for enhancing **naval cooperation**.
  - They focus on **maritime domain awareness** and **interoperability**.

Question 40

Who among the following wrote the book “Guilty Men of India’s Partition” ?

Options:

A. Mahatma Gandhi

B. Lala Har Dayal

C. Lala Lajpat Rai

D. Ram Manohar Lohia

Answer: D

Solution:

The correct answer is **Ram Manohar Lohia**.

Key Points

- **Ram Manohar Lohia** was an influential **Indian freedom fighter, socialist political leader, and thinker**.
- He wrote the book "**Guilty Men of India's Partition**", which critiques the role of various leaders in the partition of India.
- Lohia was known for his strong opposition to the policies of the Indian National Congress and his efforts to promote **socialist ideologies** in India.

- He played a significant role in the **Quit India Movement** and was a prominent advocate for the **abolition of the caste system** and the promotion of equitable social policies.
- Lohia's writings and speeches have been influential in shaping the **socialist and anti-colonial discourse** in India.

Additional Information

- **Mahatma Gandhi**
  - **Mahatma Gandhi** was the preeminent leader of the Indian independence movement in British-ruled India.
  - He is known for his philosophy of **nonviolent resistance** and his leadership in the **Indian National Congress**.
  - Gandhi's notable works include "**Hind Swaraj**" and "**The Story of My Experiments with Truth**".
- **Lala Har Dayal**
  - **Lala Har Dayal** was an Indian nationalist revolutionary and scholar who was involved in the **Ghadar Party**.
  - He is known for his contributions to the **Indian independence movement** and his intellectual works.
- **Lala Lajpat Rai**
  - **Lala Lajpat Rai** was a prominent Indian freedom fighter and a leader in the **Indian Nationalist Movement**.
  - He is also known as "**Lion of Punjab**" and played a significant role in the **Swadeshi movement**.
  - Rai authored several books, including "**Unhappy India**".

Question 41

Who authored the famous novels, ‘The Fountainhead’ and ‘Atlas Shrugged’ ?

Options:

A. H.G. Wells

B. Ayn Rand

C. George Orwell

D. J.M. Barrie

Answer: B

Solution:

The correct answer is **Ayn Rand**.

Key Points

- **Ayn Rand** was a **Russian-American writer** and philosopher.
- She is best known for her novels **'The Fountainhead'** and **'Atlas Shrugged'**.
- **'The Fountainhead'**, published in **1943**, explores the life of an individualistic young architect named Howard Roark.
- **'Atlas Shrugged'**, published in **1957**, is a **philosophical novel** that presents Rand's philosophy of **Objectivism**.
- **Objectivism** emphasizes rational self-interest and the pursuit of one's own happiness as the moral purpose of life.
- Both novels have had a significant impact on popular culture and continue to be widely read and discussed.

Additional Information

- **H.G. Wells**
  - **H.G. Wells** was a British writer known for his works in the **science fiction genre**.
  - Some of his famous novels include **'The War of the Worlds'** and **'The Time Machine'**.
- **George Orwell**
  - **George Orwell** was an English novelist and essayist.
  - He is best known for his novels **'1984'** and **'Animal Farm'**.
- **J.M. Barrie**
  - **J.M. Barrie** was a Scottish author and playwright.
  - He is best known for creating the character **Peter Pan**.

Question 42

The Bhoodan-Gramadan Movement started by Vinoba Bhave is also known as _____.

Options:

A. Civil Revolution

B. Green Revolution

C. Bloodless Revolution

D. White Revolution

Answer: C

Solution:

The correct answer is **Bloodless Revolution**.

Key Points

- The **Bhoodan-Gramdan Movement** was initiated by **Vinoba Bhave** in **1951**.
- It aimed at persuading wealthy landowners to voluntarily give a percentage of their land to **landless people**.
- The movement is referred to as the **Bloodless Revolution** because it sought to bring about social change without any violence.
- Vinoba Bhave, a follower of **Mahatma Gandhi**, believed in non-violence and **sarvodaya** (welfare of all).
- This movement was a part of the larger **Sarvodaya Movement**, which sought to promote economic and social equality.
- The Bhoodan-Gramdan movement received international recognition and was seen as a model for **peaceful social transformation**.

Additional Information

- **Civil Revolution**
  - The term **Civil Revolution** generally refers to movements aimed at achieving political and social changes through civil disobedience and non-violent resistance.
  - Examples include the **Civil Rights Movement** in the United States.
- **Green Revolution**
  - The **Green Revolution** refers to a period of agricultural transformation that began in the 1940s and spread worldwide.
  - It involved the adoption of new farming techniques and high-yield crop varieties, significantly increasing food production.
- **White Revolution**
  - The **White Revolution**, also known as **Operation Flood**, was a rural development program initiated in India in 1970.
  - It transformed India into one of the world's largest producers of milk and dairy products.

Question 43

23 January, the birth anniversary of Netaji Subhas Chandra Bose, is celebrated every year as _____ .

Options:

A. Shaheed Diwas

B. Parakram Diwas

C. National Youth Day

D. Hindi Diwas

Answer: B

Solution:

The Correct answer is **Parakram Diwas**.

Key Points

- **Parakram Diwas** is celebrated on **23 January** to commemorate the birth anniversary of **Netaji Subhas Chandra Bose**.
- This day is observed to honor and remember the immense contribution and indomitable spirit of Netaji in the fight for India's independence.
- **Netaji Subhas Chandra Bose** was one of the most prominent leaders of the Indian freedom struggle who founded the Indian National Army (INA).
- The day was officially declared as **Parakram Diwas** by the Government of India in 2021.
- The term **"Parakram"** signifies courage and valor, attributes strongly associated with Netaji.

Additional Information

- **Shaheed Diwas**
  - **Shaheed Diwas**, also known as Martyrs' Day, is observed on **30 January** to honor the sacrifices of Mahatma Gandhi and other martyrs of the Indian freedom struggle.
  - It marks the assassination of Mahatma Gandhi in 1948.
- **National Youth Day**
  - **National Youth Day** is celebrated on **12 January** every year to commemorate the birth anniversary of **Swami Vivekananda**.
  - This day aims to inspire the youth of India to follow the ideals and philosophy of Swami Vivekananda.
- **Hindi Diwas**
  - **Hindi Diwas** is observed on **14 September** every year to celebrate the adoption of Hindi as one of the official languages of India.
  - The Constituent Assembly of India adopted Hindi as the official language on 14 September 1949.

Question 44

23 December, the birthday of former Prime Minister Chaudhary Charan Singh, is celebrated every year as _____ .

Options:

A. Samvidhan Diwas

B. National Milk Day

C. National Farmers' Day

D. Good Governance Day

Answer: C

Solution:

The Correct answer is **National Farmers' Day**.

Key Points

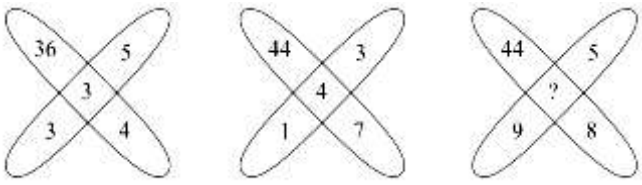
- **National Farmers' Day** is celebrated to honor the memory of **Chaudhary Charan Singh**, the former Prime Minister of India.
- **Chaudhary Charan Singh** was known for his significant contributions to the agriculture sector and his efforts to improve the conditions of farmers in India.
- He served as the **Prime Minister of India** from **28 July 1979 to 14 January 1980**.
- The day is celebrated on his birth anniversary, **23 December**, each year.
- The celebration aims to acknowledge the hardships and contributions of farmers to the **nation's economy**.
- Various programs, seminars, and events are organized to educate and support farmers.

Additional Information

- **Samvidhan Diwas**
  - **Samvidhan Diwas**, also known as **Constitution Day**, is celebrated in India on **26 November** each year.
  - The day commemorates the adoption of the **Constitution of India** in 1949.
  - It was first celebrated in 2015 to mark the 125th birth anniversary of **B. R. Ambedkar**.
- **National Milk Day**
  - **National Milk Day** is celebrated on **26 November** each year.
  - The day marks the birth anniversary of **Dr. Verghese Kurien**, the father of the White Revolution in India.
  - It was first celebrated in 2014.
- **Good Governance Day**
  - **Good Governance Day** is observed in India on **25 December** each year.
  - The day marks the birth anniversary of **Atal Bihari Vajpayee**, the former Prime Minister of India.
  - It was established in 2014 to honor his legacy.

Question 45

Find the missing number in the following figure.



Options:

A. 3

B. 4

C. 1

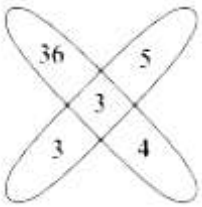
D. 2

Answer: D

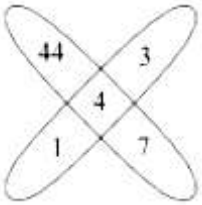
Solution:

Logic followed here is,

For,



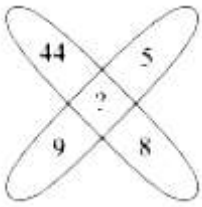
(3 + 4 + 5)× 3 = 12× 3 = 36



(1 + 7 + 3)× 4 = 11× 4 = 44

Similarly,

Let themissing number be x.



(9 + 8 + 5)× x = 44

22x = 44

⇒ x = 44/22 = **2**

Hence, the correct answer is **"Option 2."**

Question 46

In the given analogy, choose the number which will replace the question mark (?).

WSH : 5 : : KMJ : ?

Options:

A. 3

B. 7

C. 5

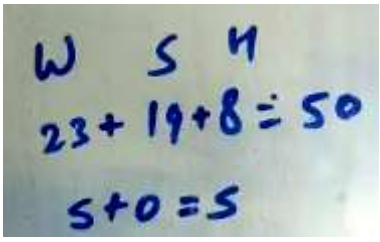
D. 2

Answer: B

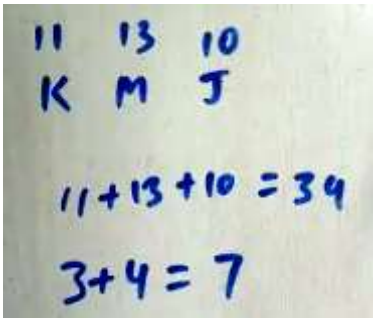
Solution:

Logic followed here is,

For, WSH : 5



SimilarlyKMJ : ?



Hence the correct answer is "**Option 2**"

Question 47

From the given options, at what angle are the hands of a clock inclined at 10 minutes to 2 (Smaller angle) ?

Options:

A. 115°

B. 65°

C. 120°

D. 112°

Answer: A

Solution:

Given time: 1:50

Formula used:Angle = $|30H - \frac{11}{2}M|$

Where, M = minutes and H = hours

Here, M = 50, H = 1

Therefore,

we get angle = $|30 \times 1 - \frac{11}{2} \times 50|$

= |30 - 275|

= |-245|

= 245°

Smaller angle = 360° - 245° = 115°

Hence, the correct answer is**115°**.

Question 48

If 1st January, 2001 was a Monday, what was the day on 26th January, 2003 ?

Options:

A. Saturday

B. Sunday

C. Monday

D. Wednesday

Answer: B

Solution:

Given: **1st January 2001 was Monday**.

Now,

2001 to 2003 = 2 Years (2Ordinary Year).

And, 1 Ordinary Year has 1 odd day.

Total odd days = 2.

then, **1st January 2003 will be Monday + 2= Wednesday**.

Now, the number of days between 1st January 2003 to 26th January 2003

= 25days.

= 25days → 25/7 = 3 weeks and 4odd days.

So, **26th January 2003 will be Wednesday + 4= Sunday**.

Hence, the correct answer is **"Option 2"**.

Question 49

What comes in place of the question mark (?) in the series given below ?

B2D, C3F, E5J, G7N, ?, M13Z

Options:

A. I9R

B. K11Z

C. K9W

D. K11V

Answer: D

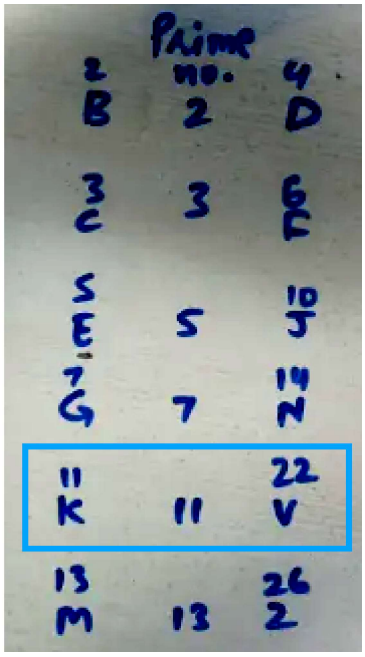
Solution:

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

Logic followed here is,

Logic: Letter and number is increased by prime by number.

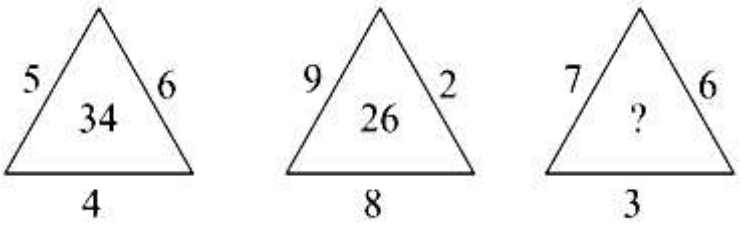
And third letter = position value of first letter × 2



Hence the correct answer is **"Option 4"**

Question 50

Which one will replace the question mark (?) ?



Options:

A. 40

B. 43

C. 44

D. 45

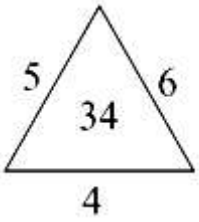
Answer: D

Solution:

Logic followed here is,

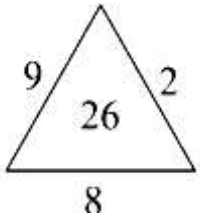
Logic:

For



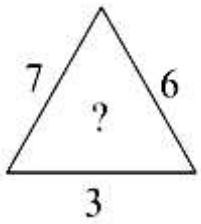
5× 6 + 4 = 30 + 4 = **34**

And



9 × 2 + 8 = 18 + 8 = **26**

Similarly, for



$6 \times 7 + 3 = 42 + 3 =$ **45**.

Hence, the correct answer is **"Option 4."**

Question 51

Take the given statements to be true even if they seem to be at variance with commonly known facts. Then decide which of the given conclusions logically follow the given statements.

Statements :

0% chairs are tables.

All computers are chairs.

Some books are tables.

Conclusions :

I. Not a single table is a computer.

II. Some books are not chairs.

Options:

A. Only conclusion I follows.

B. Only conclusion II follows.

C. Both conclusions I and II follow.

D. Neither conclusion I nor II follows.

Answer: A

Solution:

Given Statements:

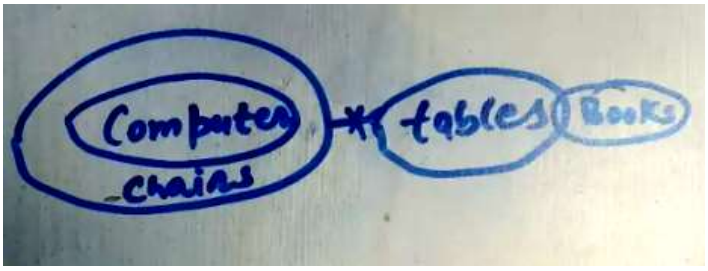
0% chairs are tables.

→ "0% chairs are tables" means no chair is a table. Represent this by keeping the circles for "Chairs" and "Tables" completely separate.

All computers are chairs.

Some books are tables.

The least possible Venn diagram for the given statement is:



Explanation of the Venn Diagram:

Conclusions:

I. Not a single table is a computer. **- True** (Since all computers are inside chairs and no chairs are tables, no computers are tables.)

II. Some books are not chairs. **- False** (We only know some books are tables. We don't have any information about the relation between books and chairs. It's possible that some books are chairs, or no books are chairs. We can only say that some books are tables. It is not confirmed that some books are not chairs.)

So, Only conclusion I follows.

Hence, the correct answer is "**Option 1**".

Question 52

Read the directions carefully and give the answer from the given options.

P, Q, R, S, T, K, L, M and N are sitting around a circle facing the centre.

K is 4^{th} to the right of P and P is 3^{rd} to the right of Q.

N is 4^{th} to the left of Q and 3^{rd} to the right of S.

R is 2^{nd} to the right of M and M is the immediate neighbour of P.

T is 2^{nd} to the left of L.

Who is to the immediate left of K ?

Options:

A. R

B. T

C. Q

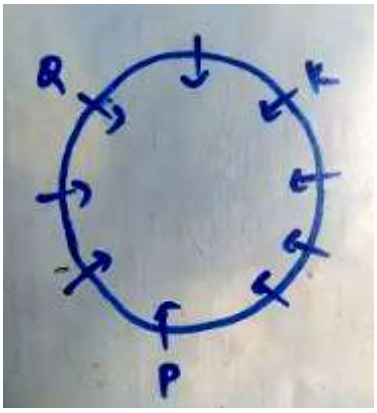
D. M

Answer: B

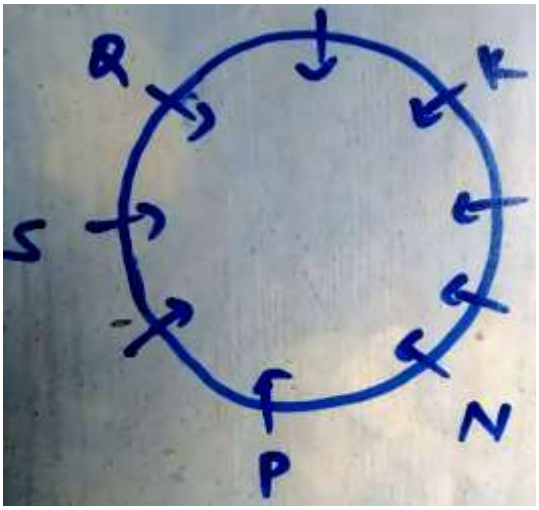
Solution:

Given, P, Q, R, S, T, K, L, M and N are sitting around a circle facing the centre.

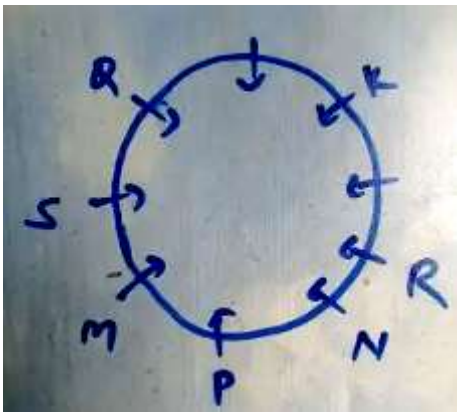
K is $4^{th}$to the right of P and P is $3^{rd}$to the right of Q.



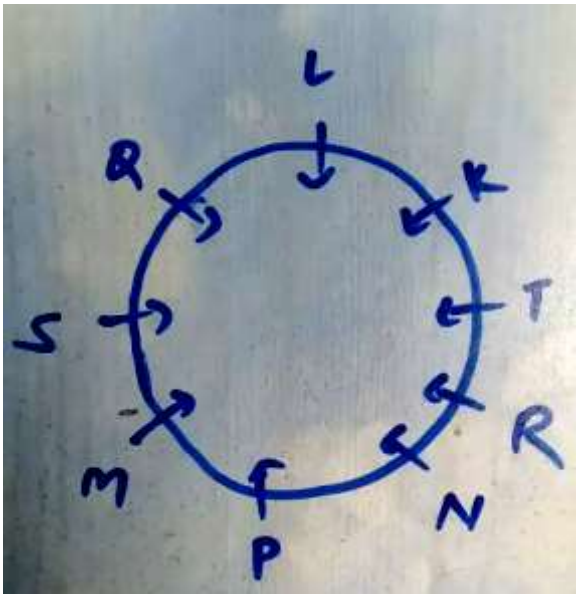
N is 4thto the left of Q and 3rdto the right of S.



R is 2ndto the right of M and M is the immediate neighbour of P.



T is 2ndto the left of L.

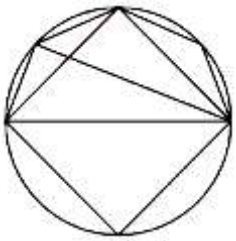


Then **T**is to the immediate left of K.

Hence the correct answer is **"Option 2"**

Question 53

Find the number of triangles in the given figure.



Options:

A. 8

B. 10

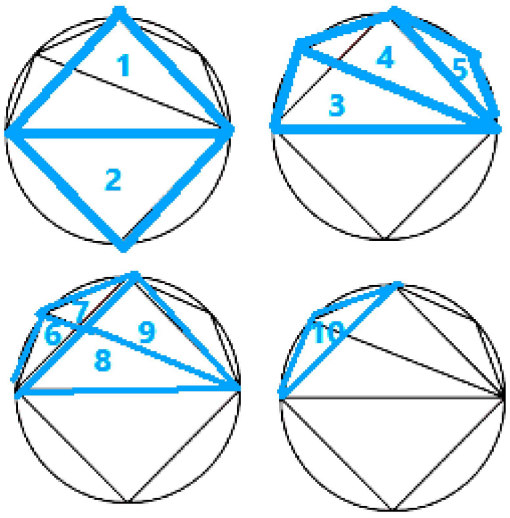
C. 12

D. 14

Answer: B

Solution:

The total number of triangles is,



So, the total number of triangles is 10.

Hence, the correct answer is **"Option 2"**

Question 54

Rakesh is 17^{th} from the right and Ankit is 15^{th} from the left in a line of students. If they interchange their places, the position of Ankit becomes 19^{th} from the left. How many students are there in the line ?

Options:

A. 36

B. 35

C. 34

D. 33

Answer: B

Solution:

The logic followed here is:

Position of Rakesh from the right = 17th

Position of Ankit from the left = 15th

After interchanging, Position of Ankit from the left = 19th

So,

Total number of students = Position of Rakesh from the right + Position of Ankit from the left after interchange - 1

= 17 + 19 - 1

= 36 - 1 = 35.

Hence, the total number of students in the line are 35.

Question 55

In a family, Bhanu is the father of Kamlesh. Bhanu has only two children. Kamlesh is the brother of Ritu. Ritu is the daughter of Santosh. Aryan is the grandson of Santosh. Sunny is the father of Aryan. How is Sunny related to Bhanu ?

Options:

A. Son-in-law

B. Son

C. Nephew

D. Brother-in-law

Answer: A

Solution:

Family Chart:

Symbol in Diagram	Meaning
○	Female
□	Male
=	Married couple
—	Siblings
|	Difference of a generation

Given: Bhanu is the father of Kamlesh.

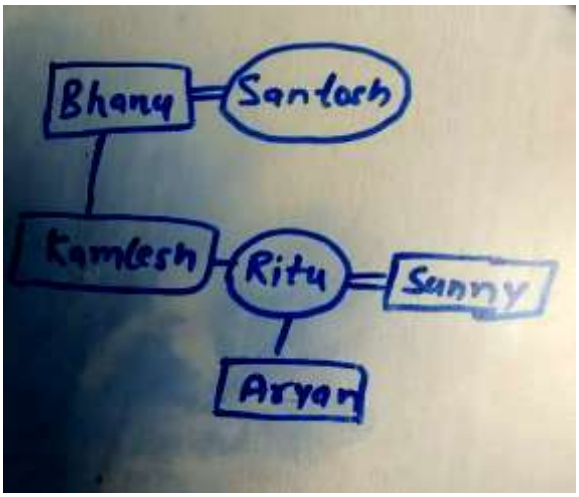
Bhanu has only two children.

Kamlesh is the brother of Ritu.

Ritu is the daughter of Santosh.

Aryan is the grandson of Santosh.

Sunny is the father of Aryan.



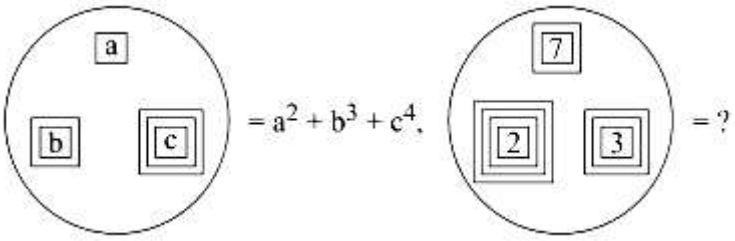
Therefore, Sunny is Ritu's husband, and Ritu is Bhanu's daughter.

So, Sunny is the **Son-in-law** of Bhanu.

Hence, the correct answer is "Option 1".

Question 56

Identify the number that will replace the question mark in the second equation based on the relationship represented in the first equation.



Options:

A.

420

B.

92

C.

602

D.

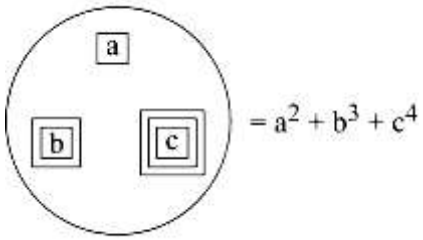
456

Answer: D

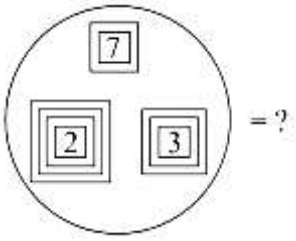
Solution:

The Logic followed here is,

Logic: **number of squares in the box + 1 = power of the number in the box.**



Similarly for,



Number of square boxes for 7 = 2

Number of square boxes for 2= 4

Number of square boxes for 3 = 3

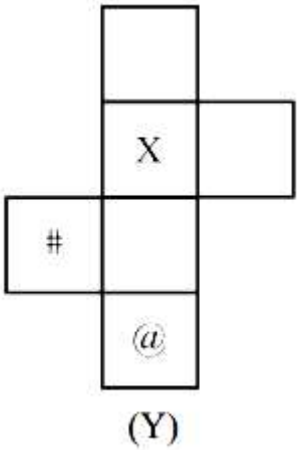
Then,

$\Rightarrow 7^3 + 2^5 + 3^4 = 343 + 32 + 81 =$ **456.**

Hence, the correct answer is **"Option 4"**

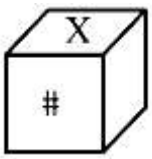
Question 57

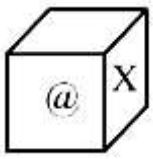
Choose the box that is similar to the box formed from the given sheet of paper (Y).

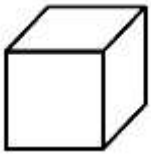


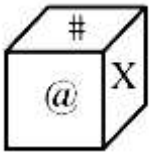
(Y)

Options:

A. 

B. 

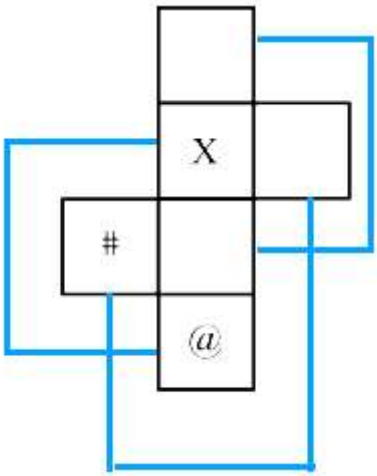
C. 

D. 

Answer: A

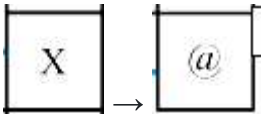
Solution:

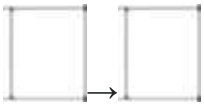
The folding thepaper cutting along the lines to make a cubical box is shown below:

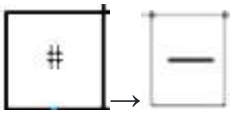


⇒ As the alternate positions become opposite to each other,the remaining two faces become opposite to each other.

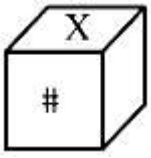
So, opposite pairs are:



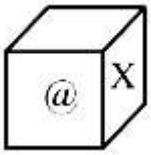


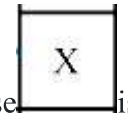


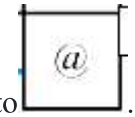
So, checking each option one by one:

Option 1) 

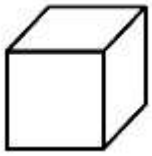
⇒Can be madebecause allare the opposite sides.

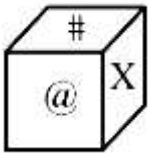
Option 2) 

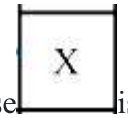
⇒Cannot be made because 

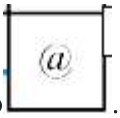
is adjacent to 

.

Option 3) 
⇒ Cannot be made because 
is adjacent to 
.

Option 4) 

⇒Cannot be made because 

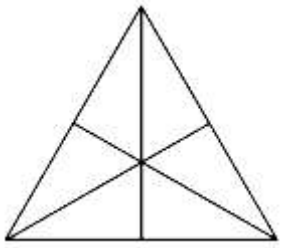
is adjacent to 

.

Hence,**"Option 1"**is the correct answer.

Question 58

Find the number of triangles in the given figure.



Options:

A. 14

B. 15

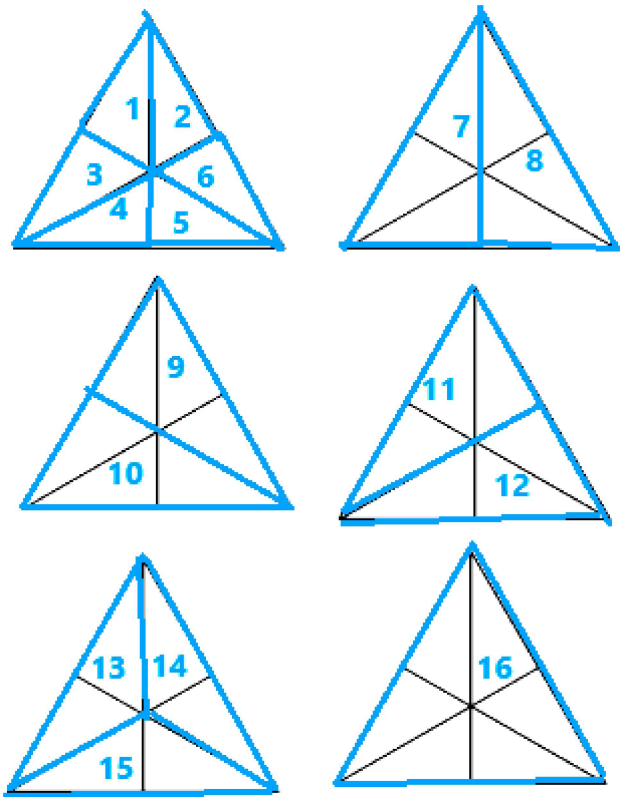
C. 16

D. 18

Answer: C

Solution:

The total number of triangles is,

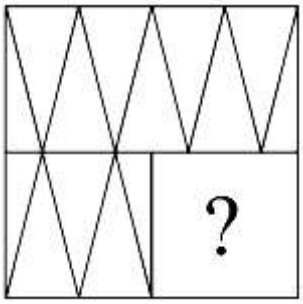


So, the total number of triangles are 16.

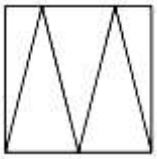
Hence, the correct answer is **"Option 3"**

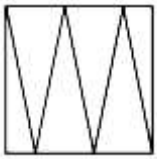
Question 59

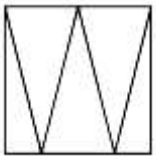
Which option figure will complete the pattern in the given figure ?



Options:

A. 

B. 

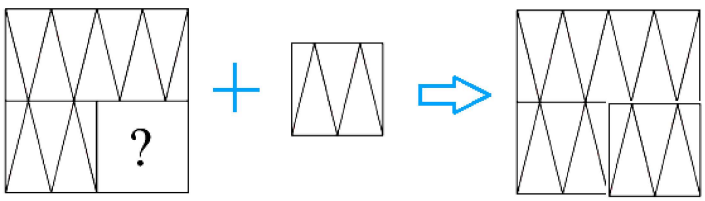
C. 

D. 

Answer: A

Solution:

Correct combination is,



Hence the correct answer is **"Option 1"**

Question 60

A woman leaves her home. She walks 40 m in North-West direction and then 90 m in South-East direction. Then, she moves 30 m in North direction. How far is she now from her initial position ?

Options:

A. 30 m

B. 60 m

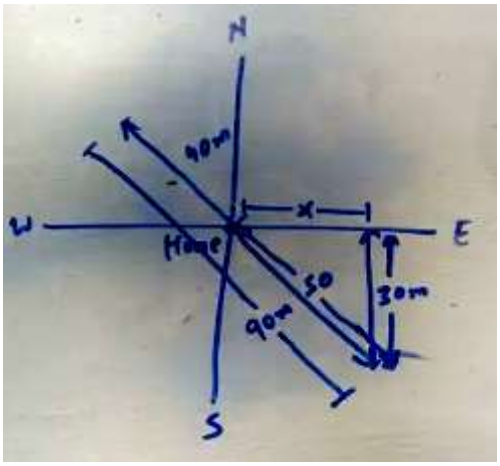
C. 50 m

D. 40 m

Answer: D

Solution:

The path followed by girl is shown below:



So, distance between initial and final point is x

Then

$x^2 = 50^2 - 30^2$

$\Rightarrow x = \sqrt{(2500 - 900)} = \sqrt{1600} = 40$

Hence the correct answer is **"Option 4"**
