

RRB NTPC 5 Jan 2021 Shift 1 Solution

1. Who was the eighth Secretary-General of UN?

- a. Antonio Guterres**
- b. Kofi Annan**
- c. U Thant**
- d. Ban Ki-Moon**

Ans. d

Explanation:

The correct answer is Ban Ki-Moon.

Ban Ki-moon was the United Nations eighth Secretary-General

2. Which of the following Indian mines is one of the world's largest uranium mine?

- a. Tummalapalle mine**
- b. Jaduguda mine**
- c. Narwapahar mine**
- d. Bhatin mine**

Ans. a

Explanation:

The correct answer is Tummalapalle mine.

The Tummalapalle Mine is a uranium mine found in Tumulapalli hamlet in Kadapa, Andhra Pradesh, India.

3. The ratio of two weights, 27 kg and 108 g, is:

- a. 300 : 1**
- b. 240 : 1**
- c. 270 : 1**
- d. 250 : 1**

Ans. d

Explanation:

Given:

The ratio of two weights = 27 kg = $27 \times 1000 = 27000$ g and 108 g

Calculation:

Required ratio = 27000 : 108

$\Rightarrow 250 : 1$

\therefore Required ratio is 250 : 1

4. Which temple in Thanjavur has chola architecture and was built by Emperor Rajaraja?

- a. Brihadisvara Temple
- b. Naganathaswamy Temple
- c. Thirumananjeri Temple
- d. Lord Murugan Temple

Ans. a

Explanation:

The correct answer is Brihadisvara Temple.

Thanjavur's Brihadisvara Temple is a Hindu shrine dedicated to Shiva. It is one of the largest temples in South India and a model of fully realised Tamil architecture.

5. How many D's are there in the following series which are immediately followed by W but NOT immediately preceded by K?

KDCWKDWNKGDWDHKVDWZDW

- a. 1
- b. 2
- c. 3
- d. 4

Ans. c

Explanation:

Immediately preceded by means immediately before or to come just before.

Immediately followed by means immediately after or to come just after.

The logic followed is:

Given series

KDCWKDWNKGDWDHKVDWZDW

Condition to be checked:

D which are immediately followed by W but NOT immediately preceded by K.

Not $K \rightarrow D \rightarrow W$

The series are given below

KDCWKDWNKGDWDHKVDWZDW

There are three pair of word which is GDW, VDW and ZDW.

Hence, "3" is the correct answer.

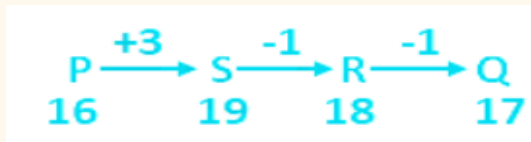
6. Four letter clusters have given out of which three are alike in some manner and one is different, Select the odd one

- a. PSRQ
- b. VYXW
- c. CGEF
- d. JMLK

Ans. c

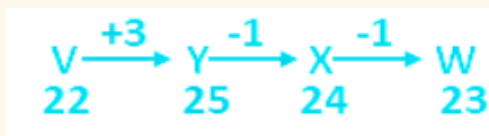
Explanation:

From option 1:



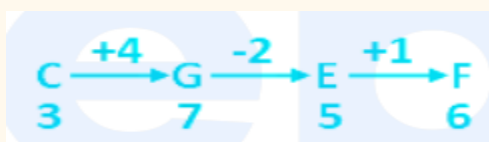
We add three in first letter we get second letter, we subtract one in second letter we get third letter and again we subtract one in third letter we get fourth letter.

From option 2:



We add three in first letter we get second letter, we subtract one in second letter we get third letter and again we subtract one in third letter we get fourth letter.

From option 3:



We add four in first letter we get second letter, we subtract two in second letter we get third letter and we add one in third letter we get fourth letter.

This is different from others.

Hence, "option 3" is the correct answer.

7. Which of the following cities has emerged as the most important centre with nearly half the cotton mills of the state located there?

- a. Bengaluru**
- b. Madurai**
- c. Coimbatore**
- d. Chennai**

Ans. c

Explanation:

The correct answer is Coimbatore

With over half of the mills located there, Coimbatore has emerged as the most important center.

8. Total cost per unit of output is known as:

- a. Average fixed cost**
- b. Average cost**
- c. Average variable cost**
- d. Average product**

Ans. b

Explanation:

The correct answer is average cost.

The average cost per unit of production (AC) is also known as the average total cost (ATC). Divide the total cost (TC) by the quantity produced by the company (Q) to find it. The average cost has a significant impact on how companies price their goods.

9. Who was the Raja of Burdwan when Permanent Settlement was imposed?

- a. Tejchand**
- b. Mehtab Chand**

- c. Sangam Rai
- d. Abu Ray

Ans. a

Explanation:

The correct answer is Tejchand.

Tejchand was the Raja of Burdwan at the time the Permanent Settlement was implemented.

10. A bus passes two persons moving in the direction of the moving bus at a speed of 3 km/h and 5 km/h, respectively. The bus passes the first person in 10s and the second person in 11s. The speed of the bus is :

- a. 25 km/h
- b. 24 km/h
- c. 27 km/h
- d. 28 km/h

Ans. a

Explanation:

Given:

Speed of first person = 3 km/h

Speed of second person = 5 km/h

Bus passes the first person = 10 sec

Bus passes the second person = 11 sec

Formula used:

Speed = Distance/Time

Calculation:

Distance covered by the first person in 10 sec = $[(3 \times 5/18) \times 10]$ m

$\Rightarrow 25/3$ m

Distance covered by the second person in 11 sec = $[(5 \times 5/18) \times 11]$ m

$\Rightarrow 275/18$ m

Bus travels a distance = $(275/18 - 25/3)$ m

$\Rightarrow 125/18$ m

Speed of the Bus = $(125/18 \times 18/5)$ km/hr

$\Rightarrow 25$ km/h

\therefore The speed of the bus is 25 km/h

11. Select the option that is related to the third word in the same way as the second word is related to the first word,.

Bihar : Jharkhand :: Chhattisgarh:

- a. Maharashtra
- b. Rajpur
- c. Ranchi
- d. Madya Pradesh

Ans. d

Explanation:

The logic followed here is:

In this question,

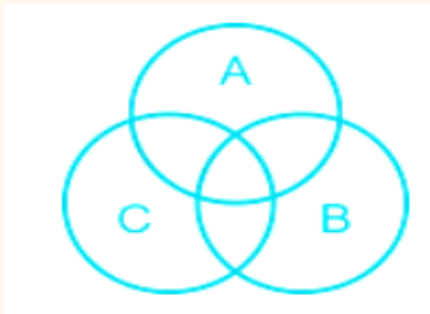
Jharkhand is the part of Bihar before year 2000 but from year 2000 Jharkhand separated from Bihar.

Similarly,

Chhattisgarh is related to Madya Pradesh because in the year 2000 Chhattisgarh separated from Madhya Pradesh.

Hence, "Madhya Pradesh" is the correct answer.

12. Select the option that is best represented by the given Venn diagram.

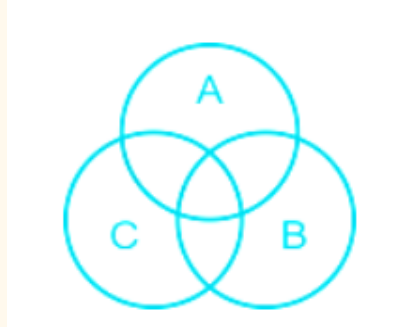


- a. Doctor, Man, Student
- b. table, Chair, Furniture
- c. Gold, silver, ornaments
- d. Family, Parents, Children

Ans. a

Explanation:

Given figure are

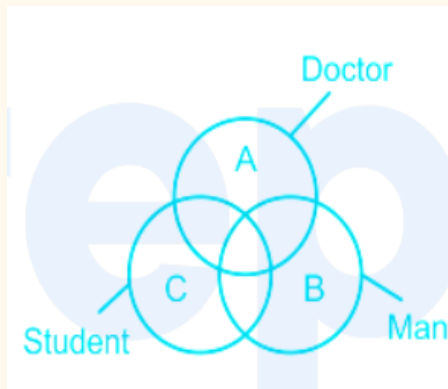


From option 1 - Doctor, Man, Student

Some doctor are man, some man are student, some doctor are student, some doctor are student as we as man.

So It is the best representation of the venn diagram.

Let A = Doctor, B = Man, C = Student



From option 2 - table, Chair, Furniture

No table is chair, some furniture are table as we as chair. It is not correct representation of the venn diagram.

From option 3 - Gold, silver, ornaments

It is not correct representation of the venn diagram.

From option 4 - Family, Parents, Children

It is not correct representation of the venn diagram.

Hence, "option 1" is the correct answer.

13. A Shopkeeper incurs a loss of 20% after selling a machine for Rs 4800. In order to gain a profit of 20% at what price should the shopkeeper sell the same machine?

- a. Rs 7500
- b. Rs 7200
- c. Rs 6600
- d. Rs 6000

Ans. b

Explanation:

Given:

Loss % = 20

Selling price of machine = Rs. 4800

Calculation:

Cost price = selling price + 0.80 cost price

⇒ 0.80 cost price = 4800

⇒ CP = 4800/0.80

⇒ 6000

To earn a 20% profit selling price = 1.2 cost price

⇒ SP = 1.2 × 6000

⇒ Rs. 7200

∴ SP of the machine is Rs. 7200

14. In a certain code language CRUDE is written as BSTED. How is MOIST written that language?

a. LNHR

b. LPHTS

c. NPJTU

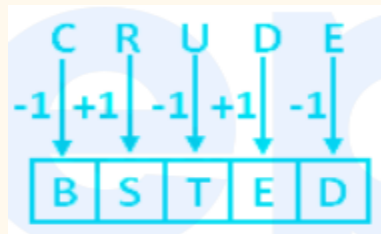
d. NNJRU

Ans. b

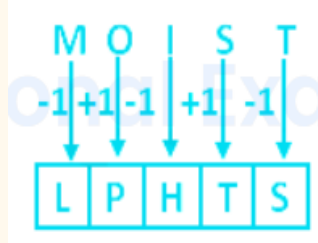
Explanation:

The logic followed here is:

In a certain code language CRUDE is written as BSTED. The logic are given below -



Similarly, MOIST written that language



Hence, "LPHTS" is the correct answer.

15. Where was the First experimental satellite telecommunication earth station set up in 1967 in India?

- a. Ahmednagar
- b. Allahabad
- c. Ahmedabad
- d. Aurangabad

Ans. c

Explanation:

The correct answer is Ahmedabad.

The first 'Experimental Satellite Communication Earth Station (ESCES)' was operationalized in Ahmedabad in 1967, and it also served as a training facility for Indian and international scientists and engineers.

16. Which of the following statements is true?

- a. Every complex number can be expressed in the form of a real number
- b. Every integer is natural number
- c. Every real number can be written in the complex form
- d. Every real number is an integer

Ans. c

Explanation:

From option 1 - Every complex number is the combination of real and imaginary number. But in the option say every complex number can be expressed in the form of a real number which is wrong.

From option 2 - Every natural number is integer but every integer is not natural number. So from option 2 every integer is natural number is not correct.

From option 3 - Every complex number is the combination of real and imaginary number. So, every real number can be written in the complex form, which is correct.

From option 4 - Every integer is real number but every real number is not an integer.
from this option every real number is an integer is not correct.
Hence, "option 3" is the correct answer.

17. Land which is left without cultivation for one or less than one agricultural year is known as:

- a. culturable waste land
- b. waste land
- c. net sown area
- d. current fallow

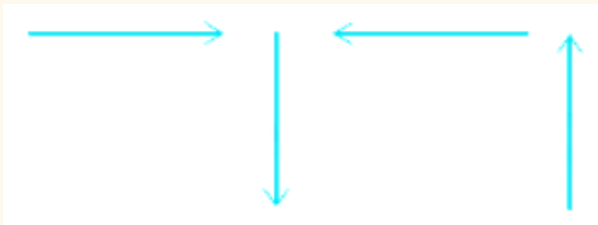
Ans. d

Explanation:

The correct answer is current fallow.

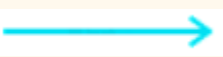
Current fallow : This represents the cropped area that is kept fallow during the current year. If a seeding area is not cropped against the same year, it may be treated as current fallow.

18. Select the option that would come next in the given series.



a. 

b. 

c. 



Ans. c

Explanation:

In this question arrow moves 90 degree clock wise direction get next arrow and so on.
The figure are given below -



Hence, "option 3" is the correct answer.

19. Colonial rule was first established in:

- a. Bengal
- b. Surat
- c. Delhi
- d. Bombay

Ans. a

Explanation:

The correct answer is Bengal.

The English East India Company (E.I.C.) built its raj in the countryside, applied its revenue policies, and saw how these policies affected diverse groups of people.

The Bengal was the first place where colonial rule was established.

20. When was the State Reorganisation Commission formed in India?

- a. 1952
- b. 1950

- c. 1953
- d. 1951

Ans. c

Explanation:

The correct answer is 1953.

On December 22, 1953, the Central Government of India established the States Reorganisation Commission (SRC) to suggest the reorganisation of state boundaries.

21. The value so obtained on adding the sum and the difference of the numbers 3.03 and 2.05, is:

- a. 0.606
- b. 60.06
- c. 6.06
- d. 600.6

Ans. c

Explanation:

Calculation:

Sum of the given value = $(3.03 + 2.05)$

$\Rightarrow 5.08$

Difference of the given value = $(3.03 - 2.05)$

$\Rightarrow 0.98$

Required value obtained on adding = $(5.08 + 0.98)$

$\Rightarrow 6.06$

\therefore The value so obtained on adding the sum and the difference is 6.06

22. If $x = 2$ and $y = 5$, evaluate $5xy - y^2$

- a. 25
- b. 40
- c. 20
- d. 0

Ans. a

Explanation:

Calculation:

$$5xy - y^2$$

$$\Rightarrow (5 \times 2 \times 5) - 5^2$$

$$\Rightarrow 50 - 25$$

$$\Rightarrow 25$$

∴ Required value is 25

23. In which part of a neuron is information acquired?

- a. Axon
- b. Dendrite
- c. Cell body
- d. Nerve ending

Ans. b

Explanation:

The correct answer is Dendrite.

The dendrite is the part of the neuron that receives information, while the axon is the component of the neuron that transmits information as an electrical impulse.

24. The value of $\sin(45^\circ + A) - \cos(45^\circ - A)$ is:

- a. 0
- b. 1
- c. $2 \cos A$
- d. $2 \sin A$

Ans. a

Explanation:

Calculation:

$$\sin(45^\circ + A) - \cos(45^\circ - A)$$

$$\Rightarrow \sin(45^\circ + A) - \sin(90^\circ - (45^\circ - A))$$

$$\Rightarrow \sin(45^\circ + A) - \sin(45^\circ + A)$$

$$\Rightarrow 0$$

∴ Required value is 0

25. Which of these is NOT a computer characteristic?

- a. Speed

- b. Accuracy**
- c. Data storage**
- d. Intelligence quotient**

Ans. d

Explanation:

The correct answer is Intelligence quotient.

A total score resulting from a set of standardized tests or subtests designed to estimate human intelligence is known as an intelligence quotient (IQ) .

26. Anil and Balbeer can finish a task in 3 days. They started working together, but after 2 days Anil got injured. Balbeer took 2 more days to finish the task. In how many days can Balbeer alone finish the same task?

- a. 5**
- b. 9**
- c. 10**
- d. 6**

Ans. d

Explanation:

Given:

Anil and Balbeer can finish a task = 3 days

They worked together = 2 days

Balbeer took more days to finish the task = 2

Calculation:

LCM of 2 and 3 is 6

Anil and Balbeer do work = $6/3$

$\Rightarrow 2$ units/day

Anil and Balbeer 2 days work = $2 \times 2 = 4$ units

Work left = $6 - 4 = 2$ units

Remaining work is done by Anil in 2 days

Anil's per day work = $2/2 = 1$ unit/day

Balbeer's per unit work = (Anil + Balbeer)'s work – Anil's work

$\Rightarrow 2 - 1 = 1$ unit/day

Balbeer alone can finish the same task = $6/1$

$\Rightarrow 6$ days

\therefore Balbeer alone can finish the same task is 6 days

27. The difference between the compound interest and the simple interest on a sum of money at 10% for 2 years (compound annually) is Rs 50. The sum of money is:

- a. Rs 4,000**
- b. Rs 5,000**
- c. Rs 4500**
- d. Rs 2.500**

Ans. b

Explanation:

Given:

Difference between CI and SI = Rs. 50

Rate = 10%

Time = 2 years

Formula used:

$$CI - SI = P \times (R/100)^2$$

for 2 years

where, P = Principal

R = Rate

Calculation:

According to question

We know that,

$$CI - SI = P \times (R/100)^2$$

$$\Rightarrow P \times (10/100)$$

$$2 = Rs. 50$$

$$\Rightarrow P \times (1/10)$$

$$2 = Rs. 50$$

$$\Rightarrow P \times (1/100) = Rs. 50$$

$$\Rightarrow P = Rs. 5000$$

∴ The sum of money is Rs. 5000

28. When is International Dance Day celebrated?

- a. 29th April**
- b. 28th April**
- c. 27th April**
- d. 30th April**

Ans. a

Explanation:

The correct answer is 29th April.

Every year on April 29, the International Theatre Institute invites its members, as well as dancers, choreographers, dance students, and lovers, to a Gala Celebration to commemorate International Dance Day.

29. Which of these is NOT a part of capital receipt?

- a. Recovery of loan**
- b. Disinvestment**
- c. Borrowing**
- d. Tax**

Ans. d

Explanation:

The correct answer is Tax.

Tax is NOT a part of capital receipt.

30. In which year was India's first nuclear reactor formally inaugurated by Prime minister JL Nehru?

- a. 1955**
- b. 1967**
- c. 1965**
- d. 1957**

Ans. d

Explanation:

The correct answer is 1957.

Apsara, India's and Asia's first nuclear reactor, went into operation on August 4, 1956, at 3:45 p.m., and was inaugurated by Prime Minister Nehru on January 20, 1957.

31. Who led the Khilafat movement?

- a. Mahatma Gandhi**
- b. Ali Brothers**
- c. Muhammad Ali Jinnah**
- d. None of these**

Ans. b

Explanation:

The correct answer is Ali Brothers.

The Khilafat movement led by Ali Brothers.

32. Select the option that is related to the third word in the same way as the second word is related to the first word.

Shirt : Apparel :: Necklace : ?

- a. Jewellery**
- b. Neck**
- c. Chain**
- d. Gold**

Ans. a

Explanation:

The logic followed here is:

Apparel is related to shirt.

Similarly,

Jewellery is related to Necklace.

Hence, "Jewellery" is the correct answer.

33. Identify the principal organ of the UN which got suspended in 1994?

- a. International Court of Justice**
- b. General Assembly**
- c. Security Council**
- d. Trusteeship Council**

Ans. d

Explanation:

The correct answer is Trusteeship Council.

The Trusteeship Council ceased operations on November 1, 1994, a month after Palau, the final remaining United Nations trust territory, gained independence.

34. If the price of a grocery item consumed by a family increases by 25%, then by what percentage should its consumption reduce, so as to keep the expenditure on this item unchanged?

- a. 20%**

- b. 25%
- c. 67%
- d. 50%

Ans. a

Explanation:

Calculation:

Let the original price of grocery be Rs. 100

Then,

Increased price = Rs. 25

Reduction in consumption = $[(25/125) \times 100]\%$

$\Rightarrow 20\%$

\therefore The family will have to reduce the consumption of grocery by 20%

35. The balance of exports and imports of goods is referred to as:

- a. current account
- b. Current account balance
- c. current account deficit
- d. Balance of trade

Ans. d

Explanation:

The correct answer is Balance of trade .

The difference between the value of a country's exports and the value of its imports for a certain period is known as the balance of trade (BOT).

36. Find the value of $7 + 5 - 2 \times (7 + 89) - 94 \div 2 + (33 \div 3 + 9 \times 2 - 7) \div 11$.

- a. -235
- b. -225
- c. 245
- d. -245

Ans. b

Explanation:

Concept Used:

Calculation:

$$7 + 5 - 2 \times (7 + 89) - 94 \div 2 + (33 \div 3 + 9 \times 2 - 7) \div 11.$$

$$\Rightarrow 7 + 5 - 2 \times 96 - 94 \div 2 + (33 \div 3 + 9 \times 2 - 7) \div 11$$

$$\Rightarrow 7 + 5 - 2 \times 96 - 94 \div 2 + (11 + 18 - 7) \div 11$$

$$\Rightarrow 7 + 5 - 2 \times 96 - 94 \div 2 + 22 \div 11$$

$$\Rightarrow 7 + 5 - 2 \times 96 - 47 + 2$$

$$\Rightarrow 12 - 2 \times 96 - 47 + 2$$

$$\Rightarrow 12 - 192 - 47 + 2$$

$$\Rightarrow -180 - 47 + 2$$

$$\Rightarrow -227 + 2$$

$$\Rightarrow -225$$

\therefore The value is -225

37. The value of $\frac{2}{5} \times 350 + 30\%$ of 250 is:

a. 115

b. 125

c. 215

d. 225

Ans. c

Explanation:

Calculation:

$$2/5 \times 350 + 30\% \text{ of } 250$$

$$\Rightarrow 2/5 \times 350 + 30/100 \times 250$$

$$\Rightarrow 140 + 75$$

$$\Rightarrow 215$$

\therefore Required value is 215

38. The value of $\sqrt{\frac{36.1}{102.4}}$ is:

a. 6.1/34

b. 19/34

c. 19/32

d. 19/31

Ans. c

Explanation:

Calculation:

$$\sqrt{\frac{36.1}{102.4}}$$

$$\Rightarrow 19/32$$

∴ Required value is 19/32

39. Which of the following countries is a permanent member of the United Nations Security Council?

- a. India
- b. japan
- c. Chanda
- d. China

Ans. d

Explanation:

The correct answer is China.

The Permanent Members of the United Nations Security Council (also known as the Permanent Five, Big Five, or P5) are the five sovereign states granted a permanent seat on the UN Security Council by the United Nations Charter of 1945: China, France, Russia, the United Kingdom, and the United States.

40. The value of sin 150 is:

a. $\frac{1}{\sqrt{2}}$

b. $\frac{\sqrt{3}-1}{2\sqrt{2}}$

c. $\frac{\sqrt{3}+1}{2\sqrt{2}}$

d. $\frac{\sqrt{3}-1}{\sqrt{3}+1}$

Ans. b

Explanation:

Formula used:

$$\sin(A - B) = \sin A \cos B - \cos A \sin B$$

Calculation:

$$\Rightarrow \sin(45^\circ - 30^\circ) = \sin 45^\circ \cos 30^\circ - \cos 45^\circ \sin 30^\circ$$

$$\Rightarrow 1/\sqrt{2} \times \sqrt{3}/2 - 1/\sqrt{2} \times 1/2$$

$$\Rightarrow \sqrt{3}/2\sqrt{2} - 1/2\sqrt{2}$$

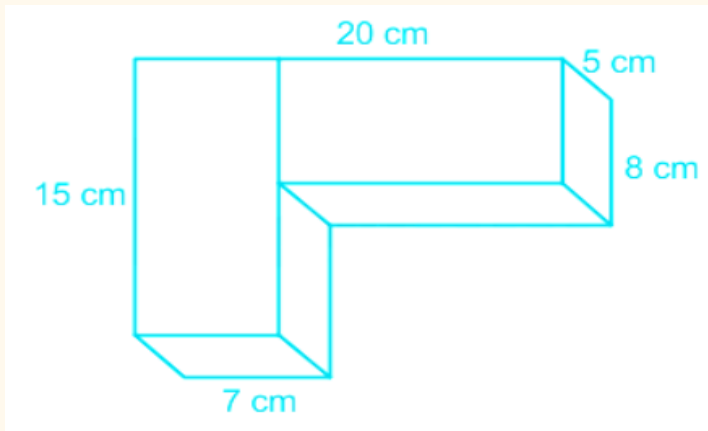
$$\Rightarrow (\sqrt{3} - 1)/2\sqrt{2} \times 2\sqrt{2}$$

$$\Rightarrow (\sqrt{6} - \sqrt{2})/4$$

$$\Rightarrow \sqrt{3} - 1/2\sqrt{2}$$

\therefore The value of $\sin 15^\circ$ is $\frac{\sqrt{3}-1}{2\sqrt{2}}$

41. What is the total surface area of the visible faces in the given figure?



a. 384 cm²

b. 905 cm²

c. 1325cm²

d. 580 cm²

Ans. a

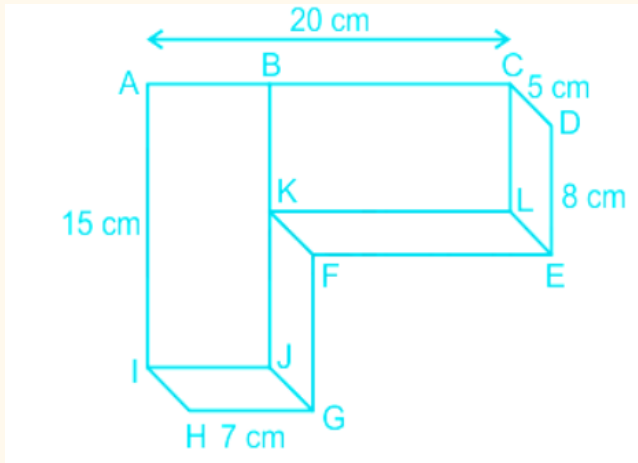
Explanation:

Concept Used:

To find the area of visible faces, we have to take the area of 2 sides

Area of rectangle = Length \times Breadth

Calculation:



$$\text{Area of ABJI} = (15 \times 7) \text{ cm}^2$$

$$\Rightarrow 105 \text{ cm}^2$$

$$\text{Area of IJGH} = (7 \times 5) \text{ cm}^2$$

$$\Rightarrow 35 \text{ cm}^2$$

$$\text{Area of BCLK} = (13 \times 8) \text{ cm}^2$$

$$\Rightarrow 104 \text{ cm}^2$$

$$\text{Area of KLEF} = (13 \times 5) \text{ cm}^2$$

$$\Rightarrow 65 \text{ cm}^2$$

$$\text{Area of KFGJ} = (5 \times 7) \text{ cm}^2$$

$$\Rightarrow 35 \text{ cm}^2$$

$$\text{Area of CDEL} = (8 \times 5) \text{ cm}^2$$

$$\Rightarrow 40 \text{ cm}^2$$

$$\text{Total area of visible faces} = (105 + 35 + 104 + 65 + 35 + 40) \text{ cm}^2$$

$$\Rightarrow 384 \text{ cm}^2$$

\therefore Total area of visible faces is 384 cm^2

42. An airplane is carrying 500 passengers, of which 45% are men and 20% are children. The ratio of the number of men women and children in the lowest terms is

a. $7 : 4 : 9$

b. $4 : 74 : 9$

c. $9 : 4 : 7$

d. $9 : 7 : 4$

Ans. d

Explanation:

Given:

Total passengers in airplane = 500

No. of men = 45%

No. of children = 20%

Calculation:

Number of men = $45/100 \times 500$

$\Rightarrow 225$

Number of children = $20/100 \times 500$

$\Rightarrow 100$

Total number of men and children = $(225 + 100)$

$\Rightarrow 325$

Number of women = $500 - 325$

$\Rightarrow 175$

Required ratio of men, women and children = $225 : 175 : 100$

$\Rightarrow 9 : 7 : 4$

\therefore Required ratio of men, women and children is $9 : 7 : 4$

43. Who is the author of the book 'Shades of Saffron'?

- a. Chidanand Rajghatta
- b. Kamla Bhasin
- c. Saba Naqvi
- d. Arundhati Roy

Ans. c

Explanation:

The correct answer is Saba Naqvi.

Shades of Saffron: From Vajpayee to Modi, by Saba Naqvi, provides a ringside view of the Bharatiya Janata Party's (BJP) history from its foundation in 1980 to its emergence as India's main political party.

44. Who won the Spanish 'La Liga' title, 2019-20?

- a. Real Madrid C.F
- b. SD Huesca
- c. Rayo Vallecano
- d. FC Barcelona

Ans. a

Explanation:

The correct answer is Real Madrid C.F.

Real Madrid was crowned the La Liga 2019-20 champions after they beat Villarreal 2-1 at the empty Alfredo Di Stefano Stadium.

45. Anil alone can complete a task in 6 days and Bhushan alone can complete it in 8 days. Anil and Bhushan undertook the task for Rs 3,200 with the help of Chaman, they completed the task in 3 days. What is Chaman's share in this earning?

- a. Rs 600
- b. Rs 400
- c. Rs 375
- d. Rs 800

Ans. b

Explanation:

Given:

Anil can complete a task = 6 days

Bhushan can complete a task = 8 days

Anil, Bhushan and Chaman can complete a task = 3 days

Work undertaken for the task = Rs. 3200

Formula used:

Work = Time × Efficiency

Calculation:

Anil one day's work = $\frac{1}{6}$ days

Bhushan one day's work = $\frac{1}{8}$ days

Chaman one day's work = $\frac{1}{3}$

$$\Rightarrow \frac{1}{3} - \left(\frac{1}{6} + \frac{1}{8}\right)$$

$$\Rightarrow \frac{1}{3} - \frac{7}{24}$$

$$\Rightarrow \frac{1}{24}$$

Ratio of Anil, Bhushan and Chaman = $\frac{1}{6} : \frac{1}{8} : \frac{1}{24}$

$$\Rightarrow 4 : 3 : 1$$

Chaman's share = Rs. $\left(\frac{1}{8} \times 3200\right)$

$$\Rightarrow \text{Rs. } 400$$

∴ Chaman's share in the earning is Rs. 400

46. Shakila incurs a loss of 10% after selling a machine part for Rs 540. In order

to gain a profit of 10%, at what price should Shakila sell the same part?

- a. Rs 550
- b. Rs 60
- c. Rs 660
- d. Rs 600

Ans. c

Explanation:

Given:

Loss% = 10

Selling price of machine = Rs. 540

Calculation:

Cost price = selling price + 0.90 cost price

⇒ 0.90 cost price = 540

⇒ CP = 540/0.90

⇒ 600

To earn a 10% profit selling price = 1.1 cost price

⇒ SP = 1.1 × 600

⇒ Rs. 660

∴ SP of the machine is Rs. 660

47. What is Tamil New Year also known as?

- a. Vishu
- b. Bestu Varas
- c. Varusha Pirappu
- d. Ugadi

Ans. c

Explanation:

The correct answer is Varusha Pirappu.

Tamil people across the world are celebrating New year today, which is the first day of the Chithirai month.

This special day is also referred to as Puthandu or Varusha Pirappu.

48. In the Computer field, What does LIFO stand for?

- a. Lost - In - First -Out
- b. Lost - In - Finish -Out

- c. Last - In - First -Out
- d. Left - In - First -Out

Ans. c

Explanation:

The correct answer is Last - In - First -Out.

LIFO is an abbreviation for Last in, first out is same as first in, last out (FILO).

49. The movement for a separate Andhra was called:

- a. Visalandhra movement
- b. Telugu Andhra movement
- c. Hamara Andhra movement
- d. Azad Andhra movement

Ans. a

Explanation:

The correct answer is Visalandhra movement.

The Vishalandhra, Vishal Andhra, or Visalandhra Movement was a movement in post-independence India for a united state for all Telugu speakers, a Greater Andhra

50. Which essential element is used in the synthesis of proteins and other compounds in plants?

- a. Magnesium
- b. Phosphorous
- c. Nitrogen
- d. Potassium

Ans. c

Explanation:

The correct answer is Nitrogen.

Nitrogen is a major essential element for all organisms, and a constituent of proteins, nucleic acids, and other indispensable organic compounds.

51. Some organisms use simple food material obtained from inorganic sources in the form of carbon dioxide and water. what are these organisms known

as?

- a. Saprophytes
- b. Holozoic
- c. Heterotrophs
- d. Autotrophs

Ans. d

Explanation:

The correct answer is Autotrophs.

An autotroph or primary producer is an organism that produces complex organic compounds (such as carbohydrates, fats, and proteins) using carbon from simple substances such as carbon dioxide, generally using energy from light (photosynthesis) or inorganic chemical reactions (chemosynthesis).

52. Which of the following is NOT a rational number?

$$\sqrt{3^2 + 4^2}, \sqrt{12.96}, \sqrt{125} \text{ and } \sqrt{900}$$

a. $\sqrt{12.96}$

b. $\sqrt{125}$

c. $\sqrt{900}$

d. $\sqrt{3^2 + 4^2}$

Ans. b

Explanation:

Calculation:

Rational number - A number which is in the form of p/q

According to the given option

$$\Rightarrow \sqrt{3^2 + 4^2} = \sqrt{25} = 5 \text{ is a rational number}$$

$$\Rightarrow \sqrt{12.96} = 3.6 \text{ is a rational number}$$

$$\Rightarrow \sqrt{125} = 5\sqrt{5} \text{ is not a rational number}$$

$$\Rightarrow \sqrt{900} = 30 \text{ is a rational number}$$

$$\therefore \sqrt{125} \text{ is not a rational number}$$

53. If the dimensions of a room are 2 m, 3 m and 4 m, then many cubes of size

$$\frac{1}{2}m \times \frac{1}{3}m \times \frac{1}{4}m$$

can be placed in the same room?

- a. 576**
- b. 672**
- c. 676**
- d. 760**

Ans. a

Explanation:

Given:

Dimensions of a room = 2 m, 3 m, and 4 m

Dimensions of cubes = $\frac{1}{2}$ m, $\frac{1}{3}$ m and $\frac{1}{4}$ m

Formula used:

Volume of cuboid = $l \times b \times h$

Calculation:

Number of cubes placed in the room = Capacity of the room/Volume of a cube

$$\Rightarrow (2 \times 3 \times 4) / (\frac{1}{2} \times \frac{1}{3} \times \frac{1}{4})$$

$$\Rightarrow 24 / \frac{1}{24}$$

$$\Rightarrow 24 \times 24 \text{ cubes}$$

$$\Rightarrow 576 \text{ cubes}$$

\therefore The number of cubes placed in the room is 576

54. A students required 20% marks to pass in psychology. He/ She secured 10% marks and failed by 20 marks. what is the passing marks?

- a. 50**
- b. 20**
- c. 40**
- d. 60**

Ans. c

Explanation:

Given:

Marks obtained by students to pass in psychology = 20%

Students secured marks = 10%

Students failed by 20 marks

Calculation:

According to question

$$\Rightarrow 10\% + 20 = 20\%$$

$$\Rightarrow 10\% = 20$$

$$\Rightarrow 100\% = 200$$

Now,

Students marks to pass in psychology = 20% of 200

$$\Rightarrow 20/100 \times 200$$

$$\Rightarrow 40$$

∴ The passing marks is 40

55. The value of $1 \div \left\{ \frac{1}{2} + \frac{1}{3} + \frac{1}{6} \div \left(\frac{3}{4} - \frac{1}{3} \right) \right\}$

a. 5/12

b. 1

c. 1/12

d. 30/37

Ans. d

Explanation:

Concept Used:

Calculation:

$$\Rightarrow 1 \div \left\{ \frac{1}{2} + \frac{1}{3} + \frac{1}{6} \div \left(\frac{3}{4} - \frac{1}{3} \right) \right\}$$

$$\Rightarrow 1 \div \left\{ \frac{1}{2} + \frac{1}{3} + \frac{1}{6} \div \frac{5}{12} \right\}$$

$$\Rightarrow 1 \div \left\{ \frac{1}{2} + \frac{1}{3} + \frac{1}{6} \times \frac{12}{5} \right\}$$

$$\Rightarrow 1 \div \left\{ \frac{1}{2} + \frac{1}{3} + \frac{2}{5} \right\}$$

$$\Rightarrow 1 \div \left\{ \frac{(15 + 10 + 12)}{30} \right\}$$

$$\Rightarrow 1 \div \left\{ \frac{37}{30} \right\}$$

$$\Rightarrow 1 \times \frac{30}{37}$$

$$\Rightarrow \frac{30}{37}$$

∴ Required value of ? is 30/37

56. The Rourkela Steel Plant started with the inauguration of first blast furnace by the then President of India in:

a. 1958

b. 1969

c. 1968

d. 1959

Ans. d

Explanation:

The correct answer is 1959.

On 3 February 1959, then president Rajendra Prasad inaugurated RSP's first blast furnace named 'Parvati' when the company was known as Hindustan Steel Limited (HSL).

57. If the denominator of a rational number is of the form $2^n 5^m$, where n and m are non-negative integers, then what will be the decimal expansion of the number?

- a. Non-terminating but recurring
- b. Can't be determined
- c. Terminating
- d. Non-terminating and non-recurring

Ans. c

Explanation:

Calculation:

A rational number is terminated if it can be expressed in the form: $p/(2^n 5^m)$. The rational number whose denominator is a number that has no other factor than 2 or 5,

will terminate the result sooner or later after the decimal point.

∴ The decimal expansion of the number is Terminating

58. Select the number from among the given options that can replace the question mark? in the following series.

7, 12, 19, ?, 39

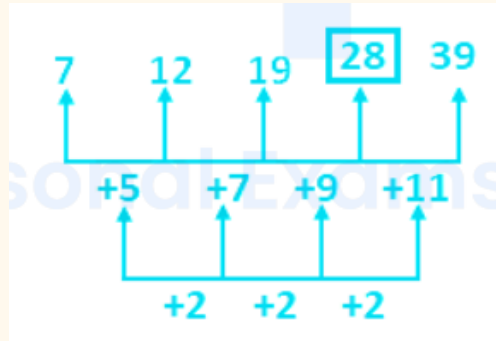
- a. 24
- b. 28
- c. 29
- d. 26

Ans. b

Explanation:

In this series, we subtract first number from second number we get the number, subtract second number from third number we get the number and so on. After that we get new number again first number subtract from second number and second number subtract from third number and so on.

The series are given below -



Hence, "28" is the correct answer.

59. How many factors of the number 21600 are perfect squares?

- a. 15
- b. 12
- c. 10
- d. 6

Ans. b

Explanation:

Concept used

Factorize the given number and then make pairs of same numbers to get the possible square factors

Calculation:

$$\Rightarrow 21600 = 2^2 \times 2^2 \times 2 \times 3^2 \times 3 \times 5^2$$

Factors of 21600 that are perfect squares is

$$\Rightarrow 1$$

$$\Rightarrow 2^2 = 4,$$

$$\Rightarrow 3^2 = 9,$$

$$\Rightarrow 2^2 \times 2^2 = 16$$

$$\Rightarrow 5^2 = 25$$

$$\Rightarrow 2^2 \times 3^2 = 36$$

$$\Rightarrow 2^2 \times 5^2 = 100$$

$$\Rightarrow 2^2 \times 2^2 \times 3^2 = 144$$

$$\Rightarrow 3^2 \times 5^2 = 225$$

$$\Rightarrow 2^2 \times 2^2 \times 5^2 = 400$$

$$\Rightarrow 5^2 \times 5^2 \times 2^2 = 900$$

$$\Rightarrow 3^2 \times 5^2 \times 2^4 = 3600$$

Number of factors of 21600 whose perfect square = 12

\therefore Factors of the number 21600 perfect squares is 12

60. In a frequency distribution, the mid value of a class is 12 and its width is 6.

The lower limit of the class is:

a. 1

b. 18

c. 6

d. 9

Ans. d

Explanation:

Given:

The mid value of a class = 12

Width = 6

Formula used:

Lower limit = Mid value – width/2

Calculation:

Lower limit = 12 – 6/2

$\Rightarrow 12 - 3$

$\Rightarrow 9$

\therefore The lower limit of the class is 9

61. The exterior angles of any polygon sum up to:

a. 270°

b. 360°

c. 90°

d. 180°

Ans. b

Explanation:

Calculation:

Exterior angle - An exterior angles of polygon is the angle between a side and its

adjacent extended side

The exterior angles of any polygon sum up to 360°

\therefore Required sum of exterior angles is 360°

62. What is the least number, which when divided by 12, 21, and 35, leaves the same remainder 6?

- a. 576
- b. 420
- c. 426
- d. 414

Ans. c

Explanation:

Given:

Numbers = 12, 21 and 35

Remainder = 6

Calculation:

LCM of numbers 12, 21, and 35 is 420

Remainder = 6

Number = $420 + 6$

$\Rightarrow 426$

\therefore The least number which when divided by 12, 21 and 35 leaves the same remainder 6 is 426

63. Among various electrical safety devices, one based on the heating effect of electric current is called a:

- a. Surge protector
- b. fuse
- c. protective relay
- d. circuit breaker

Ans. b

Explanation:

The correct answer is Fuse.

Fuse is based on the heating effect of electric current.

64. If in a certain code language, REWARI is coded as TGYCTK, then how is

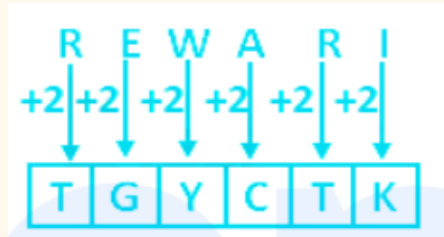
DELHI coded in the same code language?

- a. FGNJK
- b. FGLJK
- c. FGOJK
- d. FGMJK

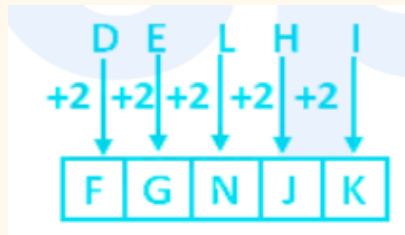
Ans. a

The pattern followed is:

If in a certain code language, REWARI is coded as TGYCTK. Which are given below -



Similarly, then DELHI coded in the same code language -



Hence, "FGNJK" is the correct answer.

65. The sum of the deviations about the mean is always:

- a. the total standard deviation
- b. positive
- c. zero
- d. the range

Ans. c

Explanation:

Concept:

The sum of the deviations of a given set of data about their mean is always zero i.e. sum of positive deviation from mean is equal to the sum of negative deviations.

For example: 2, 4, 5, 8, 11

$$\text{Mean } (\bar{x}) = (2 + 4 + 5 + 8 + 11)/5 = 30/5 = 6$$

$$x_i - \bar{x}$$

$$2 - 4$$

$$4 - 2$$

$$5 - 1$$

$$8 - 2$$

$$11 - 5$$

$$\sum (x_i - \bar{x}) = -4 - 2 - 1 + 2 + 5 = 0$$

∴ The sum of the deviations about the mean is always zero.

66. The expression 'Aaya Ram,, Gaya Ram' become popular in political vocabulary in India to describe:

- a. Bipin Lal
- b. Durgesh Lal
- c. Gaya Lal
- d. Jaya Lal

Ans. c

Explanation:

The correct answer is Gaya Lal.

Birender Singh told media, "Gaya Ram ab Aaya Ram hai."

67. Select the number from the given options that can replace the question mark(?) below:

If 243 (222) 317, then 548 (?) 621

- a. 210
- b. 209
- c. 211
- d. 219

Ans. d

Explanation:

Given: 243 (222) 317

The logic follows here is:

$$317 - 243 = 74,$$

$$74 \times 3 = 222$$

Similarly, to solve 548 (?) 621:

$$621 - 548 = 73,$$

$$73 \times 3 = 219$$

Hence, 219 is the correct answer.

68. What was considered as a symbol of human society that would NOT glorify machines and technology during the Indian National Movement?

- a. Potter's wheel
- b. Handloom
- c. Charkha
- d. Spinning jenny

Ans. c

Explanation:

The correct answer is Charkha.

Charkha was considered a symbol of human society that would not glorify machines and technology during the Indian National Movement.

69. Dena bank and Vijaya Bank have recently merged with:

- a. Bank of Baroda
- b. State Bank of India
- c. Punjab National Bank
- d. Bank of India

Ans. a

Explanation:

The correct answer is Bank of Baroda.

Vijaya Bank and Dena Bank were merged with Bank of Baroda with effect from 1 April 2019.

70. Which of the following is NOT an input device?

- a. Light pen
- b. Plotter
- c. Track ball
- d. Touch screen

Ans. b

Explanation:

The correct answer is Plotter

Some of the output devices are Visual Display Units i.e. a Monitor, Printer graphic Output devices, Plotters , Speakers.

71. When was India's hundredth space mission launched?

- a. September,2010
- b. September,2012
- c. September,2014
- d. September,2009

Ans. b

Explanation:

The correct answer is September,2012.

India successfully launched its 100th space mission on 9th September 2012 using its Polar Satellite Launch Vehicle to send two new satellites into orbit.

72. In a row of students, one student is tenth from either end of the row. How many students are there in the row?

- a. 22
- b. 19
- c. 20
- d. 16

Ans. b

Explanation:

Total number of student = No of student from left + No of student from right - 1

In a row of students, one student is tenth from either end of the row.

Then total number of student = $10 + 10 - 1$

= $20 - 1$

Then total number of student = 19

Hence, "19" is the correct answer.

73. A statement is given followed by two arguments. Decide which of the arguments is/are strong with respect to the statement.

Statement:

Life expectancy of Indians is increasing

Arguments:

- I. Yes, People are getting better medical facilities.**
- ii. Yes, People are doing more physical exercises now.**
- a. Only argument II is strong**
- b. Both arguments I and II are strong**
- c. Neither I nor II is strong**
- d. Only argument I is Strong.**

Ans. b

Explanation:

The logic followed is:

Arguments:

I. Yes People are getting better medical facilities. True (According to statement Life expectancy of Indians increasing. This is fit for this statement.)

ii. Yes, People are doing more physical exercises now. True (According to statement Life expectancy of Indians increasing. This is fit for this statement.)

Thus, both arguments are strong.

Hence, the correct answer is "Both arguments I and II are strong".

74. Which is Satyajit Ray's famous film about the decline of the aristocratic zamindari style of living?

- a. Pather Panchali**
- b. Jalsaghar**
- c. Charulata**
- d. Apur Sansar**

Ans. b

Explanation:

The correct answer is Jalsaghar.

Jalsaghar (aka "The Music Room") is a 1958 drama film directed by master Indian filmmaker Satyajit Ray.

75. Who was the first Indian to win the Nobel Prize for literature in 1913?

- a. Rabindranath Tagore**
- b. Annadashankar Roy**
- c. Humayun Kabir**
- d. Bishnu Dey**

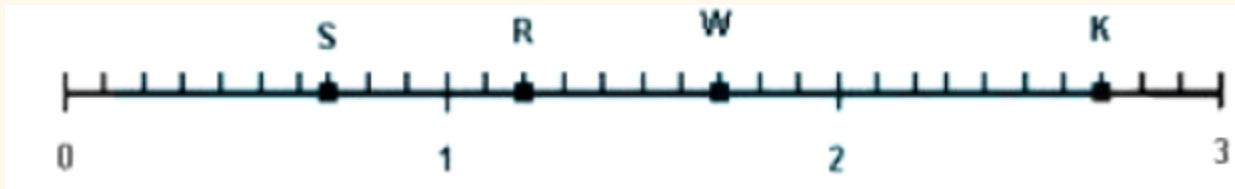
Ans. a

Explanation:

The correct answer is Rabindranath Tagore.

The Nobel Prize in Literature 1913 was awarded to Rabindranath Tagore "because of his profoundly sensitive, fresh and beautiful verse, by which, with consummate skill, he has made his poetic thought, expressed in his own English words, a part of the literature of the West."

76. Which point on the given number line represents $6/5$?



- a. K
- b. R
- c. S
- d. W

Ans. b

Explanation:

Calculation:

Point R is at 1.2 on the number line

And $6/5$ corresponds to 1.2

∴ The given number line represents $6/5$ is R

77. Which port is one of the oldest artificial ports on the eastern coast?

- a. Chennai port
- b. Kandla port
- c. Visakhapatnam Port
- d. Paradip Port

Ans. a

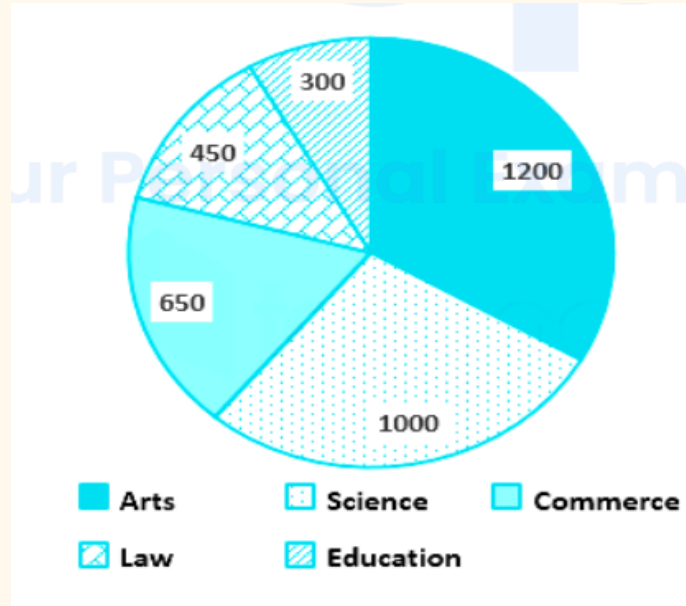
Explanation:

The correct answer is Chennai Port.

Chennai Port, formerly known as Madras Port, is the second-largest container port of India, behind Mumbai's Nhava Sheva.

It is one of the oldest artificial ports on the eastern coast.

78. The given pie diagram shows the number of students admitted in different faculties of a college. What part of the total students is admitted in the arts faculty?



- a. $\frac{5}{8}$
- b. $\frac{1}{12}$
- c. $\frac{1}{3}$
- d. $\frac{1}{8}$

Ans. c

Explanation:

Calculation:

Students admitted in the arts faculty = 1200

Total students admitted in the college = $(300 + 1200 + 1000 + 650 + 450)$
 $\Rightarrow 3600$

Total students admitted in the arts faculty = $1200/3600$
 $\Rightarrow \frac{1}{3}$

\therefore Required part of the total students is admitted in the arts faculty is $\frac{1}{3}$

79. Four options have been given, out of which three are alike in some manner and one is different. Select the odd one.

- a. (51, 24)
- b. (71, 44)

- c. (42, 15)
- d. (32, 13)

Ans. d

Explanation:

The pattern followed here is -

The sum of the digit of the number on both the side are equal.

From option 1-

(51, 24)

$$5 + 1 = 2 + 4$$

$$6 = 6$$

From option 2-

(71, 44)

$$7 + 1 = 4 + 4$$

$$8 = 8$$

From option 3-

(42, 15)

$$4 + 2 = 1 + 5$$

$$6 = 6$$

From option 4-

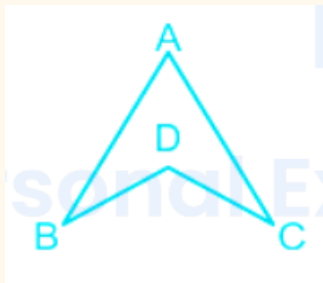
(32, 13)

$$3 + 2 = 1 + 3$$

$$5 \approx 4 \text{ (odd among all)}$$

Hence, "(32, 13)" is the correct answer.

80. In the given figure, $\angle ABD = 55^\circ$ and $\angle ACD = 30^\circ$, If $\angle BAC = y^\circ$ and $\angle BDC = x^\circ$, then what is the value of $x-y$?



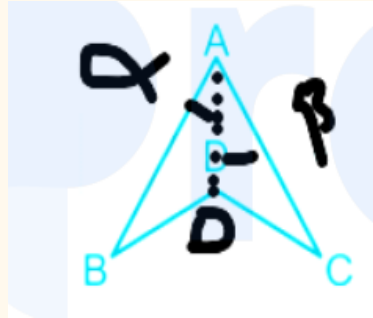
- a. 85
- b. 15
- c. 95

d. 105

Ans. a

Explanation:

Given:



$$\angle ABD = 55^\circ \text{ and } \angle ACD = 30^\circ$$

Calculation:

$$\angle BAD = \alpha \text{ and } \angle CAD = \beta$$

So Referring to the triangle $\triangle ABD$ and $\triangle ACD$,

$$\angle ADB = 180^\circ - \alpha - 55^\circ$$

$$\angle ADC = 180^\circ - \beta - 30^\circ$$

For point D,

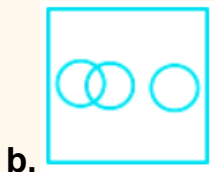
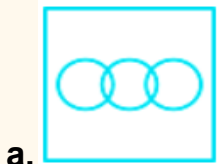
$$\angle ADB + \angle ADC + x = 360^\circ$$

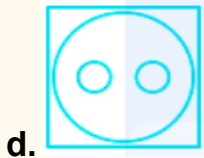
$$\Rightarrow 80^\circ - \alpha - 55^\circ + 180^\circ - \beta - 30^\circ + x = 360^\circ$$

$$\Rightarrow x - y = 85^\circ$$

81. Select the Venn diagram that best represents the relationship between the given set of classes.

Apple, Mango, Fruits

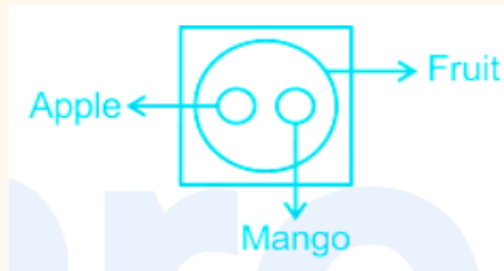




Ans. d

Explanation:

The venn diagram of Apple, Mango, Fruits are given below -
All apple and mango are fruits but no mango is an apple.



Hence, "option 4" is the correct answer

82. The given shows the number of students in a hostel speaking different languages:

Languages	Hindi	English	Marathi	Tamil	Bengali	Total
Number of Students	25	22	12	9	4	72

Which language is spoken by at least 1 out of 3 students residing in the hostel?

- a. Tamil
- b. Marahi
- c. Hindi
- d. English

Ans. c

Explanation:

Calculation:

Total number of students = 72

1 out of 3 students = $\frac{1}{3} = 33.33\%$ (Approx)

We have to Calculate $\frac{1}{3}$ rd Part of 72 Students

Language which is spoken at least 1 out of 3 students = $\frac{72}{3}$

$\Rightarrow 24$

\therefore Language is spoken by atleast 1 out of 3 students residing in the hostel is Hindi

83. Small bead-like structures inside the ovary of flowers is called?

- a. sepals
- b. petals
- c. stamen
- d. ovules

Ans. d

Explanation:

The correct answer isOvules

Small bead-like structures inside the ovary of flowers is called ovules .

84. Who represented the Congress in the second round table conference held in London?

- a. Mahatma Gandhi
- b. Lal Bahadur Shastri
- c. Vallabhbhai Patel
- d. Jawaharlal Nehru

Ans. a

Explanation:

The correct answer is Mahatma Gandhi.

Mahatma Gandhi represented the Congress in the second round table conference held in London.

85. If $x^2 - 4x + 1 = 0$, then what is the value of $x^2 + \frac{1}{x^2}$

- a. 18
- b. 14

c. 15

d. 16

Ans. b

Explanation:

Given:

$$x^2 - 4x + 1 = 0$$

Formula used:

$$(a + b)^2 = a^2 + b^2 + 2ab$$

Calculation:

$$x^2 + 1 = 4x$$

Dividing both sides by x

$$\Rightarrow x + 1/x = 4$$

Squaring both sides

$$(x + 1/x)^2 = (4)^2$$

$$\Rightarrow x^2 + 1/x^2 + (2 \times 1/x \times x) = 16$$

$$\Rightarrow x^2 + 1/x^2 + 2 = 16$$

$$\Rightarrow x^2 + 1/x^2 = 16 - 2$$

$$\Rightarrow x^2 + 1/x^2 = 14$$

∴ The value of $x^2 + \frac{1}{x^2}$ is 14

86. The addition to capital stock in an economy is measured by net investment or new capital formation, which is expressed as:

- a. Net investment = Gross investment + depreciation
- b. Net investment = Gross investment - depreciation
- c. Depreciation = Net investment + Gross investment
- d. Gross investment = Net investment - depreciation

Ans. b

Explanation:

The correct answer is Net investment = Gross investment - depreciation.

The addition to the capital stock in an economy is measured by net investment or new capital formation, which is expressed as Net investment = Gross investment - depreciation.

87. 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 conclusions logically follows(s) from the statements.

Statements:

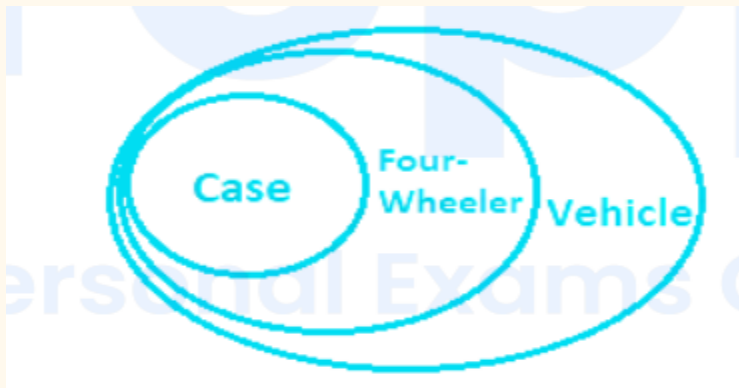
1. All the case are four-wheelers.
2. All the four-wheelers are vehicles.

Conclusions:

- I. All the vehicle are four-wheelers
 - II. All the case are vehicles.
- a. Only II
 - b. Either I or II
 - c. Only I
 - d. Both I and II

Ans. a

Explanation:



Conclusions:

- I. All the vehicle are four-wheelers. False (All the four-wheelers are vehicles but all the vehicles are not four-wheelers.)
 - II. All the case are vehicles. True (All the case are four-wheelers. All the fourwheelers are vehicles. So all the case are vehicles.)
- Hence, "option 1" is the correct answer.

88. What protects the inner of the stomach from the action of acid normal conditions?

- a. Villi
- b. Gastric Glands
- c. Mucus

d. Enzymes

Ans. c

Explanation:

The correct answer is Mucus.

A layer of mucus along the inner walls of the stomach is vital to protect the cell linings of that organ from the highly acidic environment within it.

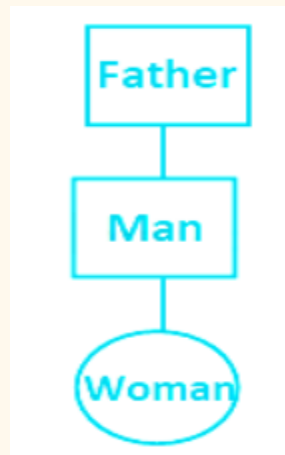
89. Indicating to a woman, a man said, "Her father is the only son of my father, "How is the man related to the woman?

- a. Father
- b. Grandfather
- c. Brother
- d. Son

Ans. a

Explanation:

Indicating to a women, a man said, "Her father is the only son my father,



Man is the father of woman.

Hence, "Father" is the correct answer.

90. The given table shows the height (in cm) of 90 plants in a garden:

Height (in cm)	58	61	62	64	65	70
Number of plants	20	25	14	9	12	10

How many plants have heights 61 cm or more, but less than 70 cm?

- a. 62**
- b. 65**
- c. 59**
- d. 60**

Ans. d

Explanation:

Calculation:

Plants whose height are 61 cm = 25

Plants whose height are 62 cm = 14

Plants whose height are 64 cm = 9

Plants whose height are 65 cm = 12

Total number of plants whose heights are 61 cm or more = $(25 + 14 + 9 + 12)$

$\Rightarrow 60$

\therefore Plants have heights 61 cm or more, but less than 70 cm is 60

91. Five persons A,B,C,D and E are sitting one above the other on a ladder (not necessarily in the same order) B is sitting above A with one person between them. Only two persons are sitting between A and C. If C is not sitting top, then who is sitting in the middle?

- a. C**
- b. D**
- c. E**
- d. B**

Ans. d

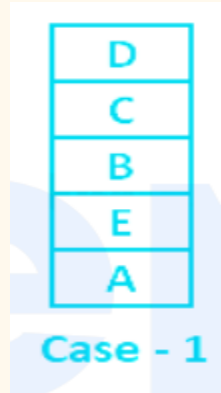
Explanation:

Five persons A,B,C,D and E are sitting one above the other on a ladder (not necessarily in the same order).

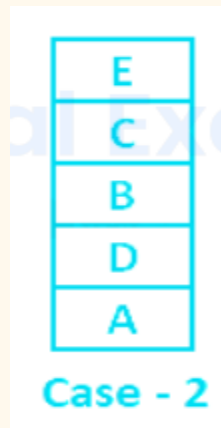
1) B is sitting above A with one person between them.

2) Only two persons are sitting between A and C. If C is not sitting top, the figure are given below -

In which there is two case in which first one is -



Second case are given below -



After observation of both cases, B is the sitting in the middle.
Hence, "B" is the correct answer.

92. A team is to be selected from 13 players P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12 and P13. There will be seven players in the team. P2 cannot be selected with P1, P6 or P4. P7 cannot be selected with P2, P10, P11 or P13. If P8 and P13 both are selected, then P5 must be selected. P4 cannot be selected with P2, P10, P12 or P11. Which of the following is a correct selection of the team?

- a. P1, P3, P4, P5, P6, P8, P9
- b. P1, P6, P11, P12, P13, P3, P4
- c. P1, P3, P4, P5, P8, P9, P13
- d. P2, P3, P5, P7, P8, P9, P13

Ans. c

Explanation:

A team is to be selected from 13 players P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12 and

P13.

- 1) P2 cannot be selected with P1, P6 or P4.
- 2) P7 cannot be selected with P2, P10, P11 or P13.
- 3) If P8 and P13 both are selected, then P5 must be selected.
- 4) P4 cannot be selected with P2, P10, P12 or P11.

Option 1 - P1, P3, P4, P5, P6, P8, P9 in which P8 and P13 always with P5, So P13 not present with P8 and P5. So it is incorrect combination.

Option 2 - P1, P6, P11, P12, P13, P3, P4 in which P8 and P13 always with P5, so P5 and P8 not present and P4 cannot be selected with P11 and P12. So it is incorrect combination.

Option 3 - P1, P3, P4, P5, P8, P9, P13. follow all the condition. So it is correct combination.

Option 4 - P2, P3, P5, P7, P8, P9, P13 in which P2 and P7 both together but in condition P2 and P7 never with same combination. So it is incorrect combination.

Hence, "option 3" is the correct answer.

93. If \times stands for addition, \div stands for subtraction, $+$ stands for multiplication and $-$ stands for division, then $10 \times 4 \div 4 - 2 + 1 = ?$

- a. 12
- b. 1.5
- c. 40
- d. 5

Ans. a

Explanation:

$$10 \times 4 \div 4 - 2 + 1 = ?$$

If \times stands for addition, \div stands for subtraction, $+$ stands for multiplication and $-$ stands for division,

Then-

$$10 + 4 - 4 \div 2 \times 1 = ?$$

Applying BODMAS rule -

$$10 + 4 - 2 \times 1 = ?$$

$$10 + 4 - 2 = ?$$

$$14 - 2 = ?$$

$$12 = ?$$

Hence, "12" is the correct answer.

94. Select the number from among the given options that can replace the question mark ? in the following series.

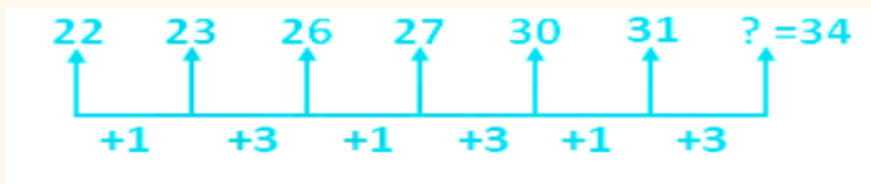
22, 23, 26, 27, 30, 31, ?

- a. 35
- b. 31
- c. 34
- d. 33

Ans. c

Explanation:

In this series first number is subtracted from second number we get 1, second number is subtracted from third number we get 3, third number is subtracted from fourth number we get 1 and fourth number is subtracted from fifth number we get 3 and so on -



Hence, "34" is the correct answer

95. Arrange the given words in alphabetical order:

A) mild, B) moderate, C) severe, D) profound

- a. A, B, C, D
- b. A, C, B, D
- c. A, B, D, C
- d. A, D, B, C

Ans. c

Explanation:

The pattern followed is:

In this question we arrange alphabetical order of the word:

First word come Mild before moderate, profound and severe because Mi come before Mo in alphabetical order, then Moderate come before profound and severe because M come before P in alphabetical order, then Profound come before severe because P come before S in alphabetical order then at last severe.

We shown below -

Frist come Mild then moderate then profound and then severe.

A) mi ld,

B) mo derate,

D) profound

C) severe,

Hence, "option 3" is the correct answer.

96. The given table shows the number of electric bulbs sold in a shop during a week:

Days	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Number of bulbs sold	25	100	150	200	75	90

on which day was the daily sale closest to the average sale for the week?

a. Friday

b. Saturday

c. Thursday

d. Tuesday

Ans. d

Explanation:

Calculation:

Number of electric bulbs sold on Monday = 25

Number of electric bulbs sold on Tuesday = 100

Number of electric bulbs sold on Wednesday = 150

Number of electric bulbs sold on Thursday = 200

Number of electric bulbs sold on Friday = 75

Number of electric bulbs sold on Saturday = 90

Total number of electric bulbs sold in a shop during a week = $(25 + 100 + 150 + 200 + 75 + 90)$

$\Rightarrow 640$

Average sale of the week = $640/6$

$\Rightarrow 106.66 \approx 100$

∴ The daily sale closest to the average sale for the week is Tuesday

97. Select the most appropriate option to fill in the blank.

W S O K _____

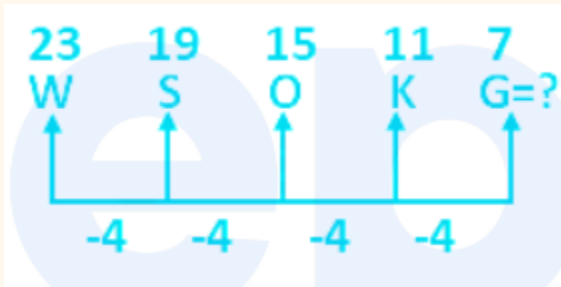
- a. L
- b. G
- c. T
- d. H

Ans. b

Explanation:

The logic followed here is:

In this word series in the first letter we subtract 4 we get second letter, in second letter we subtract 4 we get third letter and so on. The series are given below -



Hence, "G" is the correct answer.

98. Cariappa, Kargil, Katari, Manekshaw and subrto are five different sadans in sanik school. Kargil is to the right of Subrto and Katari is the left of Cariappa and right of Kargil. Subrto is to the right of Manekshaw. Which sadan is in the middle?

- a. Subrto
- b. Kargil
- c. katari
- d. Cariappa

Ans. b

Explanation:

Carippa, Kargil, Katari, Manekshaw and subrto are five sadans in sanik school.

1) Kargil is to the right of Subrto and Katari is the left of Cariappa and right of Kargil.

2) Subrto is to the right of Manekshaw,

The arrangement are given below-



Kargil sadan is in the middle.

Hence, "Kargil" is the correct answer.

99. D has a brother A. D is the son of C. B is C's father. In terms of relationship, what is A of B?

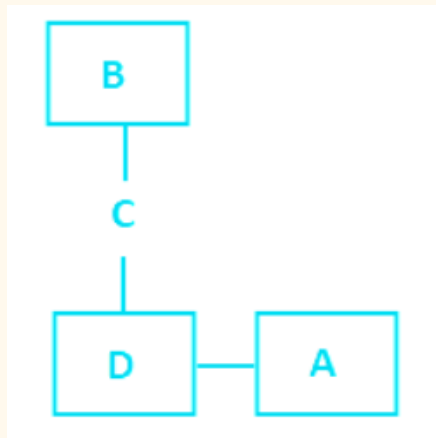
- a. Son
- b. Grandson
- c. Grandfather
- d. Brother

Ans. b

Explanation:

D has a brother A. D is the son of C. B is C's father.

Family tree are given below -



A is the grandson of B.

Hence, "Grandson" is the correct answer.

100. Select the word from the options, which is similar to the given words in a certain manner:

Stable, Burrow, Nest

- a. Slim**
- b. Herd**
- c. City**
- d. Den**

Ans. d

Explanation:

The logic follows here is:

The similar to the given words which are:

Stable means unlikely to change ,

Burrow means a hole in the ground made by certain animals ,

Nest means the home of certain animals or insects.

Similarly,

Den means the place where certain wild animals live .

Slim (thin in an attractive way), Herd (a large number of animals that live and feed together), City (a large and important town) which is not similar.

Hence, "Den" is the correct answer.