RRB NTPC 10 Jan 2021 Shift 1 Solution

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1. The base BC of a triangle ABC is divided at D such that BD = half of DC. The area of triangle ABC is _____ times the area of triangle ADC.
a. three
b. four
c. two
d. $\frac{3}{2}$
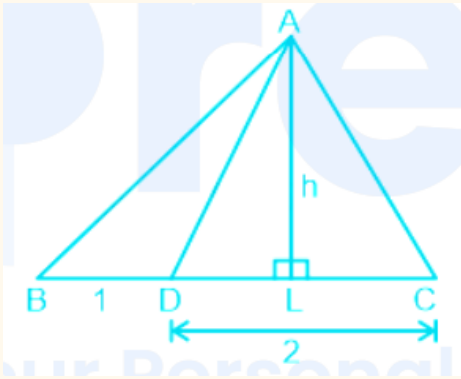
Answer: d
Explanation:
Given:
BD = 1/2 of DC
Formula used:
Area of a triangle = 1/2 × base × height
Calculation:

In the given figure,
Let height of ΔABC and ΔADC = h
BD = 1
DC = 2
So, BC = 3
Area of ΔABC/Area of ΔADC = (1/2 × 3 × h)/(1/2 × 2 × h)
⇒ 3/2
∴ Required answer is 3/2

2. Select the combination of letters that when sequentially placed in the blanks will create a repetitive pattern.
bb_cc_bb_bcccc_b
a. b; b; c; c
b. c; b; c; b
c. b; c; c; b
d. c; c; b; b

Answer: d
Explanation:
Given :- bb_cc_bb_bcccc_b
By checking options and substituting accordingly.
Option (1) b; b; c; c → b b bc / c bb b / cb c c / c c cb
Option (2) c; b; c; b → b b cc / c bb b / cb c c / c c bb
Option (3) b; c; c; b → b b bc / c cb b / cb c c / c c bb
Option (4) c; c; b; b → b b cc / c cb b / bb c c / c c bb
 Option (4) gives a pattern of b b c c - c c b b - b b c c - c c b b.
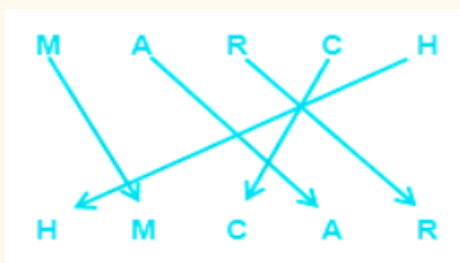Hence, ' c; c; b; b ' is the correct answer

3. If MARCH is coded as HMCAR, how will APRIL be coded?
a. LIAPR
b. LAPIR
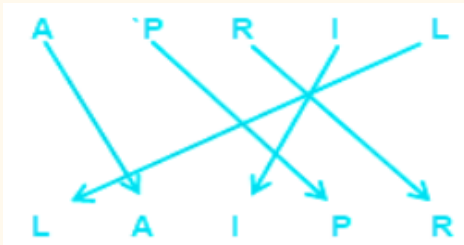**c. LAIPR**
d. LIRAP

Answer: c
Explanation:
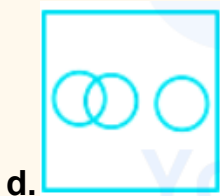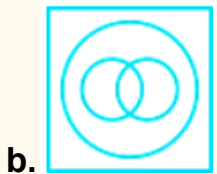The pattern for the code is as follows,

Similarly,

Hence, 'APRIL' is coded as 'LAIPR' .

4. Four Venn diagrams are given below. You have to select the option that shows the best relationship among the three given classes.
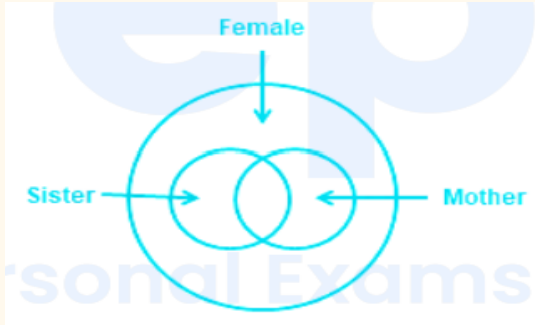**Mother, sister, female**

a.

b.

c.

d.

Answer: b
Explanation:
The Venn diagrams best represent the relationship between - Mother, sister, female figure is shown below:

Both Mother and Sister are Female and some Sister is also a mother.
Hence, 'option 2' is the correct answer.

5. Which strip of water separates India and Sri Lanka?
a. Durand line
b. Strait of Lombok
c. Strait of Malacca
d. Palk Strait

Answer: d
Explanation:
The correct answer is Palk Strait.

6. If a = 17, b = 15, c =$\frac{1}{4}$ of -128, then what is the value of
a3 + b3 + c3 - 3abc?
a. 3
b. 1
c. 2
d. 0

Answer: d
Explanation:
Given:
a = 17, b = 15, c = $\frac{1}{4}$ of -128
Formula used:
if (a + b + c) = 0 then a 3 + b 3 + c 3 - 3abc = 0
Calculation:
Here,

a = 17

b = 15

c = $\frac{1}{4}$× -128 = - 32

So (a + b +c) = 17 + 15 - 32

⇒ 0

So a 3 + b 3 + c 3 - 3abc = 0

∴ Required answer of the question is 0

7. 3 men and 3 boys can do a piece of work in 10 days. When one man is replaced by a boy, the work is completed in 12 days. In how many days will 2 men and 2 boys complete the work?

a. 20 days

b. 15 days

c. 22 days

d. 25 days

Answer: b

Explanation:

Given:

3 men + 3 boys = 10 day

2 men + 4 boys = 12 day

Concept used:

Total work = total person × total time taken

Calculation:

Let efficiency of men be m and boys be b

(3m + 3b)10 = (2m + 4b)12

⇒ 30m + 30b = 24m + 48b

⇒ 6m = 18b

⇒ m = 3b

Efficiency of men = 3 and boys = 1

Total work = 30 × 3 + 30 × 1

⇒ 90 + 30 = 120

Work will complete in 120/(2 × 3 + 2 × 1)

⇒ 15 days

∴ In 15 days 2 men and 2 boys complete the work

8. The mean score of class A of 40 students in the mathematics test of 30 marks is 23. The mean score of class B of 45 students in the same test is 22. What is the ratio of the mean score of both the classes to that of class A?
a. 380 : 391
b. 391 : 382
c. 390 : 382
d. 382 : 391

Answer: d
Explanation:
Given:
Mean of class A = 23
Mean of class B = 22
Concept used:
Mean = Sum of the terms/No. of terms
Calculation:
Total score of class A = 40 × 23
⇒ 920
Total score of class B = 45 × 22
⇒ 990
Total score both the classes = 1910
Mean score of two classes together = 1910/85
Ratio = 1910/85 : 23
⇒ 382/17 : 23
⇒ 382 : 391
∴ The ratio of the mean score of both the classes to that of class A is 382 : 39

9. 20% of the toys produced in a factory were defective and 25% of the remaining were damaged. If 4800 toys were in good condition, then what was the original number of toys produced?
a. 9000
b. 8000
c. 10000
d. 6000

Answer: b
Explanation:

Given:

No. of toys in good condition = 4800

Concept used:

Percentage of distribution

Calculation:

Let the number of toys originally was x

According to the question,

x × 4/5 × 3/4 = 4800

⇒ 3x/5 = 4800

⇒ x = 4800 × 5/3

⇒ x = 8000

∴ The original number of toys produced was 8000

10. Plants are divided into five groups. Which of the following is NOT one?
a. Bryophytes
b. Gymnosperms
c. Pteridophytes
d. Protochordata

Answer: d

Explanation:

The correct answer is Protochordata.

Plants are divided into five groups - Thallophytes, Bryophytes,Pteridophytes , Gymnosperms and Angiosperms.

11. In which state is the Satish Dhawan Space Centre, Sriharikota, located?
a. Andhra Pradesh
b. Kerala
c. Tamil Nadu
d. Karnataka

Answer: a

Explanation:

The correct answer is Andhra Pradesh

Satish Dhawan Space Centre is located at Sriharikota in Andhra Pradesh.

12. In ancient times, a person was weighed against a commodity and the equivalent weight of that commodity was offered as donation. What was this practice called?
a. Tulabhara
b. Jallikattu
c. Thimithi
d. Pulikali

Answer: a
Explanation:
The correct answer is Tulabhara.
Tulabhara is an ancient Hindu practice in which a person is weighed against a commodity (such as gold, grain, fruits or other objects), and the equivalent weight of that commodity is offered as a donation.

13. Rahim purchased 20 kg of oranges at the rate of Rs. 45/kg and sold them at the rate of Rs. 54/kg. During this period 1.5 kg oranges got spoiled. He sold the spoiled oranges at the rate of Rs. 10/kg. His net gain or loss percent is:

a. $12\frac{2}{3}$% gain

b. $13\frac{2}{3}$% loss

c. 14% gain
d. 14% loss

Answer: a
Explanation:
Given:
Total quantity of oranges = 20 kg
Rate of per kg = Rs. 45
SP per kg = Rs. 54
Concept used:
Profit % = [(SP - CP)/100] × 100
Calculation:
Total CP = 20 × 45
⇒ Rs. 900
SP of 18.5 kg oranges = 18.5 × 54

⇒ Rs. 999

SP of 1.5 kg spoiled oranges = 1.5 × 10

⇒ Rs. 15

Total SP = 1014

Profit = 1014 - 900

⇒ 114

Profit % = (114/900) × 100

⇒ $12\frac{2}{3}$

∴ His net gain is $12\frac{2}{3}$%

14. In which city was the Indus Waters Treaty (IWT) signed between India and Pakistan, in 1960?
a. Calcutta
b. Lahore
c. Bombay
d. Karachi

Answer: d
Explanation:
The correct answer is Karachi.
The Indus Waters Treaty is a water-distribution treaty between India and Pakistan which was signed in Karachi in 1960 .

15. As of October 2020, which of the following city in India does NOT have an operational metro railway system yet?
a. Kochi
b. Pune
c. Lucknow
d. Jaipur

Answer: b
Explanation:
The correct answer isPune.
Pune Metro is a metro rail based rapid transit system under construction to serve the city of Pune, India.
Hence Pune metro is still not operational.

16. A _____ is a homogeneous mixture of two or more substances.
a. component
b. solution
c. molecule
d. particle

Answer: b
Explanation:
The correct answer is solution.
Key Points
A homogeneous mixture of two or more substances is known as the Solution.

17. Two trains starting at the same time in opposite directions from two stations 200 km apart meet each other at a distance of 110 km from one of the stations. What is the ratio of their speed?
a. 11 : 9
b. 12 : 8
c. 13 : 7
d. 10 : 9

Answer: a
Explanation:
Given:
Total distance = 200 km
Concept used:
Relative Speed of 2 bodies
Sum of their individual speeds if they are moving in the opposite direction
Difference of their individual speeds if they are moving in the same direction.
Calculation:
We know the total distance is 200 Km
If both trains crossed each other at a distance of 110 km then one train covered 110 km and the other 90 km [110+90=200km]
So ratio of their speed = 110 : 90 = 11 : 9
∴ The ratio of their speed is 11 : 9

18. A and B borrowed the same amount for the same period. A borrowed on simple interest at the rate of 8% yearly. B borrowed on compound interest of 5% half yearly. At the end of one year the ratio of B's interest to that of A's interest is:

a. 40 : 41
b. 32 : 41
c. 41 : 32
d. 4 : 3

Answer: c
Explanation:
Given:
Rate of interest of A = 8%
Rate of interest of B = 5%
Concept used:
For half year interest in CI = Interest rate/2
Successive increase concept = a + a + a2/100
a = rate %
Calculation:
5% half-yearly = 5 + 5 + (5 × 5)/100
⇒ 10 + 1/4
⇒ 41/4
So ratio of interest =
41/4 : 8
⇒ 41 : 32
∴. At the end of one year the ratio of B's interest to that of A's interest is 41 : 32
Traditional method:
Let the sum be Rs. P.
Simple interest = (P × 8 × 1)/100 = 2P/25

Compound interest = $P[(1 + 5/100)^2 - 1]$

⇒ $P[(21/20^2 - 1]$
⇒ P(441 - 400)/400
⇒ 41P/400
Required ratio = (41P/4 00)/(2P/25)
⇒ 41 : 32
∴. At the end of one year the ratio of B's interest to that of A's interest is 41 : 32

19. If Bill Gates had his way, by what name was Windows OS planned to be released?
a. Calculator
b. Interface Manager
c. Control Panel
d. Clipboard Viewer

Answer: b
Explanation:
The correct answer is Interface Manager.
If Bill Gates had his way, by Interface Manager name was Windows OS planned to be released.

20. If cot A = $\frac{1}{\sqrt{3}}$, then what is the value of $\frac{1-cos\ 2A}{1+cos\ 2A}$?

a. $\sqrt{3}$
b. 1.5
c. $\frac{1}{3}$
d. 3

Answer: d
Explanation:
Given:
cot A = $\frac{1}{\sqrt{3}}$
Concept used:
Cos(90° + θ) = - Sinθ
Calculation:
cot A = $\frac{1}{\sqrt{3}}$
⇒ cot A = cot 60°
⇒ A = 60°
$\frac{1-cos\ 2A}{1+cos\ 2A}$
⇒ $\frac{1-cos\ 120°}{1+cos\ 120°}$
⇒ [1 - cos(90 + 30)°]/[1 + cos(90 + 30)°]
⇒ 1 + sin 30°/1 - sin 30°
⇒ (1 + 1/2)/(1 - 1/2)

⇒ 3

∴ Required answer is 3

21. Which of the following was stated in the 'Gandhi-Irwin Pact' signed in March 1931?
a. All Indians would get good education.
b. The manufacture of salt along the coast would be stopped.
c. Prisoners would not be released.
d. The Civil Disobedience Movement would be called off.

Answer: d
Explanation:
The correct answer is The Civil Disobedience Movement would be called off.
Important Points
Gandhi–Irwin Pact was signed on 5 March 1931.
The Gandhi-Irwin Pact was a political agreement signed by Mahatma Gandhi and Lord Irwin

22. A water tank is made of an aluminum sheet 3 cm thick. The tank is open at the top. Its external dimensions are 1.36 m, 1.06 m, and height 0.83 m. What is the cost of painting the inner surface of the tank at 50 paise per 100 sq. cm?
a. Rs. 219
b. Rs. 240
c. Rs. 249
d. Rs. 149

Answer: c
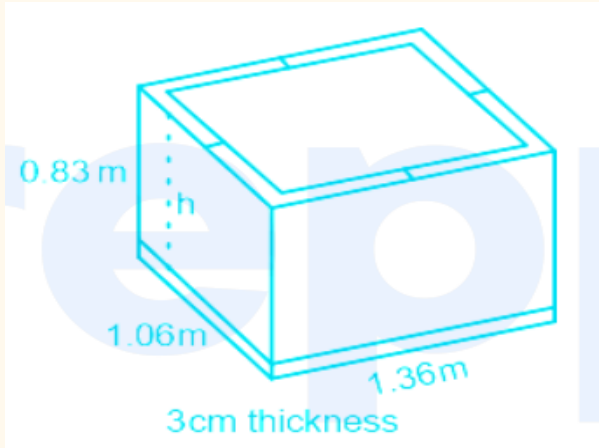Explanation:
Given:
Thickness = 3 cm
height 0.83 m
Dimensions are 1.36 m, 1.06 m
Formula used:
L.S.A = 2h(l + b)
Area of a rectangle = (l × b)
Calculation:

0.83 m

h

1.06m

1.36m

3cm thickness

Inner length = 136 - 6 = 130 cm
Inner breadth = 106 - 6 = 100 cm
Inner height = 83 - 3 = 80 cm
Surface area which has be to be painted = base area + area of 4 walls
So,
$(130 \times 100) + 2 \times 80(130 + 100)$
$\Rightarrow 13000 + 36800$
$\Rightarrow 498000 \text{ cm}^2$
Cost = 498000/100 × 50p
$\Rightarrow$ Rs. 249
∴ T he cost of painting the inner surface of the tank is Rs. 249
Note:
There was some discrepancy found in this question, In the actual question, height was given as 8.3 m but we have changed to 0.83 m

23. Pointing towards a man, Vivek said, "His only brother is the father of my daughter's father". From among the given options, how could the man be related to Vivek?
a. Father-in-law
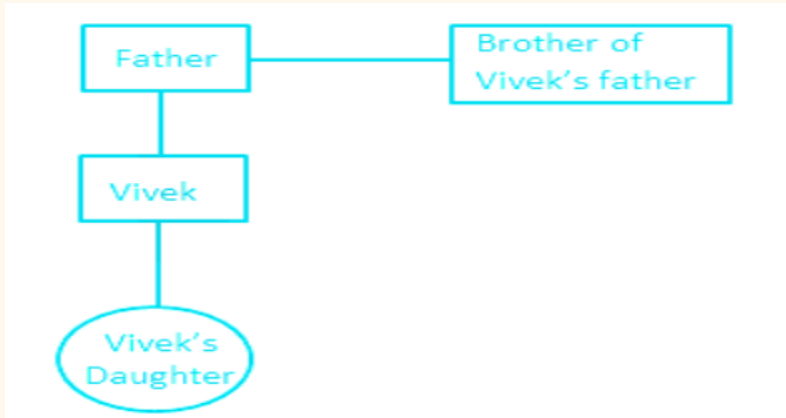**b. Uncle**
c. Father
d. Brother

Answer: b
Explanation:
From the given information,

Breaking the statement –

His only brother is the father of Vivek's daughter's father so his brother is the father of Vivek.

We can draw the following tree from the information given above:

Hence, the man is 'Uncle' of Vivek .

24. Who is regarded as the Father of the Indian Nuclear Program?
a. Dr. Homi Bhabha
b. Raja Ramanna
c. APJ Abdul Kalam
d. Jawaharlal Nehru

Answer: a
Explanation:
The correct answer is Dr. Homi Bhabha.
Homi Jehangir Bhabha is known as the 'Father of the Indian Nuclear Programme'.

25. Simplify

$$\frac{1}{1.2.3}+\frac{1}{2.3.4}+\frac{1}{3.4.5}+\frac{1}{4.5.6}$$

a. $\frac{19}{30}$

b. $\frac{5}{30}$

c. $\dfrac{2}{60}$

d. $\dfrac{7}{30}$

Answer: d

Explanation:

Given:

$\dfrac{1}{1.2.3} + \dfrac{1}{2.3.4} + \dfrac{1}{3.4.5} + \dfrac{1}{4.5.6}$

Concept used:

Simple concept of multiplication and summation

Calculation:

$\dfrac{1}{1.2.3} + \dfrac{1}{2.3.4} + \dfrac{1}{3.4.5} + \dfrac{1}{4.5.6}$

⇒ 1/6 + 1/24 + 1/60 + 1/120

⇒ (20 + 5 + 2 + 1)/120

⇒ 28/120 = 7/30

∴ Required answer is 7/30

26. With which Chinese technology company has the Trump Administration banned the US government agencies from doing business?
a. Vivo
b. Xiaomi
c. Huawei
d. Oppo

Answer: c

Explanation:

The correct answer is Huawei.

US agencies are banned from doing business with Huawei and other Chinese tech companies, as the Trump administration cites security concerns.

27. A window in a building is at a height of 10 meters from the ground. The angle of depression of a point P on the ground from the window is 30°. The angle of elevation of the top of the building from the point P is 60°. What is the height of the building?
a. 35 meters
b. 20 meters

c. 40 meters
d. 30 meters

Answer: d
Explanation:
Given:
The window is at a height of 10 meters
Concept used:
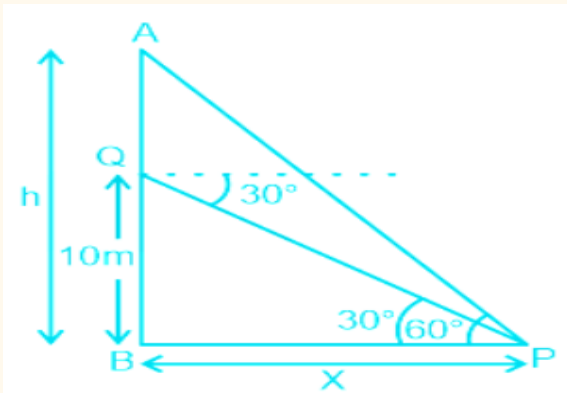$\tan\theta = P/b$
P = perpendicular or height
b = base
Calculation:

Let the window be Q.
Height of the building be AB
Let the point P at a distance of x meter.
In ΔQPB
$\tan 30° = QB/BP$
$\Rightarrow 10/x$
$x = 10/\tan 30°$
$\Rightarrow 10\sqrt{3}$
In Δ ABP
$\tan 60° = h/x$
$\Rightarrow h = x.\tan 60°$
$\Rightarrow h = x.\sqrt{3}$
$\Rightarrow h = 10\sqrt{3} \times \sqrt{3}$
$\Rightarrow 30m$

So, the height of building = 30 m

∴ The height of the building is 30 m

28. What was the first domain name ever registered in the World Wide Web?
a. www.linux.com
b. www.server.com
c. www.symbolics.com
d. www.computer.com

Answer: c
Explanation:
The correct answer is www.symbolics.com.
The first domain name registered was Symbolics.com .
It was registered March 15, 1985.

29. As of October 2020, who is the Vice President of India?
a. Ram Nath Kovind
b. Rajnath Singh
c. Hamid Ansari
d. M Venkaiah Naidu

Answer: d
Explanation:
The correct answer is M Venkaiah Naidu.
Muppavarapu Venkaiah Naidu is an Indian politician serving as the 13th and
current vice president of India since 2017.

30. As of October 2020, who is the captain of the Indian Men's Hockey Team?
a. Dilpreet Singh
b. Manpreet Singh
c. Gagandeep Singh
d. Harmanpreet Singh

Answer: b
Explanation:
The correct answer is Manpreet Singh.
Manpreet Singh Pawar is an Indian hockey player and is also the captain of the

India men's national field hockey team since May 2017.

31. Which of the following is NOT a monument in Uttar Pradesh?
a. Bara Imambara
b. Sarnath Stupa
c. Safdarjung Tomb
d. Taj Mahal

Answer: c
Explanation:
The correct answer is Safdarjung Tomb.
Safdarjung's Tomb is a late Mughal Empire style tomb built for Nawab Safdarjung in the year 1754 .

32. Simplify
$0.3 ÷ (0.6 × \frac{2}{3}) × 0.2(0.2 × 2 ÷ \frac{1}{2} + 0.2)$
a. 1.5
b. 0.15
c. 0.02
d. 0.05

Answer: b
Explanation:
Given:
$0.3 ÷ (0.6 × \frac{2}{3}) × 0.2(0.2 × 2 ÷ \frac{1}{2} + 0.2)$
Concept used:
Calculation:
$0.3 ÷ (0.6 × \frac{2}{3}) × 0.2(0.2 × 2 ÷ \frac{1}{2} + 0.2)$
$⇒ 0.3 ÷ 0.4 × 0.2 × 1$
$⇒ 0.75 × 0.2 × 1$
$⇒ 0.15$
∴ Required answer is 0.15

33. Who initiated the Pradhan Mantri Jan Dhan Yojana (PMJDY)?
a. Rajiv Gandhi
b. Manmohan Singh

c. Atal Bihari Vajpayee
d. Narendra Modi

Answer: d
Explanation:
The correct answer is Narendra Modi.
Pradhan Mantri Jan Dhan Yojana was announced by PM Narendra Modi on 15 August 2014 from the ramparts of the Red Fort and was launched on 28 August 2014

34. Select the option that is related to the sixth number in the same way as the third number is related to the fourth number and the first number is related to the second number.
7 : 342 :: 9 : 728 :: ? : 2196
a. 11
b. 13
c. 5
d. 9

Answer: b
Explanation:
The pattern followed here is,
Let (M : N)
Step 1 → M 3= A (A any number)
Step 2 → A - 1= N
Now follow the steps:
7 : 342
Step 1 → 7^3 = 343
Step 2 → 343 − 1 = 342
And,
9 : 728
Step 1 → 9^3 = 729
Step 2 → 729 − 1 = 728
Similarly,
? : 2196
Step 1 → 13^3 = 2197

Step 2 → 2197 – 1 = 2196
Hence, ' 13 : 2196' is correct answer.

35. PT is a tangent drawn from P, given outside the circle, with center O touching the circle at Q. If PQ = 30 cm and the diameter of the circle is 32cm, then what is the length of OP?
a. 32
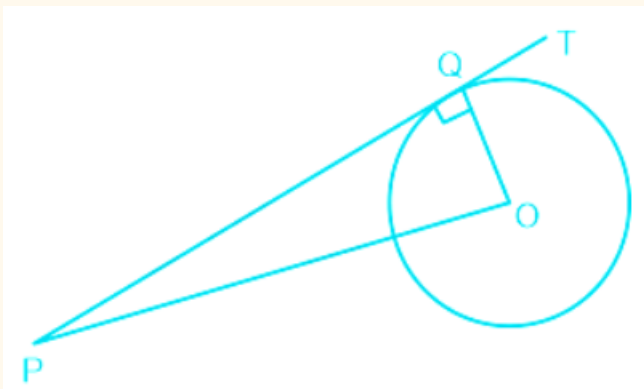b. 38
c. 34
d. 36

Answer: c
Explanation:
Given:
PQ = 30 cm
Diameter = 32 cm
Concept used:
Tangent is perpendicular to the radius at the point of contact
Calculation:

OQ is the radius of a circle
OQ = 16 cm
∠OQP = 90°
now apply Pythagoras theorem to
OP2= PQ 2+ OQ 2
⇒ OP2=16^2+ 30^2
⇒ OP = 1156

⇒ OP = 34 cm

∴ The length of OP is 34 cm

36. Rs. 9,000 is divided equally among a certain number of students. Had there been 20 more students each would have got Rs. 160 less. What was the original number of students?

a. 25

b. 30

c. 35

d. 20

Answer: a

Explanation:

Given:

Total amount = Rs. 9000

Calculation:

$$\frac{9000}{a+20} = \frac{9000}{a} - 160$$

According to the question,

⇒ 9000a = (9000 – 160a)(a + 20)

⇒ 9000a = 9000a + 180000 – 160a2 – 3200a

⇒ a^2 + 20a – 1125 = 0

⇒ a^2 + 45a – 25a – 1125 = 0

⇒ a(a + 45) – 25(a + 45) = 0

⇒ (a – 25)(a + 45) = 0

⇒ a = 25 or a = -45

(- 45 Neglected as the number of people can never be negative)

∴ The original number of people is 25

37. In which country did Manushi Chhillar win the Miss World 2017 title?

a. Japan

b. South Korea

c. China

d. Vietnam

Answer: c

Explanation:

The correct option is China.
Miss World 2017 was held in China.

38. Which country has the longest written constitution in the world?
a. USA
b. Russia
c. China
d. India

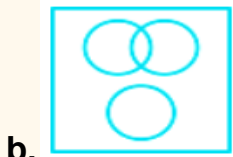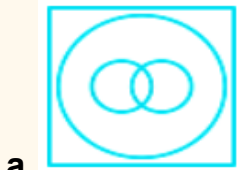**Answer:** d
Explanation:
The correct answer is India.
The Constitution of India is the longest written constitution of any sovereign country in the world, containing 448 articles grouped in 25 parts with 12 schedules

39. Four Venn diagrams are given below. You have to select the option that shows the best relationship among the three given classes.
Boy, student, farm

a.

b.

c.

d.

Answer: b

Explanation:

The Venn diagrams best represent the relationship between -

Boy, student, farm figure are shown below:
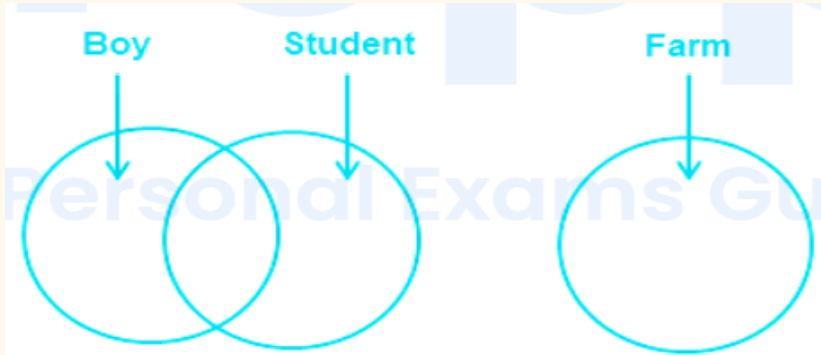
Some boys are students it is possible but any boy and student are farm it is not possible.

Hence, 'option 2' is the correct answer.

40. How many times is digit 3 passed in counting from 301 to 399?

a. 21

b. 119

c. 11

d. 121

Answer: b

Explanation:

100's place - (301, 302, 303,..........399) = 99 times

10's place (30, 31, 32,..........39) = 10 times

1's place (03, 13, 23…......93) = 10 times

Total = 99 + 20 = 119 times

∴ Answer is 119 times

41. Endemic species are those species of plants and animals which are

_____ .

a. found in a particular area

b. in very good health

c. suffering from an epidemic

d. found only in the forests

Answer: a

Explanation:

The correct answer is found in a particular area.

Important Points

Endemic species are those species of plants and animals which are found in a particular area.

42. Who among the following did NOT advocate militant opposition to colonial rule through the Swadeshi movement?
a. Bipin Chandra Pal
b. Bal Gangadhar Tilak
c. Lala Lajpat Rai
d. Gopal Krishna Gokhale

Answer: d

Explanation:

The correct answer isGopal Krishna Gokhale.

Gopal Krishna Gokhale did NOT advocate militant opposition to colonial rule through the Swadeshi movement

43. If (a + b) : (b + c) : (c + a) is 6 : 7 : 8 and also a + b + c = 14, then what is the value of c?
a. 8
b. 10
c. 6
d. 12

Answer: c

Explanation:

Given:

(a + b) : (b + c) : (c + a) = 6 : 7 : 8

a + b + c = 14

Concept used:

If (a + b) : (b + c) : (c + a) is x : y : z

(a + b + c) = (x + y + z)/2

Calculation:

Let (a + b) : (b + c) : (c + a) be 6x : 7x : 8x

a + b + b + c + c + a = 6x + 7x + 8x

2(a + b + c) = 21x

(a + b + c) = 21x/2

⇒ 21x/2 = 14

⇒ x = 28/21

⇒ 4/3

(a + b) = 6 × 4/3 = 8

So c = 14 - 8

⇒ 6

∴ The value of c is 6

44. Which of the following is NOT a National Park in India?
a. Balphakram National Park
b. Anshi National Park
c. Dachigam National Park
d. Shandur National Park

Answer: d
Explanation:
The correct answer is Shandur National Park.
Shandur National Park is located in District Ghizer, Pakistan.

45. Which government organization is the principal regulator of all the players operating in the Indian securities markets?
a. SEBI
b. RBI
c. IRDAI
d. NABARD

Answer: a
Explanation:
The correct answer is SEBI.
Important Points
Securities and Exchange Board of India (SEBI) is a statutory body and a market regulator, which controls the securities market in India.

46. Who discovered Penicillin?
a. Charles Darwin
b. Alexander Fleming
c. Gregor Mendel
d. Louis Pasteur

Answer: b
Explanation:
The correct answer is Alexander Fleming.
Alexander Fleming discovered penicillin.

47. A student reaches school on his bicycle in 3/2 hours at a speed of 8km/h. On the return journey he rests for half an hour and takes a route which is 1 km shorter. What should be the percentage increase in the speed of his bicycle so that he reaches home in the same time?
a. 30.5%
b. 37%
c. 37.5%
d. 35%

Answer: c
Explanation:
Given:
Speed of the student = 8 km/h
Time taken = 3/2 hours
Concept used:
Speed = Distance/time
Calculation:
Distance cover = 8 × 3/2 = 12 km
Now at the time of return, he will cover 11 km as given in the question
He has taken a rest for 30 minutes
So he will cover 11 km in 1 hour
So his new speed = 11 km/h
Speed increased = 3 km/h
% change = 3/8 × 100
⇒ 37.5%
∴ The required increase in speed is 37.5%

48. Which Indian art form is practiced in the Mithila region of Bihar and Nepal?
a. Tanjore art
b. Kalamezhuthu
c. Madhubani painting
d. Pattachitra painting

Answer: c
Explanation:
The correct answer is Madhubani painting.
Important Points
Mithila painting, popularly known as Madhubani art.

49. As per a new study by Greenpeace in 2018, which is the most polluted city on earth?
a. Gurugram
b. Shanghai
c. Dhaka
d. Tokyo

Answer: a
Explanation:
The correct answer is Gurugram.
Gurugram topped the list of the most polluted cities in the world in a recent study conducted by NGO Greenpeace India.

50. A shopkeeper purchased a machine for Rs.70,000 and spent Rs.5,000 as overhead expenditure. Had he purchased the machine at 15% less, he would have earned a profit of 15%. What is the selling price of the machine?
a. Rs.74,000
b. Rs.75,000
c. Rs.74,175
d. Rs.78,175

Answer: c
Explanation:
Given:
Price at which the machine was purchased = Rs.70000

Overhead expenditure = Rs.5000
Formulas used:
Profit or Loss is calculated on the Cost Price of the machine, which is 100% of itself.
Selling Price = Cost Price + Profit
or
Selling Price = Cost Price × (100 + Profit)%
Calculation:
Total cost of the machine = Purchasing Price + Overhead Expenses
⇒ 70000 + 5000 = Rs.75000
As per the question,
Cost of machine at 15% less = 70000 × (100 - 15)% + 5000
⇒ Rs.64500
Selling Price = 64500 × (100 + 15)/100
⇒ Rs.74175
∴ The selling price of the machine is Rs.74175.

51. A solid metallic cylinder of base radius 3 cm and height 5 cm is melted to form cones each of height 1 cm and base radius 1 mm. How many cones were formed?
a. 19,500 cones
b. 10,500 cones
c. 13,500 cones
d. 12,500 cones

Answer: c
Explanation:
Given:
Radius of metallic cylinder = 3 cm
Height of metallic cylinder = 5 cm
Height of cone to be formed = 1 cm
Radius of cone to be formed = 1 mm or 0.1 cm
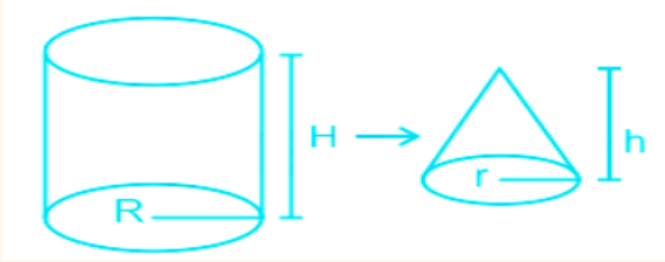Formulas used:
Volume of cylinder = $\pi R^2 H$

Volume of cone = 1/3 × $\pi r^2 h$
Calculation:
Radius and height of the cylinder is R = 3 cm, H = 5 cm respectively.
Radius and height of the cone is r = 0.1 cm, h = 1 cm respectively.

As per the question;
Volume of metallic cylinder = No of cones × Volume of a cone
⇒ π × 3 × 3 × 5 = No of cones × 1/3 × π × 0.1 × 0.1 × 1
⇒ No of cones = (3 × 3 × 5 × 3)/(0.1 × 0.1)
⇒ No of cones = 13500
∴ The number of cones formed is 13500.

52. If $\frac{1}{5}$ of a number multiplied by $\frac{2}{3}$ of the same number gives 480, then the number is:

a. 80
b. 70
c. 60
d. 100

Answer: c
Explanation:
Calculation:
Let the number be = a
So, 1/5 × a × 2/3 × a = 480
⇒ $2a^2/15 = 480$
⇒ $a^2 = 2^4 \times 3^2 \times 5^2$
⇒ a = √2 4 × 3 2 × 5 2
⇒ a = 4 × 3 × 5 = 60
∴ The required number is 60.

53. In a class 82% students passed and 2% students were placed in the reappear category. The number of students who failed was 592. What was the total number of students in the class?
a. 2700

b. 3600
c. 2000
d. 3700

Answer: d
Explanation:
Given:
Percentage of students passed = 82%
Percentage of students placed in reappear category = 2%
Number of students failed = 592
Calculation:
Let the total number of students be 100%
Percentage of students failed = 100% - Passed Percent - Reappear Category Percent
⇒ 100% - 82% - 2%
⇒ 16%
∵ 16% = 592
⇒ 100% = 592 × 100%/16%
⇒ 100% = 3700
∴ Total number of students in the class are 3700.

54. The first woman to swim the English Channel was _____.
a. an Indian
b. a French
c. a British
d. an American

Answer: d
Explanation:
The correct answer is an American.
Gertrude Ederle of the United States at the young age of 19 years, became the first woman to swim across the English channel.

55. In a competitive examination 1 mark is awarded for a correct answer, 0 marks for an unattempt question and $\frac{1}{2}$ mark is deducted for every wrong answer. Ambika answered 120 questions and got 90 marks. How many answers were correct?

a. 60
b. 100
c. 110
d. 98

Answer: b
Explanation:
Given:
Number of question attempted = 120
Marks received by Ambika = 90
Marks awarded for correct answer = 1
Marks deducted for wrong answer = 0.5
Calculation:
Let the number of correct answer be = a
⇒ Number of wrong answers = 120 - a
Marks for 'a' right answers = a × 1 = a
Marks deducted for (120 - a) wrong answers = (120 - a) × 0.5 = 60 - 0.5a
As per the question;
Total marks scored = Marks received for right answers - Marks deducted for wrong answers
⇒ 90 = a - (60 - 0.5a)
⇒ 1.5a = 150
⇒ a = 100
∴ The number of correct answers is 100.

56. Three traffic signals change at intervals of 48, 72 and 108 seconds respectively. They start changing simultaneously at 8:20:00 hours for the first time. At what time will they change again simultaneously?
a. 8:30:00 hours
b. 8:27:12 hours
c. 8:40:00 hours
d. 8:25:00 hours

Answer: b
Explanation:
Given:
3 traffic signals change after every 48, 72 and 108 respectively.

Time when 3 lights started changing simultaneously = 8:20
Concept Used:
Lowest Common Multiple
Calculation:
The time of changing the 3 traffic lights simultaneously will be the LCM of 48, 72, and 108 as the first common multiple of the numbers.
By Prime Factorisation we will take LCM of 48, 72 and 108 seconds.

$48 = 2^4 \times 3$

$72 = 2^3 \times 3^2$

$108 = 2^2 \times 3^3$

LCM (48, 72, 108) = $2^4 \times 3^3$ = 432
Hence after 432 seconds, they will change simultaneously.
⇒ 432/60 minutes
⇒ 7 minutes 12 seconds
∴ Lights will change at 8:20:00 + 7 minutes + 12 seconds = 8:27:12 hours

57. Select the option that is related to the third term in the same way as the second term is related to the first term.
Lion : Cat : : Wolf : ?
a. Pup
b. Hyena
c. Bear
d. Dog

Answer: d
Explanation:
The logic followed here is:
Lion : Cat → Lion and Cat both are 'Felidae' family.
Similarly,
Wolf : Dog → Wolf and Dog both are ' Canidae' family.
Hence, 'Dog' is the correct answer.

58. A, B and C entered into partnership. A invested 3 times as much as B and B invested $\frac{2}{3}$ times of what C invested. At the end of the year the total profit was Rs.6,600. B's share in the profit is:
a. Rs.2400

b. Rs.1200
c. Rs.1600
d. Rs.1800

Answer: b
Explanation:
Given:
A's investment = 3 times as much as B's investment
B's investment = 2/3 times of C's investment
Total profit of the year = Rs.6600
Concept used:
Ratio of investment = Ratio of Profit to be shared
Calculation:
Let the sum invested by C = a
⇒ Sum invested by B = 2/3 × a
⇒ Sum invested by A = 2a/3 × 3 = 2a
Ratio of profit to be shared between A, B, and C:
A : B : C = a : 2a/3 : 2a
⇒ A : B : C = 3 : 2 : 6
B's profit share will be = Rs.6600 × 2/11
⇒ Rs.1200
∴ B's share in the profit for the year is Rs.1200.

59. _____ was celebrated as the First War of Indian Independence.
a. The Uprising of 1857
b. The Rowlatt Satyagraha of 1919
c. The Santhal Revolt of 1855-56
d. The Civil War of 1861

Answer: a
Explanation:
The correct answer is The Uprising of 1857.
The First War of Indian Independence was fought in the year 1857.

60. What is most likely to cause food poisoning?
a. Eating food spoilt by microorganisms

b. Eating home cooked food

c. Eating frozen foods

d. Eating food with preservatives

Answer: a

Explanation:

The correct answer is Eating food spoilt by microorganisms.

Food poisoning is mostly caused by the consumption of food that is contaminated with bacteria/microorganisms like Salmonella, Listeria or E.coli.

61. Which edition of the Indian Premier League (IPL) was played in 2020?

a. 12th

b. 13th

c. 10th

d. 11th

Answer: b

Explanation:

The correct answer is 13 th.

IPL 2020 was the 13th edition of India's premier T20 league.

62. From which constituencies did Congress leader Rahul Gandhi contest the Lok Sabha Elections of 2019?

a. Amethi and Lucknow

b. Varanasi and Lucknow

c. Varanasi and Wayanad

d. Amethi and Wayanad

Answer: d

Explanation:

The correct answer is Amethi and Wayanad.

Congress leader Rahul Gandhi contest the Lok Sabha Elections of 2019 from Amethi, Uttar Pradesh and Kerala's Wayanad.

63. Reforestation means:

a. visiting the forests

b. taking care of animals in the forests

c. planting new trees in the destroyed forests
d. reinforcing forests

Answer: c

Explanation:

The correct answer is planting new trees in the destroyed forests.
Reforestation means planting new trees in the destroyed forests.
It is the re-growing of forests that have previously been cut down using tree species that are native to the geographic area.

64. Which of the following Venn diagrams displays the proper relation of following:

eyes, ears, sensory organs

a.

b.

c.

d.
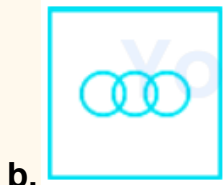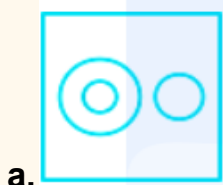
Answer: d

Explanation:

The Venn diagrams best represent the relationship between - eyes, ears, sensory organs figure are shown below:

Eyes and ears both are sensory organs.
Hence, ' option 4' is the correct answer.

65. Which of the following was a result of the Non-Cooperation and Khilafat movements?
a. Lawyers attended courts.
b. Students went to schools and colleges run by the government.
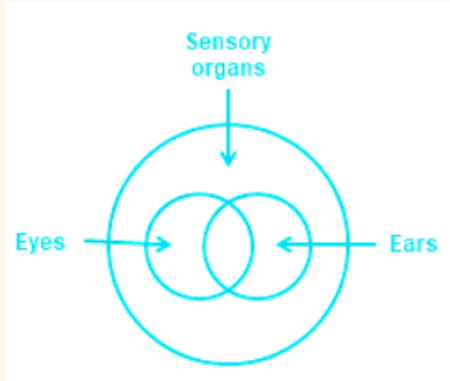**c. The working class went on strike in many towns and cities.**
d. Peasants carried loads for colonial officers.

Answer: c
Explanation:
The correct answer is The working class went on strike in many towns and cities.
Non-cooperation Movement was conducted from September 1920 to February 1922. It was initiated by Gandhi after the Jallianwala Bagh Massacre.
People started protesting with Non-Ahimsa and at the same time boycotted British goods.

66. a, b and c are the sides of a right triangle with c as hypotenuse. The radius r, of the circle which touches the three sides of the triangle is :
a. $r = \frac{(a-b+c)}{2}$
b. $r = \frac{(a+b-c)}{2}$
c. $r = \frac{(a+b+c)}{2}$
d. $r = \frac{(a-b-c)}{2}$

Answer: b

Explanation:
Given:
a, b and c are the sides of a right triangle with c as the hypotenuse.
An incircle with radius 'r'.
Formula used:
Inradius = (Base + Height - Hypotenuse)/2
Calculation:
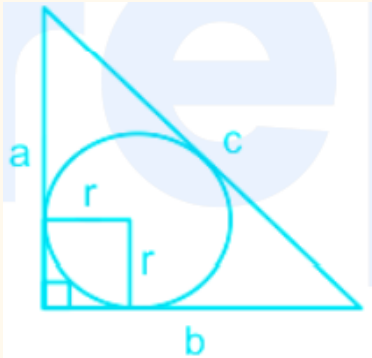
∴ Inradius of the circle with radius 'r' = (a + b - c)/2

67. Identify the number that is different from the rest.
a. 2548
b. 1728
c. 2197
d. 1331

Answer: a
Explanation:
The pattern followed here is,
Option 1 → 2548 → Not a perfect cube root of any number
Option 2 → 1728 → Perfect cube root of '12'
Option 3 → 2197→ Perfect cube root of '13'
Option 4 → 1331 → Perfect cube root of '11'
All options follow the same pattern, except 'Option 1'
Hence, "2548" is the correct answer

68. Read the given statements and conclusions carefully and decide which of the conclusions logically follow(s) from the statements.
Statements:

I. All Doctors are social workers.
II. All social workers need money.
Conclusions:
I. All social workers are doctors.
II. Doctors need money.
a. Both conclusion I and II follow
b. Neither conclusion I nor II follows
c. Only conclusion I follows
d. Only conclusion II follows

Answer: d

Explanation:

(Note:In original paper this question has discrepancy. We have corrected as per the given statements.)

Given:

Statements:

I. All Doctors are social workers.

II. All social workers need money.

The least possible diagram for the given statements is as follows
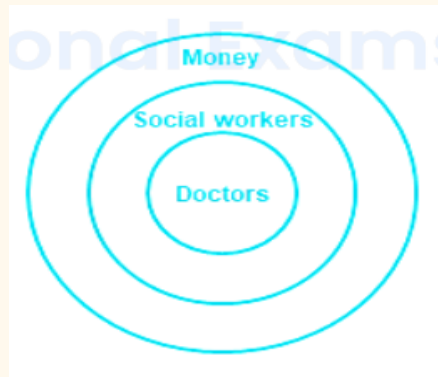
Conclusions:

I. All social workers are doctors → False (it is possible but not definite)

II. Doctors need money → True (because all social workers need money and all doctors are social workers so all doctors need money.)

Hence , "Only conclusions II follow".

69. Which of the following incidents took place after the victory of the British in the Battle of Plassey, in 1757?
a. No new buildings and institutions were developed.
b. Trade of the British East India Company expanded.

c. The port cities of Madras, Calcutta and Bombay were destroyed.
d. People stayed away from the colonial cities of Madras, Calcutta and Bombay.

Answer: b
Explanation:
The correct answer is Trade of the British East India Company expanded.
After the Battle of Plassey, the Britishers virtually monopolized the trade and commerce of Bengal.

70. Identify the number that is different from the rest.
23, 29, 31, 37, 42, 43, 47
a. 43
b. 42
c. 31
d. 37

Answer: b
Explanation:
The logic is here,
In given series 23, 29, 31, 37, 43, 47 all are prime number except 42.
41 is prime number not 42.
Hence, "42" is correct answer.

71. Select the option that is related to the third term in the same way as the second term is related to the first term.
Running : Track : : Boxing : ?
a. Ground
b. Pitch
c. Court
d. Ring

Answer: d
Explanation:
The logic followed here is:
Running : Track → Running on the track .
Similarly,
Boxing : Ring → Boxing is played in the ring .

Hence, 'Ring' is the correct answer.

72. What is the full form of COBOL?
a. Common Basic Operating Language
b. Computer Basic Oriented Language
c. Computer Based Operating Language
d. Common Business Oriented Language

Answer: d
Explanation:
The correct answer is Common Business Oriented Language.
COBOL stands for Common Business Oriented Language.

73. The Minamata Convention in 2013 was held at Japan to address the emissions of which heavy metal?
a. Cobalt
b. Zinc
c. Nickel
d. Mercury

Answer: d
Explanation:
The correct answer is Mercury.
Minamata Convention is an international treaty that is designed to protect human health and the environment from the harmful effect of Mercury and its compounds.

74. With the success of the anti-satellite (ASAT) test in 2019, with which other countries did India join the league?
a. Russia, China, UK
b. US, Russia, UK
c. Russia, China, France
d. US, Russia, China

Answer: d
Explanation:
The correct answer is US, Russia, China.

The successful conduct of Mission Shakti was made India the fourth nation in the world after US, Russia, China with the capability to defend its assets in outer space.

75. How many odd numbers are preceded by the number 4 in the following series?
2 6 6 3 4 5 2 4 9 8 6 4 3 4 8 2
a. 2
b. 4
c. 1
d. 3

Answer: d
Explanation:
Left 2 6 6 3 4 5 2 4 9 8 6 4 3 4 8 2 Right
Odd numbers are preceded by the number 4 in the following series is:
4 →Odd number.
2 6 6 34 5249 8 6434 8 2.
There are 3 odd numbers preceded by the number 4 .
Hence, "3" is the correct answer.

76. $(1 - \frac{1}{n})$ + $(1 - \frac{2}{n})$ + $(1 - \frac{3}{n})$ + up to n term will result as:
a. $\frac{1}{2n}$
b. $\frac{n-1}{2}$
c. $\frac{1}{n^2}$
d. $\frac{1}{2n-1}$

Answer: b
Explanation:
Given:
$(1 - \frac{1}{n})$ + $(1 - \frac{2}{n})$ + $(1 - \frac{3}{n})$ + up to n term
Formula used:
Sum of n terms = n(n + 1)/2
Calculation:

$(1 - \frac{1}{n}) + (1 - \frac{2}{n}) + (1 - \frac{3}{n})$ + up to n term

$\Rightarrow 1 \times n - 1/n(1 + 2 + 3 + \ldots n)$

$\Rightarrow n - 1/n \times n \times (n + 1)/2$

$\Rightarrow n - (n + 1)/2$

$\Rightarrow (2n - n - 1)/2$

$\Rightarrow (n - 1)/2$

$(1 - \frac{1}{n}) + (1 - \frac{2}{n}) + (1 - \frac{3}{n})$ + up to n term will result as: (n - 1)/2

77. Of the given options, select the odd one out?
a. Script
b. Dialogue
c. Plot
d. Actor

Answer: d
Explanation:
The logic followed here is:
Except Actor, all are intangible whereas Actor is tangible.

Word	Meaning
Script	Intangible
Dialogue	Intangible
Plot	Intangible
Actor	Tangible

Hence, the correct answer is "Actor".

78. Who is regarded as the father of modern economics?
a. Manmohan Singh
b. Adam Smith
c. Amartya Sen
d. John Maynard Keynes

Answer: b
Explanation:
The correct answer is Adam Smith.
Adam Smith was a Scottish economist and also known as the Father of economics or the Father of Capitalism.

79. If $\frac{x}{2y} = \frac{6}{7}$, then what is the value of $\frac{x-y}{x+y} + \frac{14}{19}$?

a. $\frac{99}{109}$

b. $\frac{110}{99}$

c. $\frac{109}{19}$

d. $\frac{19}{19}$

Answer: d
Explanation:
Given:
$\frac{x}{2y} = \frac{6}{7}$
Calculation:
$\frac{x}{2y} = \frac{6}{7}$
By cross multiplication, we get
⇒ 7x = 12y
⇒ x/y = 12/7
Now,
$\frac{x-y}{x+y} + \frac{14}{19}$
⇒ (12 - 7)/(12 + 7) + 14/19
⇒ 5/19 + 14/19
⇒ 19/19 or 1
∴ The required value is 19/19.

80. Which of the following rivers is NOT in Africa?
a. Orange
b. Niger
c. Nile
d. Amazon

Answer: d
Explanation:
The correct answer is Amazon.
Amazon river is the largest river in the world in terms of discharge volume of water and also the longest river in South America .

81. If A's height is 25% less than that of B, then approximately by how much percentage is B's height more than that of A?
a. 50%
b. 33%
c. 75%
d. 25%

Answer: b
Explanation:
Given:
A's height = 25% less than that of B
Calculation:
Let the height of B = 100
⇒ A's height = 100 - 100 × 25/100
⇒ A's height = 75
Difference between the height of B and A = 100 - 75 = 25
∴ The required percentage = 25/75 × 100
⇒ 33.33%

82. A rectangular field is 16 meters long and 12 meters wide. A barbed fence has to be drawn on three sides of the field leaving one side open along the width. What is the cost of fencing at the rate of 25 paise per cm?
a. Rs.4400
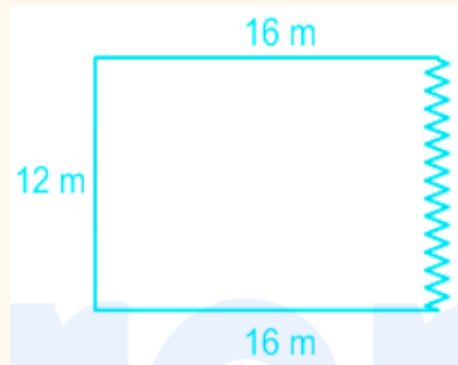**b. Rs.1600**
c. Rs.1900
d. Rs.1100

Answer: d
Explanation:
Given:
Dimensions of rectangular field = 16 m × 12 m

Cost of fencing = 25 paise per cm
Formula used:
Length of rectangular field with one side open = 2 × Length + Breadth
Calculation:

Length of field = 2 × 16 m + 12 m
⇒ 44 m = 4400 cm
∴ Cost of fencing at 25 paise per cm = 4400 cm × 25/100
⇒ Rs.1100

83. Which Navratna company is fondly called 'Vizag steel'?
a. IISCO Steel Plant
b. Rashtriya Ispat Nigam Limited
c. Rourkela Steel Plant
d. Bokaro Steel Plant

Answer: b
Explanation:
The correct answer is Rashtriya Ispat Nigam Limited.
Rashtriya Ispat Nigam Limited Company is called Vizag Steel.

84. If X = 2 −√3, then is X − $\frac{1}{x}$:

a. 5√3
b. -2√3
c. 12 - 30√3
d. 3√3

Answer: b

Explanation:

Given:

X = 2 −√3

Calculation:

X = 2 −√3

1/X = 1/(2 - √3)

By Rationalization

$\Rightarrow$1/X = 1/(2 - √3) × (2 + √3)/(2 + √3)

$\Rightarrow$ (2 + √3)/(2^2 - √3^2) $\because$ [a2 - b2 = (a + b)(a - b)]

$\Rightarrow$ (2 + √3)/(4 - 3)

$\Rightarrow$ (2 + √3)/1

$\therefore$ X - 1/X = 2 - √3 - (2 + √3)

$\Rightarrow$ 2 - √3 - 2 - √3

$\Rightarrow$ -2√3

85. Who invented the word 'Brexit'?
a. Peter Wilding
b. Nigel Farage
c. Tommy Robinson
d. Gerard Batten

Answer: a

Explanation:

The correct answer isPeter Wilding.

The term Brexit was invented by Peter Wilding.

86. The following table shows the points scored by four players in four games:

Player	Game1	Game2	Game3	Game4
A	12	8	10	6
B	0	8	6	4
C	8	11	4	3
D	10	12	2	8

Who is the overall best performer considering all the games?
a. C
b. B
c. A
d. D

Answer: c
Explanation:
Calculation:
Points scored by player A in all the games = 12 + 8 + 10 + 6 = 36
Points scored by player B in all the games = 0 + 8 + 6 + 4 = 18
Points scored by player C in all the games = 8 + 11 + 4 + 3 = 26
Points scored by player D in all the games = 10 + 12 + 2 + 8 = 32
∴ The overall best performer is player A as he/she scored the maximum points

87. The following table shows the points scored by four players in four games:

Player	Game1	Game2	Game3	Game4
A	12	8	10	6
B	0	8	6	4
C	8	11	4	3
D	10	12	2	8

Determine the average number of points scored by A, considering all the games.
a. 12
b. 9
c. 10
d. 16

Answer: b
Explanation:
Formula used:
Average scored by a player in 4 games = Sum of the points scored/4
Calculation:
Points scored by player A in all the games = 12 + 8 + 10 + 6 = 36
∴ The average number of points scored by A = 36/4 = 9

88. The following table shows the points scored by four players in four games:

Player	Game1	Game2	Game3	Game4
A	12	8	10	6
B	0	8	6	4
C	8	11	4	3
D	10	12	2	8

Who is the overall worst performer considering all four games?
a. B
b. D
c. C
d. A

Answer: a
Explanation:
Calculation:
Points scored by player A in all the games = 12 + 8 + 10 + 6 = 36
Points scored by player B in all the games = 0 + 8 + 6 + 4 = 18
Points scored by player C in all the games = 8 + 11 + 4 + 3 = 26
Points scored by player D in all the games = 10 + 12 + 2 + 8 = 32
∴ The overall worst performer is player B as he/she scored the minimum points.

89. The following table shows the points scored by four players in four games:

Player	Game1	Game2	Game3	Game4
A	12	8	10	6
B	0	8	6	4
C	8	11	4	3
D	10	12	2	8

What will the difference be, of the average points scored by C and D?
a. 8.5
b. 1.5
c. 6.5
d. 10.5

Answer: b
Explanation:
Formula used:
Average scored by a player in 4 games = Sum of the points scored/4
Calculation:
Average points scored by player C in 4 games = 8 + 11 + 4 + 3 = 26/4 = 6.5
Average points scored by player D in 4 games = 10 + 12 + 2 + 8 = 32/4 = 8
∴ The difference of the average points scored by D and C = 8 - 6.5
⇒ 1.5

90. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.
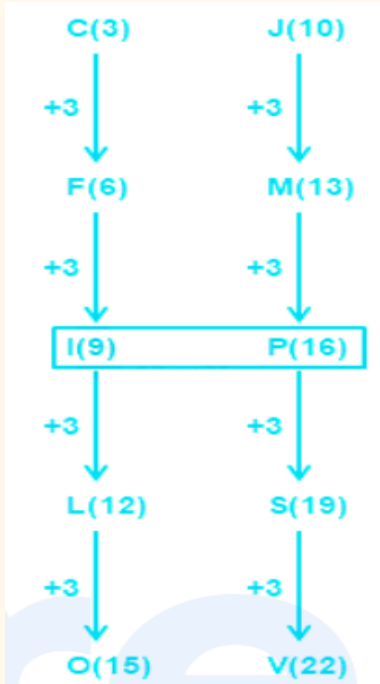**CJ, FM, ?, LS, OV**
a. IP
b. HL
c. RX
d. KQ

Answer: a
Explanation:
The logic is shown below –

```
C(3)        J(10)
 │+3         │+3
 ▼           ▼
F(6)        M(13)
 │+3         │+3
 ▼           ▼
┌─I(9)        P(16)─┐
 │+3         │+3
 ▼           ▼
L(12)       S(19)
 │+3         │+3
 ▼           ▼
O(15)       V(22)
```

Hence, "IP" is the missing term that completes the series

91. A remembers that P's first appointment to the job is after 17th but before 20th March. Whereas B remembers that P's first appointment to the job is after 18th but before 22nd March. Assuming both are correct, which date is most likely to be P's first appointment to the job?
a. 21st March
b. 19th March
c. 18th March
d. 20th March

Answer: b
Explanation:
The logic followed here is,
P's first appointment to the job is after 17th but before 20th March.
Two date for between 17th but before 20th March → 18th march and 19th march.
And,
B remembers that P's first appointment to the job is after 18th but before 22nd March.
Three date between 18th to 22nd March → 19th march , 20th march and 21 march.

There are common date is 19th March.

So, 19th march is most likely to be P's first appointment to the job.

Hence, correct answer is 19th march.

92. If '÷ ' means '+', '+' means '-', '-' means '×' and '×' means '÷', then what will the value of 16 ÷ 4 × 2 + 5 - 3 be?
a. 1
b. 10
c. 4
d. 3

Answer: d
Explanation:
Decoding the information,
Given:
16 ÷ 4 × 2 + 5 – 3
After replacing the signs from left to right and using the BODMAS rule,
16 + 4 ÷ 2 - 5 × 3
= 16 + 2 – 5 × 3
= 16 + 2 - 15
= 18 - 15
= 3
Hence, "3" is the correct answer.

93. How many numbers are present between 50 and 100 (Both excluding) which contains digit 5 and can be, exactly divisible by digit 5?
a. 10
b. 9
c. 7
d. 5

Answer: d
Explanation:
Given:
Numbers between 50 to 100
Calculation:
Numbers are = 55, 65, 75, 85, 95
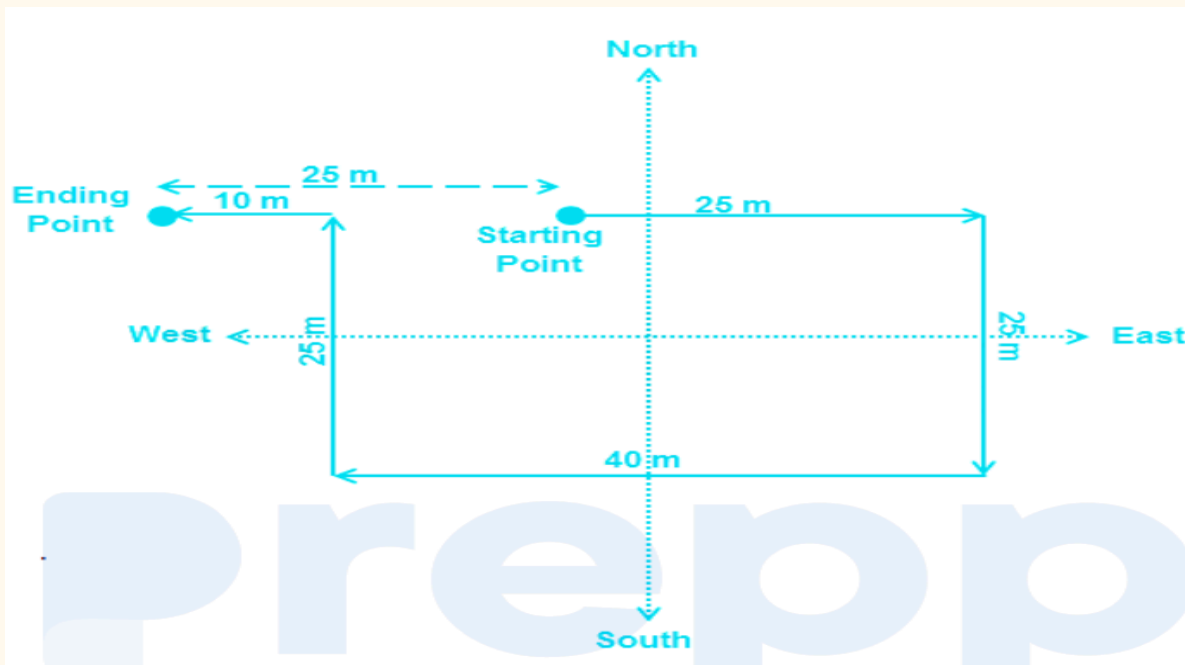
So, total numbers are = 5
∴ Answer is 5

94. Sheetal walks 25 m east. Then she turns right and walks another 25 m. She then turns right and walks another 40 m. Then again turning right, she walks 25 m. Finally, she turns left and walks 10 m. How far is Sheetal from her original position?
a. **20 m**
b. **25 m**
c. **10 m**
d. **15 m**

Answer: b
Explanation:
Drawing the diagram according to the given information,

So, the distance between the starting and ending point = 40 - 25 +10 = 25 m.
Hence, 25 m is the correct answer.

95. If G stands for 'add', H stands for 'multiply', J stands for 'subtract' and K stands for 'division' then find the value of
125 J 110 K 5 G 7 H 2.

a. 89
b. 114
c. 117
d. 133

Answer: c
Explanation:
BODMAS rule:
Decoding the information,
Given:
125 J 110 K 5 G 7 H 2
After replacing the signs from left to right and using the BODMAS rule,
125 - 110 ÷ 5 + 7 × 2
= 125 – 22 + 7 × 2
= 125 – 22 + 14
= 139 - 22
= 117
Hence, "117" is the correct answer.

96. Select the number from among the given options that can replace the question mark (?) in the following series.
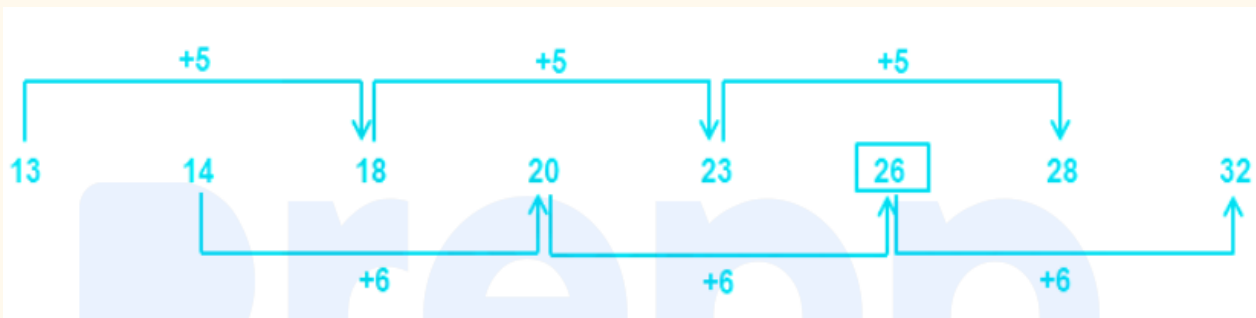**13, 14, 18, 20, 23, ?, 28, 32**
a. 26
b. 33
c. 24
d. 29

Answer: a
Explanation:
The pattern followed here is -

Hence, "26" is the missing term.

97. Select the option that is related to the third term in the same way as the second term is related to the first term.
INCH : 17 :: YARD : ?
a. 38
b. 26
c. 24
d. 48

Answer: c
Explanation:
The pattern followed here is,
Sum of all alphabet place value ÷ 2 = Number.
Now follow the steps
INCH : 17
Step 1→INCH = I(9) + N(14) + C(3) + H(8) = 34.
Step 2→34 ÷ 2 = 17.
Similarly,
YARD : ?
Step 1 → YARD = Y(25) + A(1) + R(18) + D(4) = 48.
Step 2 → 48 ÷ 2 = 24.
Hence, " 24" is correct answer.

98. In a certain code language, 257 means 'I like you', 746 means 'You are good' and 263 means 'I am good'. What number is coded for 'Are'?
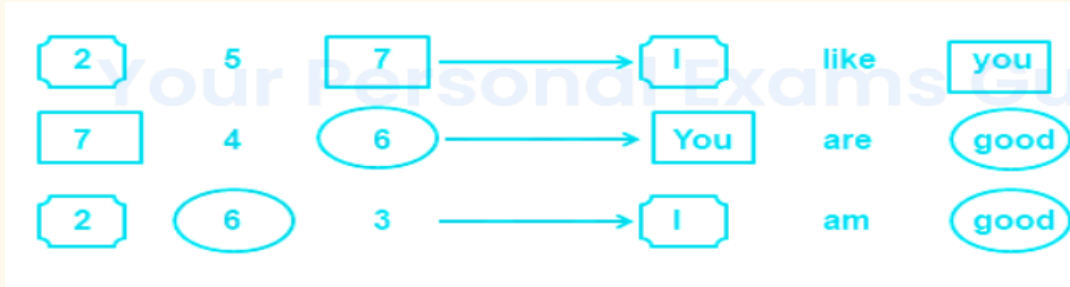**a. 5**
b. 6
c. 4
d. 3

Answer: c
Explanation:
According to the given information,

'Are' is coded as 4.

Hence, '4' is the correct answer.

99. If BLACK is called GREEN, GREEN is called YELLOW, YELLOW is called BLUE and BLUE is called RED, then what would the colour of GOLD be called?
a. BLUE
b. BLACK
c. GREEN
d. YELLOW

Answer: a

Explanation:

The pattern followed here is:

Given;

BLACK is called GREEN.

GREEN is called YELLOW.

YELLOW is called BLUE.

BLUE is called RED.

The color of Gold is Yellow, andYELLOW is called BLUE.

Hence, "BLUE" is the right answer.

100. Which of the following is the same as foot, inch and yard?
a. Pound
b. Quart
c. Mile
d. Gram

Answer: c

Explanation:

The correct answer is Mile.

Mile is the same as foot, inch, and yard.