SNAP 2009

Quantitative Aptitude

1. **A dice is rolled three times and sum of three numbers appearing on the uppermost face is 15. The chance that the first roll was a four is**

A $\frac{2}{5}$

B $\frac{1}{5}$

C $\frac{1}{6}$

D None of these

Answer: B

Explanation:

There are three possibilities for sum of uppermost faces of dice is equal to 15. They are

5, 5, 5 -only 1 arrangement

4, 5, 6 -3! = 6 arrangements

3, 6, 6 -$\frac{3!}{2}$ = 3 arrangements

Out of these 10 arrangements, there are 2 cases in which 4 occurs in first roll (4,5,6 or 4,6,5)

Therefore, probability = $\frac{2}{10}$ = $\frac{1}{5}$

Answer is option B.

2. **A boat covers a distance of 30 kms downstream in 2 hours while it takes 6 hours to cover the same distance upstream. What is the speed of the boat in kms per hour?**

A 5

B 7.5

C. 13

D. 10

Answer: D

Explanation:
Let speed of boat be V and speed of stream be U
so as per case 1
Downstream i.e V+U = 30/2 =15
And Upstream i.e V-U = 30/6 = 5
Now adding
we get 2V =2

3. **A five digit number is formed by using the digits 1, 2, 3, 4 and 5 without repetitions. What is the probability that the number is divisible by 4?**

A $\dfrac{1}{5}$

B $\dfrac{5}{6}$

C $\dfrac{4}{5}$

D   None of these

Answer: A

Explanation:

For a number to be divisible by 4, last 2 digits must be divisible by 4

Last 2 digits can be 12, 24, 32, 52

_, _, _, _ _

Last 2 digits have 4 possibilities and remaining digits can be arranged in 3! ways

Number of 5 digit numbers divisible by 4 are 3! $\times$ 4 = 24

Total number of 5 digit numbers that can be formed = 5!

Therefore, probability = $\dfrac{24}{5!}$ = $\dfrac{1}{5}$

Answer is option A.

4. **If the algebraic sum of deviations of 20 observations measured from 23 is 70, mean of these observations would be**

A.   24

B.   25

C.   26

D.   None of these

Answer: D

Explanation:

Sum of observation is given as = 70

Number of observation = 20

Therefore, Mean = 70/20=3.5

But, here observation starts from 23.

Therefore, Mean = 23 + 3.5 = 26.5

5. **An alloy of gold and silver weighs 50 gms. It contains 80% gold. How much gold should be added the alloy so that percentage of gold is increased to 90?**

A. 50 gms

B. 60 gms

C. 30 gms

D. 40 gms

Answer: A

Explanation:

Gold in 50g of alloy

$$= 80 \times \frac{50}{100} = 40g$$

Let x g gold must be added.

Now, according to the question,

$$40 + x = \frac{90}{100}(50 + x)$$

$$x = 50g$$

Thus, 50 g of gold must be added to it to get 90%.

Thus, the correct option is A.

6. **Weekly incomes of two persons are in the ratio of 7 : 3 and their weekly expenses are in the ratio of 5 : 2. If each of them saves Rs. 300 per week, then the weekly income of the first person is**

A   Rs. 7500

B   Rs. 4500

C   Rs. 6300

D   Rs. 5400

Answer: C

Explanation:

Let the incomes of two persons are 7x and 3x

Expenditure of first person = 7x -300

Expenditure of second person = 3x -300

According to the question,

7x−300/3x−300=5/2

=> 14x-600 = 15x-1500

x = 900

Income of first person

= 7x = 7×900=RS.6300

7. **Wheat is now being sold at Rs. 27 per kg. During last month its cost was Rs. 24 per kg. Find by how much per cent a family reduces its consumption so as to keep the expenditure fixed.**

A 10.2%

B 12.1%

C 12.3%

D 11.1%

Answer: D

Explanation:
Old price of rice = Rs.24/k
New price of rice = Rs.27 per/kg
Therefore, Increase in price of rice = New price -Old price = 27 -24 = Rs.3/kg
Therefore, Increased percentage in price
= 3/24×100=12.5 %
Now, reduction in consumption, so as to keep the expenditure fixed.

$Ac_acording$ to the formula,
$\frac{12.5}{100+a} \times 100$
= $\frac{12.5}{100+12.5} \times 100$

=11.1 %

8. **There are 10 stations on a railway line. The number of different journey tickets that are required by the authorities is**

A. 92

B. 90

C. 91

D. None of these

Answer: B

Explanation:
The number of different journey tickets that are required by the authorities = The number of selecting 2 stations × \times\ × 2 (For every pair stations say A and B, there are two tickets required A to B and B to A)
= $^{10}C_2 \times 2$ = 90

9. **The radius of circle is so increased that its circumference increased by 5%. The area of the circle then increases by**

A 12.5%

B 10.25%

C 10.5%

D 11.25%

Answer: B

Explanation:

We know that Circumference is dependent linearly on radius

so if circumference is increased by 5% , we can conclude radius is increased by 5%

Now Area varies directly with square of radius

Now if r is changed to 1.05 r

so r^2 will change to (1.05r)(1.05r) = 1.1025 r^2

So we can conclude area will change by 10.25%

10. **In how many ways can the letters of the word ABACUS be rearranged such that the vowels always appear together?**

A $\dfrac{6!}{2!}$

B $3! * 3!$

C $\dfrac{(3!*3!)}{2!}$

D $\dfrac{(4!*3!)}{2!}$

Answer: D

Explanation:

ABACUS

Vowels = AAU

Remaining BCS

Now AAU will be considered 1 and B,C,S separate

so these can be arranged in 4! ways

Vowels AAU can be arranged in 3!/2! ways

so total arrangements = $\dfrac{4! \times 3!}{2!}$

11. **In 4 years, Rs. 6000 amounts to Rs. 8000. In what time at the same rate will Rs. 525 amount to Rs. 700?**

A. 2 years

B. 3 years

C. 4 years

D 5 years

Answer: C

Explanation:
A=P+SI
We get SI =2000
2000 = (6000*R*4)/100
we get R=25/3 %
Now
P =525
A =700
So SI = 175
175 = (525*25/3*T)/100
We get T = 4 years

Instructions [12 - 14]

At the start of a game of cards, J and B together had four times as much money as T, while T and B together had three times as much as J. At the end of the evening, J and B together had three times as much money as T, while T and B together had twice as much as J. B lost Rs. 200

12. **What fraction of the total money did T have at the beginning of the game?**

A $\frac{1}{3}$

B $\frac{1}{8}$

C $\frac{2}{9}$

D $\frac{1}{5}$

Answer: D

Explanation: Money T had with respect to total = 300/1500 = 1/5

Alternative solution:

It is given that the J and B had 4 times the money as T(in the beginning). Thus, if T had x amount with him, the total amount with them will be 5x.

So, let's assume that the total amount with them is 60x(LCM of 5, 4, and 3).

In the beginning: Now, the amount with T will be 12x, and the sum of the amount with J and B will be 48x.

Since the amount with T and B is 3 times that with J, the amount with J will be 15x. Thus, the amount with B will be 33x.

At the end: Since the amount with J and B is three times that of T, T will have 15x at the end. Also, the amount with T and B is twice that of J; the amount with J will be 20x. Thus, B will have 25x at the end.

Now, the ratio of money with T in the beginning with respect to the total amount = $\frac{12x}{60x} = \frac{1}{5}$

Thus, the correct option is D.

13. **What fraction of the total money did J win/lose?**

A   Won $\dfrac{1}{12}$

B   Lost $\dfrac{1}{6}$

C   Lost $\dfrac{1}{3}$

D   Won $\dfrac{1}{5}$

Answer: A

Explanation: />J won : 500-375 = 125
So fraction = 125/1500 = 1/12

Alternative solution:

It is given that the J and B had 4 times the money as T(in the beginning). Thus, if T had x amount with him, the total amount with them will be 5x.

So, let's assume that the total amount with them is 60x(LCM of 5, 4, and 3).

In the beginning: Now, the amount with T will be 12x, and the sum of the amount with J and B will be 48x.

Since the amount with T and B is 3 times that with J, the amount with J will be 15x. Thus, the amount with B will be 33x.

At the end: Since the amount with J and B is three times that of T, T will have 15x at the end. Also, the amount with T and B is twice that of J; the amount with J will be 20x. Thus, B will have 25x at the end.

Now, the difference between the money with J in the beginning and at the end = $20x - 15x = 5x$

Thus, the required ratio = $\dfrac{5x}{60x} = \dfrac{1}{12}$

Thus, the correct option is A.

14. **What amount did B start with?**

A.   Rs. 575

B.   Rs. 375

C.   Rs. 825

D.   Rs. 275

Answer: C

Explanation:
Let the initial amount with them be
J1 , B1 and T1
Now as per given
J1+B1 =4T1 (1)
T1+B1 = 3J1 (2)
Total amount with them will be 4J1 or 5T1

Now Let final amounts with them be J2 , B2 and T2 respectively .

J2 +B2 = 3T2   (3)

T2 +B2 = 2J2 (4)

Total amount with them will be 4T2 or 3J2

Now 5T1 =4T2 =4J1=3J2

From (1)

B1 = 4T1-J1

   = 4T1-5/4 T1

   = 11/4 T1

B2 = 3T2 -J2

    =3T2 -4/3T2

    =5/3 T2

    5/3 (5/4) T1

   = 25/12 T1

Now B1-B2 = 11/4 T1 -25/12T1 =200

so we get 8/12 T1 = 200

we get T1 = 300

so B1 = 11/4 (300) = 825

B2 = 25/12 (300) = 625

T2 = 5/4(300) = 375

J1 = 375

J2 = 4/3 (375) = 500

So B started with Rs 825

Alternative solution:

It is given that the J and B had 4 times the money as T(in the beginning). Thus, if T had x amount with him, the total amount with them will be 5x.

So, let's assume that the total amount with them is 60x(LCM of 5, 4, and 3).

In the beginning: Now, the amount with T will be 12x, and the sum of the amount with J and B will be 48x.

Since the amount with T and B is 3 times that with J, the amount with J will be 15x. Thus, the amount with B will be 33x.

At the end: Since the amount with J and B is three times that of T, T will have 15x at the end. Also, the amount with T and B is twice that of J; the amount with J will be 20x. Thus, B will have 25x at the end.

Now, the difference of money with B in the beginning and in the end = $33x - 25x = 8x$

Since B lost Rs 200 during the game, $8x = 200$

Thus, $x = 25$

So, the amount with B, in the beginning = $33 \times 25 = 825$

Thus, the correct option is C.

15. **If a and b are negative, and c is positive, which of the following statement/s is/are true?**
   I) $a - b < a - c$
   II) **if** $a < b$, **then** $\dfrac{a}{c} < \dfrac{b}{c}$
   III) $\dfrac{a}{b} > \dfrac{a}{c}$

A   I only

B II only

C. III only

D. II and III only

Answer: D

Explanation:

I) $a - c$ is negative as a is negative and c is positive. Thus, the value of $a - c$ will be smaller than a(since more negative is added to a negative number). $a - b$ can be negative or positive depending upon the value of a and b, but it can be concluded that this number will be greater than a(since a positive number is added to a negative number). Thus, $(a - c) < (a - b)$. Thus, the statement I is false.

II) Given $a < b, \dfrac{a}{c} < \dfrac{b}{c}$ as c is positive and $a < b$. Therefore, statement II is true

III) a is negative and b is negative, this implies $\dfrac{a}{b}$ is positive. a is negative and c is positive, this implies $\dfrac{a}{c}$ is negative. Therefore, $b > c$. Statement III is true

Answer is option D

16. **The diagonal of a square is** $4\sqrt{2}$ **cm. The diagonal of another square whose area is double that of the first square is**

A. 8 cm

B. $8\sqrt{2}$ cm.

C. $4\sqrt{2}$ cm.

D. 16 cm

Answer: A

Explanation:
The diagonal of the first square is $4\sqrt{2}$
Now we know if side of a square is a
then diagonal is $a\sqrt{2}$
Therefore here a = 4
Now area = 16

Now area of second square = 2(16) = 32
Now therefore side of 2nd square = $\sqrt{32} = 4\sqrt{2}$
Now therefore diagonal will be : $4\sqrt{2}(\sqrt{2}) = 8$

17. **The maximum length of a pencil that can be kept in a rectangular box of dimensions 8 cm x 6 cm x 2 cm, is**

A $2\sqrt{13}$ cm.

B $2\sqrt{14}$ cm.

C $2\sqrt{26}$ cm.

D $10\sqrt{2}$ cm.

Answer: C

Explanation:

The maximum length of pencil will be along the longest diagonal of box

so we can say the maximum length will be : $\sqrt{4^2+6^2+8^2} = \sqrt{104} = 2\sqrt{26}$

Instructions [18 - 19]

Answer the questions based on the information given below
The Venn diagram given below shows the estimated readership of 3 daily newspapers (X, Y & Z) in a city.
The total readership and advertising cost for each of these papers is as below

Newspapers	Readership (lakhs)	Advertising cost (Rs. per sq. cm)
X	8.7	6000
Y	9.1	6500
Z	5.6	5000

The total population of the city is estimated to be 14 million. The common readership (in lakhs) is indicated in the given Venn diagram
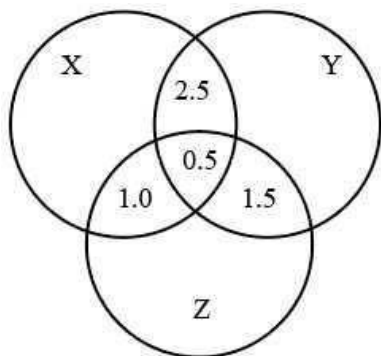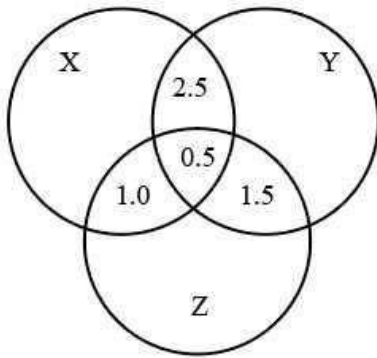

18. **The number of people (in lakhs) who read at least one newspaper is**

A 4.7

B 11.9

C 17.4

D 23.4

Answer: C

Explanation:

Now X = 8.7‑2.5‑0.5‑1 =4.7
Y = 9.1‑2.5‑0.5‑1.5 =4.6
Z = 5.6‑1‑1.5‑0.5 =3.1
Now at least 1 will be
4.7+4.6+3.1+2.5+1+1.5+0.5 = 17.4

19. **The number of people (in lakhs) who read only one newspaper is**

A   4.7

B   11.9

C   17.4

D   23.4

Answer: B

Explanation:

Given Readership of newspaper X = 8.7

only X + 2.5 + 0.5 + 1 = 8.7

only X = 4.7
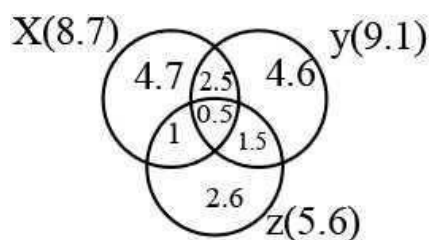
Given Readership of newspaper Y = 9.1

only Y + 2.5 + 1.5 + 0.5 = 9.1

only Y = 4.6

Given Readership of newspaper Z = 5.6

only Z + 0.5 + 1 + 1.5 = 5.6

only Z = 2.6

Number of people who read only one newspaper = 4.7 + 4.6 + 2.6 = 11.9 lakhs

20. **Sonali invests 15% of her monthly salary in insurance policies. She spends 55% of her monthly salary in shopping and on household expenses. She saves the remaining amount of Rs. 12,750. What is Sonali's monthly income?**

A   Rs. 42,500

B   Rs. 38,800

C   Rs. 40,000

D   Rs. 35,500

Answer: A

Explanation:
Let Sonali's monthly income be 100x
Now Expenditure on insurance policies = 15x
Expenditure on shopping and household expenses = 55x
Therefore remaining amount = 100x-55x-15x = 30x
Which is equal to 12,750
Now therefore 30x=12,750
x = 425
Therefore total income = 100x = 42,500

21. **How many kgs of tea worth Rs. 25 per kg must be blended with 30 kgs of tea worth Rs. 30 per kg so that by selling the blended variety at Rs. 30 per kg there should be a gain of 10%?**

A.   36 kgs

B.   40 kgs

C.   32 kgs

D.   42 kgs

Answer: A

Explanation:
Let the quantity of tea worth Rs.25 be x kg.
Now as per given
(25x+30×30)×110/100=30(30+x)
(275x+9900)=(9000+300x)
300x−275x=900=x=900/25
Therefore, x = 36 kg.

22. **In an examination, out of 480 students 85% of the girls and 70% of the boys passed. How many boys appeared in the examination if total pass percentage was 75%?**

A   370

B   340

C 320

D 360

Answer: C

Explanation:

Total number of students = 480

Percentage of total students passed

= 75 % of total student = 75×480/100=360student

Now, using the condition from the question,

Let the number of boys be x

Then, 70% of x + 85% of (480 -x) = 360

=> 70×x/100+85×(480−x)/100=360

=> 70x -85x + 40800 = 36000

=> 40800 -36000 = 85x -70x

=> 4800 = 15x

=> x=4800/15=320

There are 320 boys who have appeared for the examination.

23. **300 gms of salt solution has 40% salt in it. How much salt should be added to make it 50% in the solution?**

A. 40 gms

B. 60 gms

C. 70 gms

D. 80 gms

Answer: B

Explanation:

300 gms of solution has 40% salt

so the amount of salt = 300(0.4) = 120

Now let salt added be x

So we get 120+x/300+x = 1/2

we get 240+2x =300+x

we get x= 60

24. **What number should replace the question mark in the image below?**

A 18

B 20

C. 22

D. 24

Answer: D

Explanation:

Lower number is eight times the upper number, i.e.

$6 \times 8 = 48$

$12 \times 8 = 96$

$y \times 8 = 192$

$y = \dfrac{192}{8} = 24$

Answer is option D.

25. **What image from bottom row should replace the question mark?**
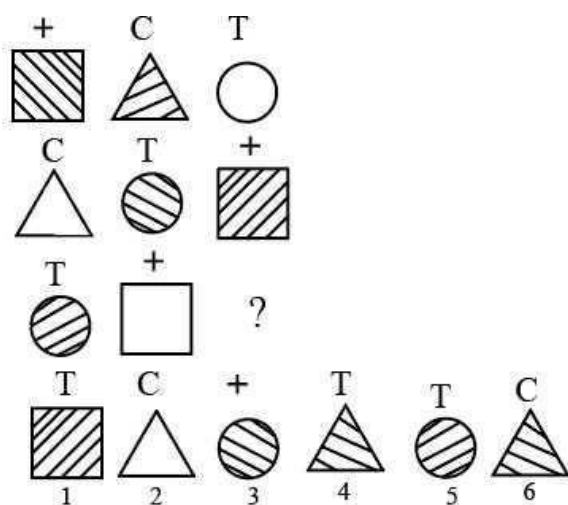
A. 4

B. 6

C. 1

D. none

Answer: B

Explanation:

Images are shifting by one position to the left side. In each step, there are two shaded and one unshaded image. Therefore, shaded triangle with index C at upper vertex will fill the blank.

Image 6 is suitable image and answer is option B.

26. **A five-digit number divisible by 3 is to be formed using numerical 0, 1, 2, 3, 4 and 5 without repetition. The total number of ways this can be done is:**

A 122

B 210

C 216

D 217

Answer: C

Explanation:
Let us observe the digits given to us, we have 0,1,2,3,4 and 5, to make a five digit number we only need 5 digits out of the given 6 digits,
Case 1: Using digits 0,1,2,4 and 5.
The number of ways in which we can arrange these 5 digits are ⇒4×4×3×2×1
⇒96
Case 2: Using the digits 1,2,3,4 and 5
The number of ways in which we can arrange these 5 digits are ⇒5×4×3×2×1
⇒120
Therefore, the total number of cases =96+120=216

27. **A contract is to be completed in 50 days and 105 men were set to work, each working 8 hours a day. After 25 days, $\frac{2}{5}th$ of the work is finished. How many additional men be employed so that the work may be completed on time, each man now working 9 hours a day?**

A. 34

B. 36

C. 35

D. 37

Answer: C

Explanation:
It is given that in the initial 25 days, the work done by 105 men was $(2/5)^{th}$ of the total work.
Thus, the total work left is $(3/5)^{th}$ of the total work.
MDH/W is constant
so we get

$$\frac{105 \times 25 \times 8}{\frac{2W}{5}} = \frac{M \times 25 \times 9}{\frac{3W}{5}}$$

We get M =140
So additional men = 140-105 = 35

28. **A can built up a structure in 8 days and B can break it in 3 days. A has worked for 4 days and then B joined to work with A for another 2 days only. In how many days will A alone build up the remaining part of the structure?**

A. 10 days

B. 9 days

C. 12 days

D. None of these

   Answer: D

Explanation:
Let the total work be 24 units
So we can say work done by A will be +3 units / day
and work done by B will be -8 units/day
Now as per the given condition :
work done by A in 4 days = 3(4) 12 units
Now, both worked for 2 days:
so work done will be (3-8)(2) = -10 units
Now the net work will be 12-10 = 2 units
Now remaining work 24-2 =22 units

Therefore A will complete this in 22/3 = $7\frac{1}{3}$ days

29. **The first two terms of a geometric progression add up to 12. The sum of the third and the fourth terms is 48. If the terms of the geometric progression are alternately positive and negative, then the first term is**

A. −2

B. −4

C. −12

D. 8

   Answer: C

Explanation:
Let the first term of the geometric progression be a and common ratio be r
Now as per given condition :
$a + ar = a(1 + r) = 12$ (1)
$ar^2 + ar^3 = 48$ (2)
we get $ar^2(1 + r) = 48$ (3)
Dividing (1) and (3)
we get :

$1/r^2 = 1/4$

we get $1/r = 1/2 \, or -1/2$

but since terms are alternatively positive and negative

we get $r = -2$

Substituting

we get $a(-1) = 12$

we get $a = -12$

30. **The mean of the numbers a, b, 8, 5, 10 is 6 and the variance is 6.80. Then which one of the following gives possible values of a and b?**

A   a $= 0, b = 7$

B   a $= 5, b = 2$

C   a $= 3, b = 4$

D a $= 2, b = 4$

   Answer: C

Explanation:

We are given that :

The mean of the numbers a, b, 8, 5, 10 is 6 and the variance is 6.80

Now taking mean

we get $30 = a + b + 8 + 5 + 10$

so we get $a + b = 7$ (1)

Now variance = 6.80

so $6.80 = ((a-6)^2 + (b-6)^2 + (8-6)^2 + (5-6)^2 + (10-6)^2)/5$

we get $6.8(5) = (a-6)^2 + (b-6)^2 + 1 + 16 + 4$

So we get $13 = (a-6)^2 + (b-6)^2$

$a = 7 - b$

we get $13 = (1-b)^2 + (b-6)^2$

we get $b = 4$

and so $a = 3$

31. **An agent sells goods of value of Rs. 15,000. The commission which he receives at the rate of $12\frac{1}{2}\%$ is**

A   Rs. 1875

B   Rs. 2125

C   Rs. 2000

D   Rs. 2700

   Answer: A

Explanation:

The commission amount will be :

15,000 (12.5/100)

= 15,000(25/200)

= Rs 1875

32. $\sqrt{110.25} \times \sqrt{0.01} \div \sqrt{0.0025} - \sqrt{420.25}$ **equal to**

A   0.75

B   0.50

C   0.64

D   0.73

Answer: B

Explanation:

We have :

$$\sqrt{\frac{11025}{100}} \times \sqrt{\frac{1}{100}} \div \sqrt{0.0025} - \sqrt{420.25}$$

we will use BODMAS

and so we get $10.5 \times \frac{0.1}{0.05} - \sqrt{\frac{42025}{100}}$

= 21-20.5

= 0.5

Instructions [33 - 35]

The table below shows the number of people who responded to a survey about their favourite style of music. Use this information to answer the following questions to the nearest whole percentage.

Age	15-20	21-30	31+
Classical	6	4	17
Pop	7	5	5
Rock	6	12	14
Jazz	1	4	11
Blues	2	3	15
Hip – Hop	9	3	4
Ambient	2	2	2
Total	33	33	68

33. **What percentage of respondents under 31 indicated that Blues is their favourite style of music?**

A   7.1

B   7.6

C   8.3

D   14.1

Answer: B

Explanation:

Total number of respondents under 31 = 66

Total number of persons who liked blue = 3+2 =5

So in percentage we get (5/66)(100) = 7.6

34. What percentage of respondents aged 21-30 indicated a favourite style other than Rock music?

A 64%

B 60%

C 75%

D 36%

Answer: A

Explanation:

Total respondents in 21-30 =33

Respondents liking Rock = 12

So respondents liking other = 33-12 =21

Therefore in percentage : (21/33)*100 = 64%

35. What percentage of the total sample indicated that Jazz is their favourite style of music?

A. 6%

B. 8%

C. 22%

D. 12%

Answer: D

Explanation:

Total number of people liking Jazz = 16

Total sample = 68+66 =134

So percentage = (16/134)(100) =12%

Instructions [36 - 40]

The pie charts below show the percentage of students in each faculty at North West University and the number of non-US students in the Arts faculty. These percentages have been rounded to the nearest whole number. There are a total of 1049 students in Arts faculty. Use this information to answer the following questions.
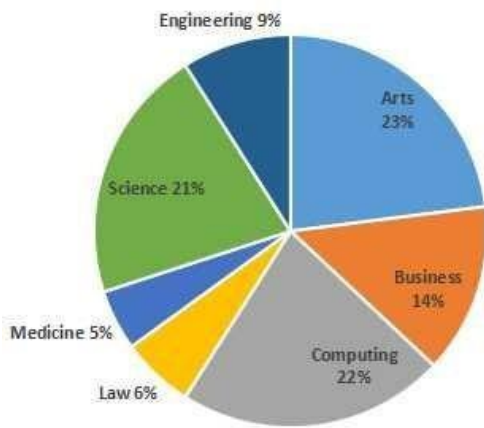
Students by Faculty
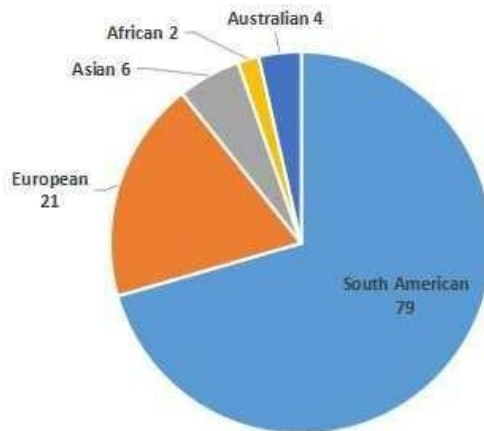
Arts Students (Non-US)

36. **What percentage of students in the Arts faculty are non-US students?**

A   14%

B   9%

C   30%

D   11%

Answer: D

Explanation:
Total students in Arts faculty = 1049
Total non US students in arts faculty = 79+21+6+2+4 = 112
Now in percentage
We get : $\frac{112}{1049} \times 100 = 11\%$

37. **How many students are there in the Engineering faculty?**

A   420

B   410

C   390

D 440

Answer: B

Explanation:

Let the total number of students be x

Now it is given that 1049 students are in arts which is 23%

so we can say

x(23/100) = 1049

We get x =4560

Now Engineering faculty = 9%

so we get number = (0.09)(4560) = 410

---

38. **How many students are there at the University?**

A 4650

B 4560

C 4640

D 4450

Answer: B

Explanation:

Let the total number of students be x

Now it is given that 1049 students are in arts which is 23%

so we can say

x(23/100) = 1049

We get x =4560

39. **If six percent of Science students are Asian. How many Asian students are studying Science?**

A. 48

B. 66

C 120

D 57

Answer: D

Explanation:

Let the total number of students be x

Now it is given that 1049 students are in arts which is 23%

so we can say

x(23/100) = 1049

We get x =4560

Now students studying science will be 4560(21/100) = 957
Now Asian students are studying Science will be 6% of total science
= 0.06(957)
= 57

40. There are 34 European medical students. What percentage of the faculty does this represent?

A 14%

B 18%

C 16%

D 15%

Answer: D

Explanation:
Let the total number of students be x
Now it is given that 1049 students are in arts which is 23%
so we can say
x(23/100) = 1049
We get x =4560
Now we know that medical students = 5%
So number of medical students : 4560(0.05) = 228 students
Now out of this 34 students are European
So percentage of these with respect to total = $\frac{34}{228} \times 100 = 15\%$

Reasoning

41. There are 3 societies A, B, C having some tractors each. A gives B and C as many tractors as they already have. After some days B gives A and C as many tractors as they have. After some days C gives A and B as many tractors as they have. Finally each has 24 tractors. What is the original No. of tractors each had in the beginning?

A A–29, B–21, C–12

B A–39, B–21, C–12

C A–21, B–12, C–29

D A–21, B–12, C–39

Answer: B

Explanation:
Let the no. of tractors with A, B, and C be a, b, and c respectively.

After A gives out tractors to both B and C, the number of tractors with B becomes 2b and that with C becomes 2c. The remaining tractors with A becomes a-(b+c).

After B's turn to give out tractors, A has 2{a-(b+c)}, C has 2(2c)= 4c, and B will be left with 2b-(a-b-c)-2c tractors.

Finally after C's turn, A has 4{a-(b+c)} = 4(a-b-c) tractors, B has 4b-2(a-b-c)-4c = 4b-2a+2b+2c-4c=6b-2a-2c tractors. And C is left with 4c-2(a-b-c)-{2b-(a-b-c)-2c}= 4c-2a+2b+2c-(2b-a+b+c-2c)= 4c-2a+2b+2c-2b+a-b+c= -a-b+7c tractors

It is given that they are all left with 24 tractors in the end.

For A, 4(a-b-c)=24

=> a-b-c=6

=> a= 6+b+c.

For B, 6b-2a-2c=24

=> 3b-a-c=12

=>3b-6-b-c-c=12

=>2b-2c=18

=>b-c=9

=>b=c+9.

For C, -a-b+7c=24

=>-6-b-c-c-9+7c=24

=>5c-b=39

=>5c-c-9=39

=>4c=48

∴ c=12.

b=c+9

∴ b=21.

a=6+b+c

=> a= 6+21+12

∴ a=39.

42. **Although most of the fastest growing jobs in today's economy will require a college degree, many of the new jobs being created from home health aide to desktop publisher require knowledge other than gained from earning a degree. For workers in those jobs, good basic skills in reading, communication, and mathematics play an important role in getting a job and developing a career.**

   From the information given above it can be validly concluded that, in today's economy

A skills in reading, communication and mathematics play an important role in developing a career as a desktop publisher.

B the majority of the new jobs being created require knowledge other than that gained from earning a college degree

C a job as a home health aide will rely more on communication skills than on basic skills in reading and mathematics

D if a job is one of the fastest growing jobs, it will require a college degree.

Answer: A

Explanation:

The second line of the passage discusses about job requirements for the desktop publisher role. It clearly says that the good basic skills in reading, communication, and mathematics play an important role to develop a career there. Hence, option A.

43. **According to the National Agricultural Aviation Society (NAAS), without the use of crop protection products to control insects, weeds, and diseases, crop yields per acre will drop by more than 50 percent. The first aerial application of insecticide occurred in 1921, and it was a huge success. By contrast, in today's economy all aircraft that are classified as aerial applicators do more than just apply insecticide; today, they also spread sees and apply fertilizer.**

From the information given above it CANNOT be validly concluded that

A according to the NAAS, if crop yields per acre never drop by more than 50 percent, then crop protection products have been used to control insects, weeds, and diseases.

B in today's economy any aircraft that cannot be used to apply fertilizer cannot be classified as an aerial applicator

C in today's economy, if an aerial applicator is used, then it will be able to spread seed and to apply fertilizer

D according to the NAAS, if crop yields per acre drop by more than 50 percent, then crop protection products have not been used to control insects, weeds, and diseases.

Answer: D

Explanation:

In the given passage, it is given that according to NAAS, without the use of crop protection products to control insects, weeds, and diseases, crop yields per acre will drop by more than 50 percent. i.e. If the crop protection products are not used, then the crop yields will fall by more than 50 percent. However, we cannot be sure about its reverse. Hence, we can eliminate Option A. Option D is in line with this.

44. **Lou observes that if flight 409 is cancelled, then the manager could not possibly arrive in time for the meeting. But the flight was not cancelled. Therefore, Lou concludes, the manager will certainly be on time. Evelyn replies that even if Lou's premises true, his argument is fallacious. And therefore, she adds, the manager will not arrive on time after all.**

Which of the following is the strongest thing that we can properly say about this discussion?

A Evelyn is mistaken in thinking Lou's argument to be fallacious, and so her own conclusion is unwarranted.

B Evelyn is right about Lou's argument, but nevertheless her own conclusion is unwarranted.

C Since Evelyn is right about Lou's argument, her own conclusion is well supported.

D Since Evelyn is mistaken about Lou's argument, her own conclusion must be false.

Answer: B

Explanation:

Lou subjects the arrival of his manager on time on the basis of only 1 factor. There might be other factors that can affect the manager's reaching on time, for example, delay in baggage claims, Traffic jams, etc. Hence, Evelyn is right when she says Lou's argument to be fallacious. However, concluding that the manager will not be on time on the basis of Lou's argument is absurd and unwarranted. Hence, Option b is the correct one here.

45. **Cars are safer than planes. Fifty percent of plane accidents result in death, while only one percent of car accidents result in death. Which of the following, if true, would most seriously weaken the argument above?**

A Planes are inspected more often than cars.

B The number of car accidents is several hundred thousand times higher than the number of plane accidents.

C. Pilots never fly under the influence of alcohol, while car drivers often do.

D. Plane accidents are usually the fault of air traffic controllers, not pilots.

Answer: B

Explanation:

The argument presented is that Cars are safer than planes supported with the data given. And we need to weaken this argument.

In Option B, if we assume the number of plane accidents to be x. Then as per the data provided in the question, the number of deaths due to plane accident becomes x/2.

And if we consider number of car accidents to be 100,000x. The number of deaths because of car accident becomes 1% of 100,000x, which is 1000x, which is way greater than that caused by planes(x/2). This clearly shows that cars are not safer than Planes.

Hence, this weakens the main argument and is our final answer.

Instructions [46 - 48]

Refer to the chart below showing annual production and answer the questions that follow.

Element (% Production)
Primary User (% used)
Industry
1-10%
2-10%
3-10%
4-25%
5-40%
6-5%
A
B
C
P-15%
Q-15%
R-15%
S-15%
T-5%
U-15%
V-10%
W-10%
100% = 100,000 tons
Total - 100%
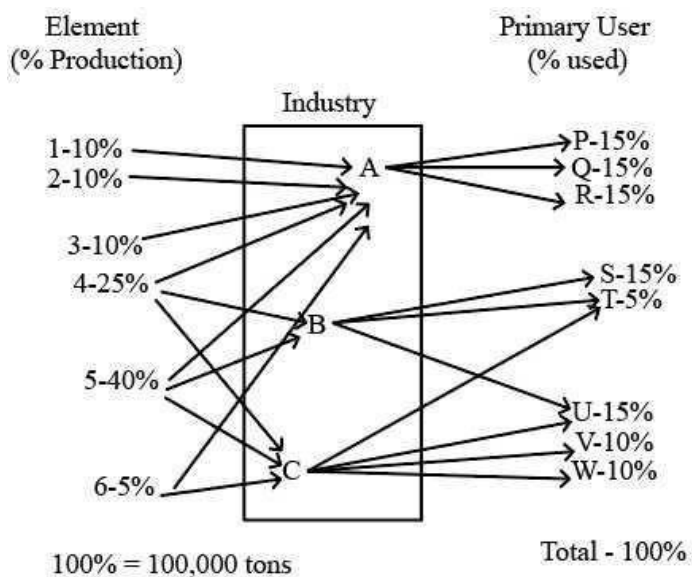
46. Which industry /industries contribute /contributes to company S?

A. Industry A and B only

B. B and C only

C. A and C only

D. B only

Answer: D

Explanation:
Only B contributes to company S .

47. **Industry B processes what percentage of the total production of listed elements?**

A 25%

B 65%

C 40%

D Cannot be determined

Answer: B

Explanation:
25+40=65% of the total production of listed elements is processed by B

48. **Of the listed elements processed by the Industry A, how many tons are produced annually?**

A 30,000

B 50,000

C 1,00,000

D 55,000

Answer: C

Explanation:

% Production for industry A is = 10+10+15+20+40+5 = 100%

100% production corresponds to 100000 tons.

Instructions [49 - 52]

In each of the following questions there are two blanks marked I & II. The words to fill in these blanks are given against I as (A, B, C, D) and II as (P, Q, R, S) RESPECTIVELY. The right words to fill in these blanks are given as four alternatives. The words on either side of the sign (::) have a similar relationship. That alternative which signifies this relationship is your answer.

49. **I : Increase : : Descend : II**
    I. (A) Grow (B) Ascend (C) Rise (D) Price
    II. (P) Reduce (Q) Down (R) Decrease (S) Mountain

A. AR

B. RB

C. CP

D. DQ

Answer: B

Explanation:

The antonyms of Increase and descend are decrease and ascend respectively. Hence, they are the perfect words to fulfil the analogy.

∴. Option B-RB

50. **Modern : I : : II : Old**
    I. (A) Ancient (B) Death (C) Famous (D) Civilization
    II. (P) Industrialisation (Q) Young (R) Fashion (S) Western

A. AQ

B. AS

C. BP

D. CR

Answer: A

Explanation:

Going by the options, Option A will give Modern: Ancient:: Young: Old, which seems okay, because of the antonym pairs used for analogy.

Option B gives us, Modern: Ancient:: Western:Old. Here, Western and Old seems an absurd pair and not related as Modern and Ancient. Therefore, we eliminate this.

Option C is vague as it gives out of context pairs in the form of Modern: Death:: Industrialisation: Old.

Option D can also be eliminated as Modern: Famous:: Fashion: Old makes no sense.

Hence, option A is the final answer.

51. **Part : I :: Class : II**
    I. (A) Section (B) Whole (C) School (D) Students
    II. (P) Student (Q) School (R) Teachers (S) Room

A．AR

B．BQ

C．CP

D．DS

   Answer: B

Explanation:

A part is a part/fraction of a whole, and in the same way a class is a part of a school.

Hence, Option B makes sense and is our answer.

52. **Summit : Apex** ∷ **I : II**
    I. (A) beautiful (B) Picture (C) Attractive (D) Enhancing
    II. (P) Comfortable (Q) Pretty (R) Healthy (S) Brave

A．AQ

B．BP

C．DS

D．CR

   Answer: A

Explanation:
Summit and apex are synonymous to each other, and therefore we need to pick a pair of synonyms to match the analogy. Going by the options, only option A wherein Beautiful and pretty suffices the analogy.

53. **If in a certain code BEAUTIFUL is coded as 573041208, BUTTER as 504479, how is FUTURE coded in that code?**

A   201497

B   204097

C 704092

D 204079

Answer: B

Explanation:

With close observations, we can see that each letter has a particular digit associated with it.

B-5

E-7

A-3

U-0

T-4

I-1

F-2

L-8

R-9.

∴ FUTURE will be coded as 204097, which is given in Option B.

54. **How many Mondays are there in particular month of a particular year if the month ends on Wednesday?**

A. 4

B. 5

C. 3

D. Cannot be specified

Answer: D

Explanation:

There can be 28(February in a Non-Leap year), 29 (February in a Leap year), 30 and 31 days in a month.

For 28 days, if a month ends in a Wednesday, there are 4 days each of Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday.

For 31 days, if a month ends in a Wednesday, we have 5 days each of Monday, Tuesday and Wednesday after distributing 28 days equally to the 7 days.

Therefore, if the month is not specified, we can have both 4 and 5 Mondays in a month. hence, option D.

Instructions [55 - 56]

There are two rows of numbers in each question. The upper row is complete and in the lower row one number is missing. Find a suitable number to fill the blank space so that the symmetry with the upper row is maintained.

55.

17	102	12
15	?	10

A   211

B   75

C   125

D   117

Answer: B

Explanation:

The table can be read row-wise. The first number when multiplied with the half of the third number, gives the second number, i.e.

17*(12/2)= 17*6= 102

Similarly for the second row, 15*(10/2)= 15*5= 75 -Option B

56.

12	336	14
15	?	16

A   220

B   480

C   125

D   450

Answer: B

Explanation:

The table can be read row-wise. The first number when multiplied with third number, and then doubled, gives the second number, i.e.

12*14*2= 336

Similarly for the second row, 15*16*2= 480 -Option B

Instructions [57 - 58]

Seven People A, B, C, D, E, F, G are planning to enjoy boating. There are only two boats, and the following conditions are to be kept in mind.

(I) A will go in the same boat in which E is to go.

(II) F cannot go in the same boat in which C is, unless D is also accompanying.

(III) Neither B nor C can be given the boat in which G is.

(IV) The maximum number of persons in one boat can be four only.

57. **If F and B are in one boat, which of the following statements is true?**

A G is in the other boat

B D is in the other boat

C C is in the other boat

D E is with F and B in one boat

Answer: A

Explanation:

From statement III, we can infer that both B and C are in one boat, different from that of G.

Now, as per the question, if F and B are in the same boat, F and C are also together. So, when we use statement II, we can see that D has to be on the same boat as F. So, B, C, D and F are on one boat and the rest are in the other one (as only a maximum of 4 persons in a boat are allowed).

Option option A is correct with the final results we obtain.

58. **If E gets the boat with F, which of the following is the complete and accurate list of the people who must be sitting in other boat?**

A.   F and E

B.   G and A

C.   D and A

D.   C, D and B

Answer: D

Explanation:

From statement I, A and E are always together. If F joins them, the possibility of F and C being together is ruled out as in that case, D will have to be included and then, it will violate statement IV with 5 persons on a boat.

So, D will be on the other boat. Also, from statement III, we can infer that B and C are always together and not on the same boat as G. B and C cannot join A, E and F as it will once again, contradict statement IV. So, G joins A, E, F on a boat and the other 3-C, B and D are on the other boat.
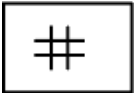
Hence, option D.
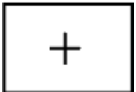
Instructions [59 - 60]

A series of figures has been shown on the left. Find the figure in the place of ? from the figures on the right.

59.

A —

B #

C |

D +
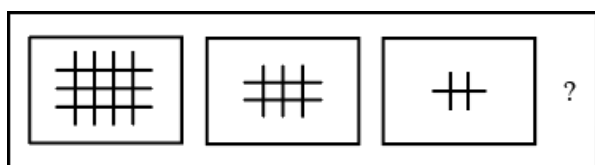
Answer: C

Explanation:
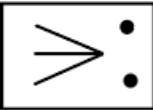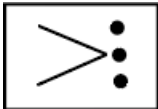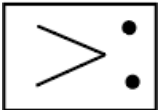
For every subsequent figures, the number of horizontal and vertical lines decrease by 1.

In the first figure, we have 3 Horizontal and 4 vertical lines. In the next figure, we have 2 Horizontal and 3 vertical lines. In the next one, we have 1 horizontal and 2 vertical lines.

So, in the final figure, we will have 0 horizontal and 1 vertical line. Hence, Option C.

60.

A

B

C

D
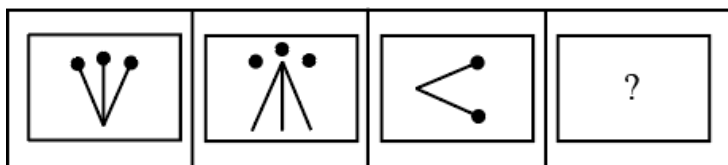
Answer: C

Explanation:

Figure 4 should be related to 3 in the same way as 2 is related to 1.

In figure 2, the dots remain at the same place and the lines flip by 180 °

Similarly, in figure 4, the dots should remain as it is and the lines should flip itself by 180 °

Option C shows the required figure.

61. Complete the following series. (GMSY, IOUA, KQWC, ?)

A. MSYE

B. NSYE

C. MYTE

D. MSYF

Answer: A

Explanation:

Logic: Each letter of every term is a two-letter increment from the corresponding letters of the previous term.

K + 2 = M

Q + 2 = S

W + 2 = Y

C + 2 = E

Instructions [62 - 65]

Following is a new plan called 'Airtel One', introduced by Airtel (GSM service Provider) for its post-paid customers.

Pulse Rate	60 Secs		
Price of Plan	Rs. 99		
Free Airtime on Plan	Nil		
Incoming Calls (Rs.)	Free		
Outgoing Calls (Rs./minute)	Airtel	GSM/CDMA (10 Digit)	Landline/WLL
LOCAL RATES	Rs. 1	Rs. 1	Rs. 2
STD RATES			
50-200 KM	Rs. 1.50	Rs. 1.50	Rs. 2
200-500 KM	Rs. 1.50	Rs. 2.50	Rs. 2.50
500+ KM	Rs. 1.50	Rs. 3.00	Rs. 3.50
ISD			
USA, Canada, Europe(Fixed Line)	Rs. 7		
Gulf, Europe(Mobile)SAA RC	Rs. 10		
Rest of the world	Rs. 40		
SMS			
Local	Rs. 1.50		
National	Rs. 2.00		
International	Rs. 5.00		
Value Added Service(Rs.)	Rs. 3.00 and Rs. 6.00 Depending on the service		
Monthly bill = Call charges + SMS charges + Price of Plan			

62. **If Mohan made STD calls (within 100 kms) for 30 min and spent 100 min on local calls with 30% on landline, 40% in GSM and 30% on Airtel, and Rohan spent 18 min on STD within 150 Kms and spent 120 mins on local calls with 30%, 40% and 30% on GSM, landline and Airtel respectively, then who spent more?**

A. Mohan

B. Rohan

C. Both spent the same amount.

D. Cannot be determined.

Answer: B

Explanation:
For Mohan,

There are 2 cases for STD calls:

1) Call rate of 1.5 which will give 30*1.5= Rs. 45

2) Call rate of 2, which will give 30*2= Rs. 60

For Local calls,

30% of 100min in landline= 30 min of landline will cost 30*2= Rs. 60

40% of 100 min in GSM = 40 min of GSM will cost 40*1= Rs. 40

30% of 100 min in Airtel= 30 min of Airtel costs 30*1= Rs. 30

Total money spent by Mohan for local calls= Rs. 130.

In total he spends either Rs. 130+ 45= 175 or Rs. 130+60= Rs. 190.

For Rohan,

The two cases for STD call rates will cost him:

1) 18*1.5= Rs. 27 with call rate of Rs.1.5/min

2)18*2= Rs. 36 with call rate of Rs. 2/min

For Local calls,

30% of 120 min= 36 min with GSM will cost him Rs. 36.

40% of 120 min= 48 min with landline will cost him Rs. 48*2= Rs. 96

30% of 120 min= 36 min with Airtel will cost him Rs. 36.

Total money spent on local calls= Rs. (36+ 96+36)= 168.

Including the STD calls, he spends either Rs. 195 or Rs. 201.

Clearly, even the case where the maximum money spent by Mohan is less compared to the case where the minimum amount spent by Rohan is considered. Therefore, Rohan spends more of the two.

63. **A new SMS scheme was introduced @60p/local SMS, with an additional monthly charge of Rs. 35. Who will not benefit from the scheme? A Person sending**

A   38 local SMS a month

B   40 local SMS a month

C   60 local SMS a month

D   59 local SMS a month

Answer: A

Explanation:
We will try to find the breakeven point at which the money spent at old rate was higher than or equal to the money spent on the new scheme.

Let us consider x SMS being sent a month.

Bill amount because of old rates= 1.5x

For the new scheme, money payable= 0.6x+ 35.

So, for the new scheme to be profitable,

1.5x> 0.6x+35

=> 0.9x> 35

=> x>35/0.9

=>x>38.88

or, from 39 messages/ month onwards, the scheme is profitable.

∴. For a person sending 38 SMS a month will not be benefited from the scheme.

64. A bill of Rs 199/Month is definitely not possible when you make only

A.   30 calls to Airtel on STD (500+Kms) and 55 local calls in a month

B.   16 calls to Airtel on STD (15 Kms) and 76 local calls in a month

C   10 STD calls (250 Kms) each to Airtel, GSM and landline respectively and 30 locals in a month

D   8, 4 and 7 calls to Airtel, GSM and landline respectively on STD (500+Kms) and 55 local calls in a month

Answer: D

Explanation:
To get a total bill of Rs. 199, we need to somehow amount the outgoing calls to Rs. 100, as the plan price is Rs. 99

In Option A, 30 STD calls to Airtel (500 km+) will amount Rs. 30*1.5= Rs. 45

55 Local calls to Airtel/ GSM will cost Rs. 55*1= Rs. 55

So, total amount for the given option= Rs. 55+ Rs. 45= Rs. 100. This will amount to total bill of Rs. 199

In option B, 16 STD Airtel calls will amount to Rs. 16*1.5= Rs. 24

76 local calls will cost Rs. 76*1= Rs. 76

So, total amount for the given option= Rs. 76+ Rs. 24= Rs. 100. This will amount to total bill of Rs. 199

In option C, 10 STD calls (250 km) to Airtel, GSM and Landline will cost Rs. {(10*1.5) + (10*2.5) + (10*2.5)}= Rs. (15+25+25)= Rs. 65

The bill from local calls can vary from Rs. 30*1 to Rs. 30*2 i.e from Rs. 30 to Rs. 60

So, total amount can vary from Rs. 95 to Rs. 125. So, a bill of Rs. 100 is possible, which can amount to a total bill of Rs. 199

In option D, 8 STD calls on Airtel, 4 GSM STD and 7 Landline STD, all 500 km+ will cost Rs. {(8*1.5) + (4*3) + (7*3.5)} = Rs. (12+12+24.5)

= Rs. 48.5

Local call bill will vary from Rs. 55*1 to Rs. 55*2, which is from Rs. 55 to Rs. 110.

So, total amount can vary from Rs. 103.5 to Rs. 158.5. So, a bill of Rs. 100 is not possible. Therefore which a total bill of Rs. 199 is not possible in this case.

65. A person makes 12 minutes of ISD calls in a month. If 80% of his ISD bill came from calling the rest of the world, then the ISD calls for the minimum duration were made to which of the following group of countries?

A USA, Canada, Europe (Fixed Line)

B Gulf, Europe (Mobile), SAARC

C. Rest of the world

D. Cannot be determined.

Answer: D

Explanation:

Since, the amount of the total ISD bill is not mentioned, we cannot determine the required entity.

So, Cannot be determined.

Instructions [66 - 67]

These questions are based on the graph which shows the demand and production statistics of 5 T.V. companies
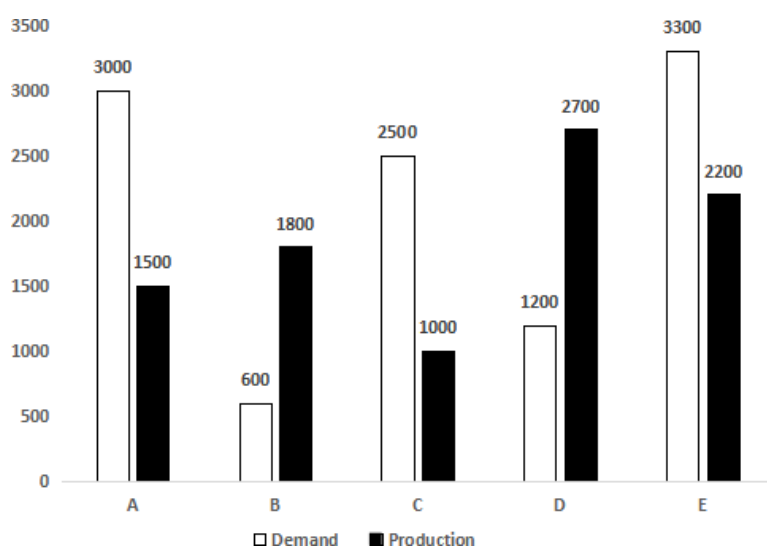
66. **What is the difference between the average demand and the average production of the five companies taken together?**

A 1400

B 400

C 280

D 138

Answer: C

Explanation:

Total Demand= 3000+ 600+ 2500+ 1200+ 3300= 10600

So, average demand= $\frac{10600}{5}$ = 2120.

Total Production= 1500+1800+1000+2700+2200= 9200

Average Production= $\frac{9200}{5}$ = 1840.

Therefore difference in average production and average supply= 2120-1840= 280- Option C

67. **The production of the company D is how many times of the production of the company A?**

A 1.8

B 1.5

C 2.5

D 1.11

 Answer: A

Explanation:

Production of Company D= 2700

Production of company A= 1500

So, D's production is $\frac{2700}{1500}$= 1.8 times that of A's production.

Instructions [68 - 69]

The following questions are based on the pie-chart given below which gives the expenditure incurred in printing a magazine:
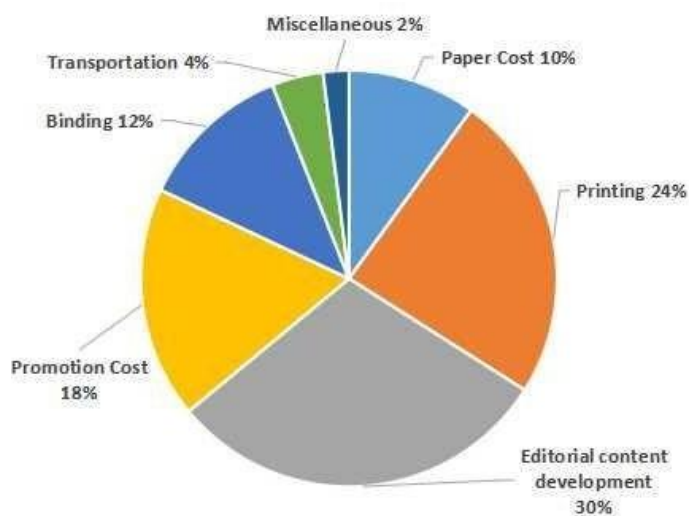
68. **What is the angle for the sector representing paper cost?**

A. 10 degrees

B. 36 degrees

C. 23.5 degrees

D. 45 degrees

 Answer: B

Explanation:

If we consider the entire circle, it represents both 360 ° as well as 100%.

So, 360° = 100%

=> 10%= 36°

Paper's share is shown as 10%. therefore angle subtended by the paper's share is 36 °

69. **For a given issue of the magazine, the 2% of the cost is Rs. 2,000 and the print-run is 12,500 copies. What should be the sale price if the publisher desires a profit of 5 percent?**

A.   Rs.5

B.   Rs.7.5

C.   Rs.8

D   Rs.8.40

   Answer: D

Explanation:
It is given that 2% of C.P= Rs. 2000

=> $\frac{2}{100}$*CP= 2000

=>CP= $\frac{200000}{2}$.

∴ CP= Rs. 1,00,000

Profit required =5%

So, total SP= 1.05(1,00,000)= Rs. 1,05,000.

Copies sold= 12,500.

Therefore, SP of each copy= Rs. $\frac{1,05,000}{12,500}$ = Rs.8.40-Option D

70. **If 'water' is called 'food', 'food' is called 'tree' , 'tree' is called 'sky' , 'sky' is called 'wall' , on which of the following does a 'fruit' grow?**

A.   Water

B.   Food

C.   Tree

D.   Sky

   Answer: D

Explanation:
A fruit grows on tree. But according to the code words, tree is referred to as Sky. So, as per this question, a fruit grows on sky.

General English

Instructions [71 - 72]

Choose the correct option to fill the blank for correct grammatical use.

71. She is a close friend of _____.

A. my

B. I

C. me

D. mine

   Answer: D

Explanation:

Since we are showing an association here, the possessive form of "my", i.e., **"mine",** is the correct choice.

Hence, the answer is option D.

72. He took care of her _____ she was restored to health.

A. when

B. before

C. after

D. till

   Answer: D

Explanation:

Since we are talking about a point in time here, "till" is the best choice for the answer.

Hence, the answer is option D.

73. Choose the correct option: The man _____ his appearance completely since then.

A. is changing

B. changed

C. has changed

D. is changed

   Answer: C

Explanation:

"Since then" indicates that the action has already taken place.

Thus, "has changed" is the correct answer.

The answer is option C.

74. From the options below, choose the word with the incorrect spelling:

A.   Diarrhea

B.   Diaper

C.   Dichotomy

D.   Dias

   Answer: A

Explanation:
"Diarrhoea" is the correct spelling of the word in British English.

Hence, the answer is option A.

75. Choose the word spelt correctly :

A.   superintendant

B.   sleve

C.   alloted

D.   dissipate

   Answer: D

Explanation:
Option A: superintendant: This is the miss-spelt representation of the word Superintendent. Thus, this is not the correct option.

Option B: sleve: This is the miss-spelt representation of the word sleeve. Thus, this is not the correct option.

Option C: alloted: This is the miss-spelt representation of the word allotted. Thus, this is not the correct option.

Option D: Dissipate means to disappear. Since it has the correct spelling, thus this is the correct option.

The correct option is D.

Instructions [76 - 79]

Fill in the blanks with the correct pair of words:

76. **He lives _____ Bangaluru _____115, Richmond Road.**

A   at – in

B in – at

C. at – on

D. in – on

Answer: B

Explanation:

The preposition "in" is used for a larger area, whereas "at" is used for a specific location.

Thus, the correct statement becomes "He lives in Bangaluru at 115, Richmond Road."

Hence, the answer is option B.

77. **'Aurally challenged' is a _____for the _____.**

A metaphor – blind

B euphemism – deaf

C simile – disabled

D synonym – dumb

Answer: B

Explanation:

"Aurally Challenged" is used to refer to deaf people.

Hence, the answer is option B.

78. **If error is a _____, fault is _____.**

A defect – a mistake

B mistake – a defect

C slip – an inaccuracy

D blunder – to blame

Answer: B

Explanation:

An "error" is a minor miscalculation or mistake that can happen to anyone, whereas a "fault" is a misguided habit or defect.

Hence, the answer is option B.

79. **The man has _____ the rules of ethical conduct; he is _____ a beast.**

A flaunted – literally

B ignored – basically

C. broken – as

D. flouted – virtually

Answer: D

Explanation:

For the second blank, "as" is grammatically incorrect, whereas "literally" and "basically" make the statement too literal.

Option D is the best choice for the answer.

Instructions [80 - 81]

Which punctuation mark is missing in the following sentences?

80. Part of Australia is known to the natives as The Outback.

A. inverted commas

B. semicolon

C. comma

D. hyphen

Answer: A

Explanation:

Since we are emphasizing on the words "The Outback", inverted commas should be used around them.

Hence, the answer is option A.

81. I know that you want to learn to drive Rima but you are too young.

A. inverted commas

B. semicolon

C. comma

D. hyphen

Answer: C

Explanation:

A comma should be used after the word "Rima" to show the separation of clauses.

Hence, the answer is option C.

Instructions [82 - 83]

Select as option the word closest in meaning to the given word:

82. Veracious

A. False

B. Varied

C. Image

D. Truthful

   Answer: D

Explanation:

'Veracious' means speaking or representing the truth.

Since the closest word similar to veracious is Truthful,

The correct option is D.

83. Perturb

A. Stipulate

B. Turn around

C. Disturb greatly

D. Compatible

   Answer: C

Explanation:

"Perturb" means to make someone anxious or disturbed.

Hence, the answer is option C.

Instructions [84 - 85]

Choose the option that is the closest in meaning to the phrases in bold:

84. He was a king who ruled his subjects with a high hand.

A. sympathetically

B. oppressively

C. democratically

D generously

   Answer: B

Explanation:

"With a high hand" means "having or showing no regard for the rights, concerns, or feelings of others"

Hence, the answer is option B.

85. I racked my brains to solve this difficult problem.

A. I read a large number of books.

B. I consulted several people.

C. I used my commonsense.

D. I subjected my mind to hard thinking.

Answer: D

Explanation:

To rack your brain means to make a great effort to think.

Hence, the answer is option D.

Instructions [86 - 87]

Select the most appropriate meaning of the underlined idiomatic phrase:

86. I was supposed to give a speech to my English class, but I got cold feet and I didn't go.

A. My English class-room makes my feet feel too cold.

B. My feet got cold so I didn't go.

C. I got too nervous and I didn't go.

D. It was winter time and I had no socks for my feet.

Answer: C

Explanation:

To have "cold feet" means to be too fearful to undertake or complete an action.

Hence, the answer is option C.

87. Take care of what u say! You will have to eat your words!

A. You have no food to eat.

B. You will have to take back what you have said.

C You are not good with your language.

D None of the above.

Answer: B

Explanation:

To "eat one's words" means to retract what one has said.

Hence, the answer is option B.

88. **Which two sentences convey the same idea?**
    1) Shouldn't they have checked your tickets?
    2) I wonder if they should have checked your tickets.
    3) I want to know if they checked your tickets.
    4) They should have checked your tickets.

A 2, 3

B 1, 2

C 1, 4

D 2, 4

Answer: C

Explanation:

Sentence 1 implies that the speaker feels that the tickets should have been checked.

Sentence 2 implies that the speaker is wondering whether the tickets should have been checked.

Sentence 3 implies that the speaker is asking whether the tickets were checked.

Sentence 4 implies that the speaker feels that the tickets should have been checked.

Thus, 1 and 4 convey the same meaning.

Hence, the answer is option C.

Instructions [89 - 90]

Choose a single word which is opposed to the meaning contained in the sentence.

89. **He was magnanimous and his benevolence made him give to charity.**

A.   mean

B.   cruel

C.   snobbish

D.   tyrannical

Answer: A

Explanation:

Magnanimous refers to generous or forgiving, especially towards a rival or less powerful person.

Benevolence refers to the quality of being well-meaning; kindness.

Since 'mean' is the aptest opposite word in the context,

the correct option is A.

90. Biannual is

A.   once in two years

B.   every year

C.   twice a year

D.   after every two years

   Answer: C

Explanation:

"Biannual" means twice in a year.

Hence the answer is option C.

91.   **Choose the odd one out :**

A   temporal

B   ephemeral

C   transient

D   eternal

   Answer: D

Explanation:

'Temporal', 'ephemeral', and 'Transient' refers to something lasting only for a short time.

Since 'eternal' means lasting or existing forever,

The correct option is D.

92. Choose the correct option :
   If ' inter' means between as in interstate , 'intra' as in intravenous means _____.

A.   into

B.   onto

C.   within

D.   without

   Answer: C

Explanation:

'Intra' means on the inside, and 'Intravenous' means existing or taking place within, or administered into, a vein or veins.

Thus, the correct answer will be 'within'.

The correct option is C.

93. **Match the part of speech (in bold) to their usage(down)**

1. Adjective	5. The fire engine came rushing **down** the hill.
2. Preposition	6. He has seen the ups and **downs** of life.
3. Noun	7. **Down** with the tyrant!
4. Verb	8. The porter was hit by the **down** train.

A 1–8, 2–5, 3–6, 4–7

B 1–6, 2–5, 3–8, 4–7

C 1–5, 2–6, 3–7, 4–8

D 1–5, 2–7, 3–6, 4–8

Answer: A

Explanation:

In sentence 5, "down" indicates the relation of the fire engine with the hill. Thus, it is used as a "preposition". Hence, 2-5 is a match.

Options C and D can be eliminated.

In sentence 8, "down" is used to describe a noun [train]. Thus, it is used as an adjective. Hence, 1-8 is a match.

Hence, option A is the answer.

In sentence 6, "ups" and "downs" are nouns. Hence, 3-6 is a match.

In sentence 7, "down" denotes action and is thus, used as a verb. Hence, 4-7 is a match.

94. **Instructions for question. Match the items in the column I with those in column II. Choose the correct answer combination given below.**

I	II
1. As deaf as	5. gall
2. As bitter as	6. an eel
3. As unpredictable as	7. a post
4. As slippery as	8. the weather

A 1–7, 2–6, 3–8, 4–5

B 1–7, 2–5, 3–8, 4–6

C 1–8, 2–6, 3–5, 4–7

D 1–5, 2–7, 3–6, 4–8

Answer: B

Explanation:

The correct idioms are:

1. "As deaf as a post"

2. "As bitter as gall"

3. "As unpredictable as the weather"

4. "As slippery as an eel"

Hence, the answer is option B.

95. **Match the part of speech (in bold) to their usage.**
ABOVE

1. adjective	5. Rain comes from **above**.
2. adverb	6. His conduct is **above** suspicious.
3. Noun	7. Look **above** the mantel piece.
4. preposition	8. The **above** information is for the public.

A   1–8, 2–7, 3–5, 4–6

B   1–7, 2–6, 3–5, 4–8

C   1–8, 2–5, 3–6, 4–7

D   1–6, 2–8, 3–5, 4–7

   Answer: A

Explanation:
In sentence 8, "above" is used to describe a noun [information]. Thus, it is used as an adjective. Hence, options B and D are rejected.

In sentence 7, "above" is used to describe a verb [look]. Thus, it is used as an adverb. Hence, option C is rejected.

The answer is option A.

Instructions [96 - 97]

Choose the segment with the error. If there is no error, choose 4

96. **Idli and Sambar/1 make the breakfast/2 in the South./3**

A.   1

B.   2

C.   3

D   4

   Answer: B

Explanation:
Since "and" is used to join "idli" and "sambar", they form a singular entity. Thus, the verb used should have been "makes".

Hence, the answer is option B.

97. **Your account should/1 have been credited/2 with three months' interest./3**

A. 1

B. 2

C. 3

D. 4

   Answer: D

Explanation:

The given sentence does not have any errors.

Hence, the answer is option D.

98. **Choose the sentence where the underlined word is used appropriately.**

A   <u>Who's</u> car are you planning to borrow?

B.   <u>Whose</u> planning to have a birthday party?

C.   He is the person <u>who</u> you met at the junction.

D.   Does he know <u>whom</u> to call about the hotel reservations?

   Answer: D

Explanation:

A. "Whose" should have been used instead of "Who's".

B. "Who's" should have been used instead of "Whose".

C. "Whom" should have been used instead of "who".

D.It is grammatically correct.

Hence, the answer is option D.

Instructions [99 - 100]

Choose the appropriate answer.

99. **1. Can you imagine his forgetting his own birthday?**
    2. Can you imagine him forgetting his own birthday?

A.   The first sentence is correct

B.   The second sentence is correct

C.   Both sentences are correct

D   Both sentences are wrong.

Answer: B

Explanation:

The first sentence has two possessives [his] which are incorrect.

Only option B is the correct sentence.

Hence, the answer is option B.

00. **1. Recently I read about a unique wedding that took place in the newspaper.**
    2. Recently I read in the newspaper about a unique wedding that took place.

A.   The first sentence is correct

B.   The second sentence is correct

C.   Both sentences are correct

D.   Both sentences are wrong.

Answer: D

Explanation:

1.The position of the phrase "in the newspaper" makes it seem as if the wedding is taking place inside a newspaper. Hence, it is incorrect.

2.The phrase "that took place" should have been followed by a destination or time. Hence, it is incorrect.

Hence, the answer is option D.

01. **Complete the given sentence by choosing the correct phrase.**
    You cannot succeed unless

A   you do not work hard.

B   you shall not work hard.

C   you will work hard.

D   you work hard.

Answer: D

Explanation:

Since the sentence is in the present tense, options B and C can be eliminated.

Since "unless" is used, the second part will be a positive sentence. Thus, option A can be eliminated.

Hence, the answer is option D.

2. **Re-arrange the scrambled segments in logical order to make a complete sentence.**

   1. to place where more opportunities are available
   2. and so there is a great demand for English
   3. for professional and economic growth
   4. because it takes one outside one's own community
   5. English is language of opportunities

A   1, 2, 5, 3, 4

B   5, 4, 1, 3, 2

C   3, 1, 4, 2, 5

D   2, 1, 3, 5, 4

Answer: B

Explanation:

5 starts the discussion by introducing the topic.

4 follows 5 as it gives the reason why English is called the language of opportunities.

1 will follow 4 as it tells where the language can take us in terms of opportunities.

3 will follow 1 as it mentions what the opportunities are for.

Finally, 2 concludes by telling that there is a great demand for English.

Thus, the required sequence is 54132

Hence, the answer is option B.

03. **Choose the best construction:**

A   If you would have taken care you wouldn't have got typhoid.

B.   If you took care you wouldn't have got typhoid.

C.   If you take care you wouldn't have got typhoid.

D.   If you had taken care you wouldn't have got typhoid.

Answer: D

Explanation:

"wouldn't have got typhoid" means that the sentence is in the past perfect tense.

Option D is the only grammatically correct sentence of the given tense.

Hence, the answer is option D.

Instructions [104 - 105]

Choose the correct option.

04. **At times, we are all _____ to be mistaken.**

A. apt

B. likely

C. considered

D. able

Answer: B

Explanation:

The context of the line indicates the possibility of a mistake.

Among the options, "likely" is the most appropriate choice.

Hence, the answer is option B.

5. **He hardly cares, _____?**

A. does he

B. doesn't he

C. will he

D. won't he

Answer: A

Explanation:

Since the sentence is negative, the question tag will be positive. Options B and D are thus, eliminated.

The auxiliary verb used here is "is". Thus, the question tag will be "does he?".

Hence, the answer is option A.

Instructions [106 - 107]

Identify the figures of speech in the following sentences:

6. **As proud as a peacock.**

A. Metaphor

B. Simile

C. Apostrophe

D Epigram

Answer: B

Explanation:

The use of "as ... as" always denotes a simile.

Hence, the answer is option B.

7. **Death lays his icy hand on kings.**

A. Personification

B. Exclamation

C. Simile

D. Anticlimax

   Answer: A

Explanation:

"Death" is given a human ability to lay a hand on someone. This signifies personification.

Hence, the answer is option A.

Instructions [108 - 110]

Read the passage carefully and answer within the context.

"A way to deal with frozen feelings"
Every child experiences all that happens around him with total awareness. In the first seven years the child's brain is like a sponge, taking in all sensory inputs and building his idea of his surroundings. As long as the environment is safe, the child learns with incredible speed. However, when the environment is scary or stressful, the child unlearns past learning just as rapidly.

In the early years of every child's life, whenever there is shock, violence, fear or pain, these intense emotions are imprinted deeply into memory. Whenever the same activity or situation is repeated, the nervous system and body subconsciously re-experience the memory of that trauma.

Any emotional situation that takes us out of the present and into the past means that whenever the same kind of emotion crops up later in our life we return to the past for our reference point. If that point was at age three, we find ourselves behaving like a three-year-old. We feel childish and we behave childishly. Our feelings are the cause of this 'glitch' in our learning process. We know we should be able to make a positive change, but that doesn't change anything.

The process of change need not be traumatic. We couldn't have done any better because we didn't know how to. But we should realise that was then and this is now! We can choose to choose again. It's up to us. It's our movie!

08. **The "Frozen Feelings" being talked about are about**

A negative childhood experiences

B. childhood learning patterns

C. inability to learn as an adult

D. none of the above.

   Answer: A

Explanation:

In the first line, the author says "A way **to deal** with frozen feelings". The phrase "to deal" indicates that the feelings are negative.

Then the author goes on to talk about negative childhood experiences that could be traumatic and may stay there in you psyche even in adulthood.

Hence, the answer is option A.

9. A 'glitch' is

A.   a ditch

B.   uneasy emotions

C.   sudden malfunction or breakdown

D.   learning patterns

Answer: C

Explanation:
A "glitch" refers to a sudden "malfunction".

The author says that whenever we are faced with a negative situation similar to what we have experienced in our childhood, it causes a glitch and we experience all the emotions and the memories of our childhood associated with it.

Hence, the answer is option C.

10. Identify the correct sentence, based on the paragraph

A.   The process of change needs to be traumatic.

B.   We feel childish and we behave childishly.

C.   Both sentences are incorrect.

D.   Both the sentences are correct.

Answer: C

Explanation:
In the last paragraph, the author says that the process of change need not be traumatic. This negates option A.

Option B says that we behave childishly all the time, whereas the author associates this behaviour with a "glitch". Hence, option B is also negated.

Hence, the answer is option C.

General Awareness

11. **Dendrochronology is**

A The method of scientific dating based on the analysis of tree-ring growth patterns.

B A core sample from the accumulation of snow and ice over many years that have re-crystallized and have trapped air bubbles from previous time periods.

C is the study of glaciers or more generally ice and natural phenomena that involve ice.

D The scientific study of landforms and the processes that shape them.

Answer: A

12. **Which company launched the first mobile phone operation in India?**

A. Bharti Airtel

B. Essar

C. Max Touch

D. Modi Telstra

Answer: D

13. **Which is the longest running English language TV cartoon in history, first launched by Warner Brothers in 1969 exclusively for television, and is now popular fare on the Cartoon Network?**

A Scooby Doo

B Tom and Jerry

C Popeye

D Johnny Bravo

Answer: E

14. **The expansion for BIFR, in the context of the Indian Industry is:**

A. Board for Industrial and Financial Reconstruction

B. Bureau for Industrial and Financial Reconstruction

C. Board for Investment and Financial Reconstruction

D. Bureau for Investment and Financial Reconstruction

Answer: A

15. What is Ekistics?

A.   The water sports related study

B.   The science of Body Mass

C.   The art of card tricks

D.   The science of human settlements

   Answer: D

16. What is Red Herring in an IPO?

A.   Prospectus

B.   Submission of Form

C.   Funds Generated during IPO

D.   Minimum Offer per Share

   Answer: A

17. Eight O'clock Coffee, a US based coffee marketer, is a group company of

A.   Tata

B.   ITC

C.   Britannia

D.   Unilever

   Answer: A

18. Bio-diesel is extracted from the following plant:

A.   Hibiscus

B.   Aloe Vera

C.   Jatropha

D.   Chamomile

   Answer: C

19. **Which woman tennis player won the maximum number of Grand Slam singles titles in the history of tennis?**

A. Steffi Graf

B. Martina Navratilova

C. Billi Jean King

D. Margaret Court

Answer: D

20. **What is the nickname of New York city?**

A. Big Sweet Lime

B. Big Apple

C. Big Grape

D. None of the above

Answer: B

21. **Which was the first Indian company to be listed in NASDAQ?**

A. TCS

B. Wipro

C. Infosys

D. Cognizant

Answer: C

22. **"TAREGNA" - a village in Bihar was in the news because of**

A. Rahul Gandhi's election campaign

B. Viewing of the solar eclipse

C. A visit by Hillary Clinton

D. The Naxal massacre of tribals

Answer: B

23. **The driver for Formula One's Force India Team is**

A. Mark Webber

B. Adrian Sutil

C. Felipe Massa

D. Jensen Button

Answer: B

24. **(MDRT) - Million Dollar Round Table consists of**

A. World's richest industrialists

B. World's most powerful golfers

C. Global Association of Life Insurance professionals

D. World's richest sports persons

Answer: C

25. **Who declares the "Credit Policy" of India?**

A. The Finance Ministry

B. Reserve Bank of India

C. The Commerce Ministry

D. The Indian Bank's Association

Answer: B

26. **Name of the body which regulates the stock Exchanges in India is**

A. CBI

B. CID

C. SHCIL

D. SEBI

Answer: D

27. **Rafflesia arnoldii is its botanical name and it holds a world record in the plant world. What's the record?**

A. Tallest cacti

B. Largest bloom

C. Longest surviving tree

D. Smallest plant

Answer: B

28. **Temujin was a famous historical character of the world, but we know him by a different name. Which one?**

A. Babur

B. Genghis Khan

C. Kublai Khan

D. Emperor Nero

Answer: B

29. **What is Short Selling in stock market lingo?**

A. Selling the shares which you do not own.

B. Selling a share after owning it for a short period of time.

C. Selling all the shares in your booty which are not productive.

D. Selling of shares which are quoted for a short period of time.

Answer: A

30. **Mahatma Gandhi was nominated for the Nobel Peace prize for the first time in the year 1937 and last time in the year 1948. How many times in between these two years was he nominated?**

A 1

B. 3

C. 2

D. 0

Answer: B

31. **Which organization instituted the Nobel Prize in Economics?**

A. Svenska Handelsbanken

B. International Monetary Fund

C. Economics Department of Oxford University

D. Sveriges Riksbank

   Answer: D

32. **Film stars have been endorsing Lux beauty soap since ages. Who was the first actress of Bollywood to do so?**

A   Madhubala

B   Leela Naidu

C   Suraiya

D   Leela Chitnis

   Answer: D

33. **India's interstate cricket tournament is named after Kumar Shri Ranjitsinghji Vibhaji Jadeja or in short Ranji, the great cricket legend. He played his cricket in England and also played for English national team. Which county he used to play for in the league cricket of England?**

A. Sussex

B. Essex

C. Somerset

D. Surrey

   Answer: A

34. **As a practice, all major states' capitals have offices of Reserve Bank of India with only one exception. Which city of India has an office of RBI without being a state capital?**

A. Pune

B. Allahabad

C. Baroda

D. Nagpur

   Answer: D

35. **This distinguished Indian was born on 28th December 1937 in Surat. He has completed the Advanced Management Program at Harvard Business School, USA. He turned down a job offer from IBM to join his family business and today he is one the top business leaders of India. Name the tycoon.**

A   Ratan Tata

B   Anil Ambani

C.   Azim Premji

D.   Anand Mahindra

   Answer: A

36. **It's known to be used in Egypt in 3000 BC, but its name had been derived from an old French expression. It is made from the fermentation of ethanol in a process that yields its key ingredient, ethanoic acid. What is it?**

A.   Tabasco Sauce

B.   Phenol

C.   Vinegar

D.   Soya Sauce

   Answer: C

37. **The name of this Japanese company literally means "three diamonds". Which one?**

A. Sanyo

B. Mutsuhito

C.   Mitsubishi

D. Suzuki

   Answer: C

38. **Who were the first twins to play test cricket?**

A.   Merv and Kim Hughes

B.   Ian and Greg Chappell

C.   Surinder and Mohinder Amarnath

D.   Steve and Mark Waugh

Answer: D

39. **Which country has the largest rail network in the world?**

A.   India

B.   China

C.   U.S.A

D.   U.K.

Answer: C

40. **Who won the 2009 French open tennis ladies title?**

A   Svetlana Kuznetsova

B   Kristina Mladenovic

C   Maria Sharapova

D   Venus Williams

Answer: A

41. **Who invented the microchip?**

A   Robert Noyce and Jack Kilby

B   Larry Page and Sergey Brin

C Sabeer Bhatia

D   Gordon Moore & Robert Noyce

Answer: A

42. **Which is the largest landlocked country in the world?**

A.   Switzerland

B.   China

C.   Kazakhstan

D.   Mongolia

Answer: C

43. **Which country makes Panama hats?**

A. Ecuador

B. Panama

C. Cuba

D. Bolivia

   Answer: A

44. **Who was the Prime Minister of India when the 42nd Amendment Bill bringing in the changes in the Constitution was passed?**

A. Rajiv Gandhi

B. V.P. Singh

C. Indira Gandhi

D. Morarji Desai

   Answer: C

45. **Which one of the following planets lost its planet status recently?**

A. Moon

B. Neptune

C. Pluto

D. Saturn

   Answer: C

46. **One barrel of oil is approximately equivalent to how many litres?**

A 200

B 150

C 120

D 160

   Answer: D

47. **Five year plans in India are finally approved by the :**

A.   Union Cabinet

B.   President on the advice of prime minister

C.   National Development Council

D.   Planning commission

   Answer: C

48. **Many a time we read in the newspapers about Southern Cone of South America which includes Argentina, Chile, Paraguay, Uruguay and Peru. Which is the most spoken language of this geographical area?**

A.   Portuguese

B.   Spanish

C.   French

D.   English

   Answer: B

49. **Which one of the following is not a member of the organization of petroleum exporting countries (OPEC)?**

A.   Algeria

B.   Brazil

C.   Ecuador

D.   Nigeria

   Answer: B

50. **Who invented the 'computer laptop'?**

A.   Arthur Wynna – USA

B.   Q. Daimler – Germany

C   Sinclair – Britain

D   None of the above

Answer: D