

SSC MTS 2nd August 2019 Shift-1

English

Instructions

Choose the correctly spelt word.

Question 1

- A Hotiness
- B Haughtyness
- C Haughtiness
- D Hautiness

Answer: C

Question 2

- A Gramar
- B Gramer
- C Grammar
- D Grammer

Answer: C

Instructions

For the following questions answer them individually

Question 3

Select the most appropriate option to fill in the blank.
Her parents always _____ her in her studies.

- A encouraged
- B interested
- C impressed
- D expected

Answer: A

Question 4

Select the most appropriate antonym of the given word.
Fertile

- A Barren
- B Civilized
- C Sane
- D Tough

Answer: A

Question 5

**Choose the most appropriate word that can substitute the given group of words.
One who pretends to be what he is not**

- A** Director
- B** Hypocrite
- C** Creator
- D** Acrobat

Answer: B

Question 6

**Select the most appropriate antonym of the given word.
Acute**

- A** Dark
- B** Clever
- C** Grave
- D** Blunt

Answer: D

Question 7

**Select the most appropriate synonym of the given word.
Deepen**

- A** Soothe
- B** Neutralize
- C** Relieve
- D** Intensify

Answer: D

Question 8

**Select the most appropriate meaning of the given idiom.
The ball is in (one's) court**

- A** To be responsible for further action
- B** To pass the responsibility to another

- C To be fearful of taking any action
- D To risk everything in one venture

Answer: A

Question 9

Select the most appropriate option to fill in the blank.
The entry gates were closed _____ we could enter in.

- A till
- B before
- C after
- D until

Answer: B

Instructions

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.

Question 10

I told t he tailor/to made a new/dress for me. /No error.

- A dress for me
- B I told the tailor
- C No error
- D to made a new

Answer: D

Question 11

The la dy/standing in the/corner is fat. /No error.

- A corner is fat
- B No error
- C standing in the
- D The lady

Answer: B

Instructions

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.

Question 12

Please tell the story in a nutshell.

- A at a nutshell
- B in the nutshell
- C in nutshells
- D No Improvement

Answer: D

Question 13

He did not like the novel, nor I did.

- A nor did I
- B No Improvement
- C nor I like it
- D nor did I likes it

Answer: A

Instructions

For the following questions answer them individually

Question 14

**Choose the most appropriate word that can substitute the given group of words.
A place where nuns live and work**

- A Convent
- B Dormitory
- C Hostel
- D Quarter

Answer: A

Question 15

**Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.
It was not possible/for we/to understand her. /No error.**

- A for we
- B to understand her
- C It was not possible
- D No error

Answer: A

Question 16

Select the most appropriate option to fill in the blank.

_____ you like some water?

- A Do
- B Would
- C Shall
- D Can

Answer: B

Question 17

Select the most appropriate synonym of the given word.

Courage

- A Meekness
- B Valour
- C Humility
- D Timidity

Answer: B

Question 18

Select the most appropriate option to fill in the blank.

We must start now _____ it will be too late.

- A until
- B unless
- C or
- D but

Answer: C

Instructions

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Comprehension:

Humanity can be (1)_____ as the quality of being human; the peculiar nature (2)_____ man, by which he is distinguished (3)_____ other beings. Being human (4)_____ not mean that an individual possesses humanity. One of the (5)_____ outstanding examples of extraordinary humanity in a human being has been portrayed beautifully by Mother Teresa.

Question 19

Select the most appropriate option for blank No. 1.

- A define

- B** defining
- C** defined
- D** defines

Answer: C

Question 20

Select the most appropriate option for blank No. 2.

- A** of
- B** in
- C** at
- D** to

Answer: A

Question 21

Select the most appropriate option for blank No. 3.

- A** along
- B** for
- C** by
- D** from

Answer: D

Question 22

Select the most appropriate option for blank No. 4.

- A** had
- B** does
- C** has
- D** did

Answer: B

Question 23

Select the most appropriate option for blank No. 5.

- A** more
- B** many

C most

D much

Answer: C

Instructions

For the following questions answer them individually

Question 24

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.

The father with his children were expected to attend the function.

A are

B have

C No improvement

D was

Answer: D

Question 25

Select the most appropriate meaning of the given idiom.

Bend over backwards

A To express sudden shock

B To exert a lot of effort towards some end

C To end all activities

D To confess to a crime

Answer: B

Reasoning

Instructions

For the following questions answer them individually

Question 26

Five articles, bat, ball, fan, table and chair, are kept one above the other (not necessarily in the same order). The bat is four places above the fan. The table is between the ball and the chair. The chair is three places below the bat.

Which article is at the second position from the top?

A Fan

B Table

C Ball

D Chair

Answer: C

Question 27

Five teachers, H, K, P, R and T, are sitting around a circular table facing towards the centre (not necessarily in the same order). T is between H and R. P is second to the right of R. H is to the immediate left of T. Who is sitting to the immediate left of K?

- A T
- B H
- C P
- D R

Answer: D

Question 28

In a certain code language, 'RIGIDS' is written as 'TFIFFP'. What will be the code for 'CORNET' in that code language?

- A GNVNIS
- B FMULHR
- C ELTKRQ
- D ELTKGQ

Answer: D

Question 29

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

Statements:

- I. No A is B.
- II. All C are D.
- III. Some C are B.

Conclusions:

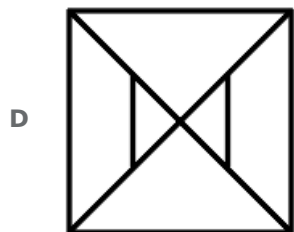
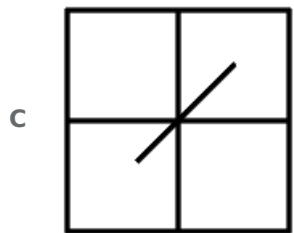
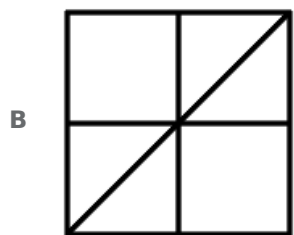
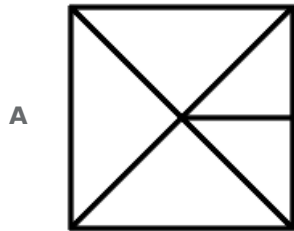
- I. Some D are B.
- II. Some B are C.
- III. All C are B.

- A Both conclusions I and II follow.
- B Both conclusions I and III follow.
- C Only conclusion III follows.
- D Only conclusion II follows.

Answer: A

Question 30

Select the option in which the given figure is embedded. (Rotation is not allowed)



Answer: D

Question 31

In a certain code language, 'ROK' is written as '44' and 'MIG' is written as '29'. What will be the code for 'TAL' in that code language?

A 33

B 34

C 41

D 43

Answer: A

Question 32

Which two signs need to be interchanged to make the following equation correct?

$$73 - 13 \times 42 \div 14 + 56 = 56$$

A + and -

B \times and \div

C - and \times

D - and \times

Answer: A

Explanation:

Expression : $73 - 13 \times 42 \div 14 + 56 = 56$

L.H.S. $\equiv 73 + 13 \times 42 \div 14 - 56$

$= 73 + (13 \times 3) - 56 = 56 = \text{R.H.S.}$

\Rightarrow Ans - (A)

Question 33

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

35 : 66 :: 29 : ?

A 63

B 62

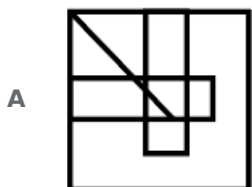
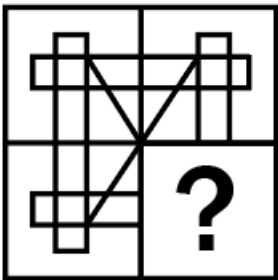
C 60

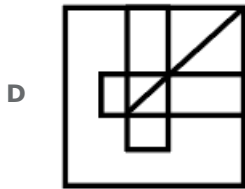
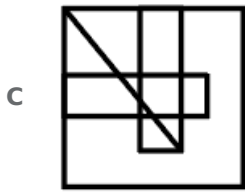
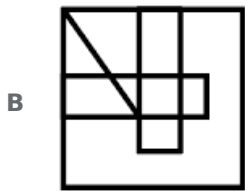
D 57

Answer: C

Question 34

Study the given pattern carefully and select the figure that will complete the pattern given in the question figure.





Answer: B

Question 35

In a certain code language, 'PING' is written as '4' and 'METAL' is written as '5'. What will be the code for 'STEADYS' in that code language?

A 8

B 7

C 5

D 6

Answer: B

Question 36

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

Statements:

I. Some red are rat.

II. Some rat are wild.

Conclusions:

I. Some wild are rat.

II. All wild are rat.

III. Some red are wild.

A None of the conclusions follows.

B Only conclusion I follows.

C Only conclusion III follows.

D Only conclusion II follows.

Answer: B

Question 37

Select the number that can replace the question mark (?) in the following series.

16, 20, 29, 45, 70, ?

A 106

B 116

C 96

D 126

Answer: A

Explanation:

The pattern followed is :

$$16 + (2)^2 = 20$$

$$20 + (3)^2 = 29$$

$$29 + (4)^2 = 45$$

$$45 + (5)^2 = 70$$

$$70 + (6)^2 = \mathbf{106}$$

=> Ans - (A)

Question 38

Six laptops, N, Q, P, L, R and A, are placed in a row facing towards the north (not necessarily in the same order). N is placed to the immediate left of A. R is placed second to the left of Q. P is placed second to the right of A. P is placed to the immediate right of R. L is placed to the left of N. Which laptop is placed to the immediate right of L?

A N

B Q

C P

D A

Answer: A

Question 39

If the two signs, '+' and '÷' are interchanged, which of the following equations will be correct?

A $16 \div 9 + 4 \times 8 = 34$

B $16 \div 21 + 13 \times 26 = 56$

C $11 + 13 \times 4 \div 2 = 37$

D $13 \times 9 + 16 \div 2 = 125$

Answer: A

Explanation:

If we exchange '+' and '÷'

$$(A) : 16 \div 9 + 4 \times 8 = 34$$

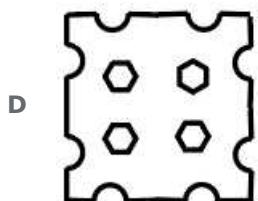
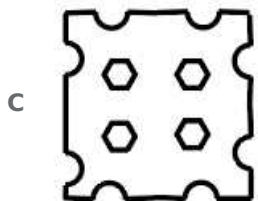
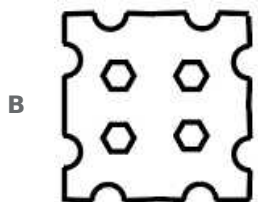
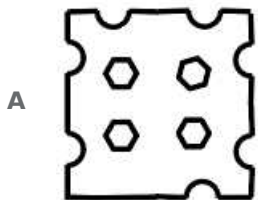
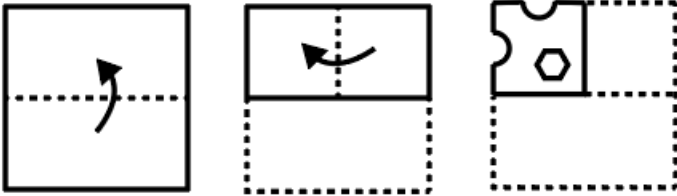
$$\text{L.H.S.} \equiv 16 + 9 \div 4 \times 8$$

$$= 16 + (9 \times 2) = 34 = \text{R.H.S.}$$

=> Ans - (A)

Question 40

A paper is folded and cut as shown below. How will it appear when unfolded?



Answer: B

Question 41

Select the number that can replace the question mark (?) in the following series.

31, 44, 58, 73, 89, ?

A 105

B 106

C 115

Answer: B

Explanation:

The pattern followed is :

$$31 + 13 = 44$$

$$44 + 14 = 58$$

$$58 + 15 = 73$$

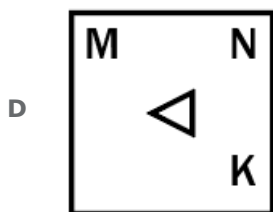
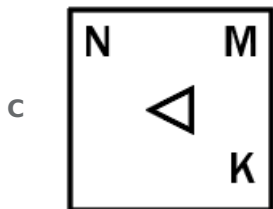
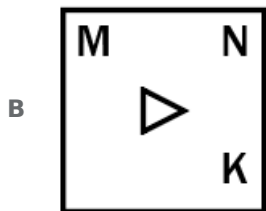
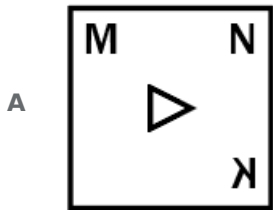
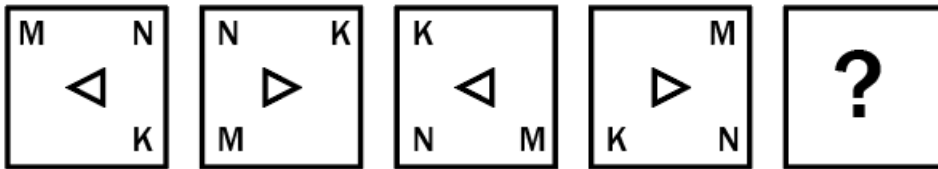
$$73 + 16 = 89$$

$$89 + 17 = \mathbf{106}$$

=> Ans - (B)

Question 42

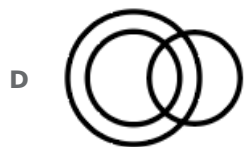
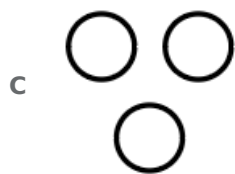
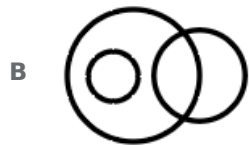
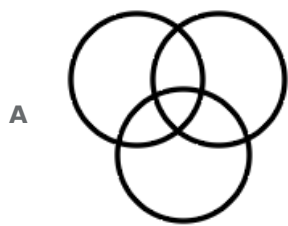
Select the option figure that will come next in the following series.



Answer: D

Question 43

Identify the Venn diagram that best represents the relationship between the given classes.
Painter, Lawyer, Singer



Answer: A

Question 44

Select the letter-pair that can replace the question mark (?) in the following series.
AR, CU, EX, GA, ?

A JE

B ID

C IF

D KF

Answer: B

Question 45

Select the word pair in which the two words are related in the same way as the two words in the following word-pair.

Five : Pentagon

A Four : Rectangle

B Triangle : Three

C Square : Four

D Six : Septagon

Answer: A

Question 46

Study the given pattern carefully and select the number that can replace the question mark (?) in it.

7 6 3 48
4 9 8 63
2 5 7 ?

A 28

B 42

C 52

D 56

Answer: B

Question 47

In a certain code language, 'GROUND' is written as 'BMJPIY'. What will be the code for 'FREAK' in that code language?

A BOAYH

B AMYVF

C BNAWG

D AMZVF

Answer: D

Question 48

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

Colour : Red :: Profession : ?

A Lawyer

B Court

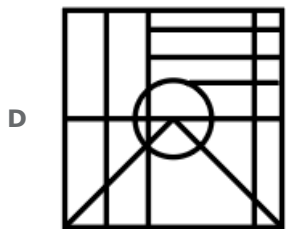
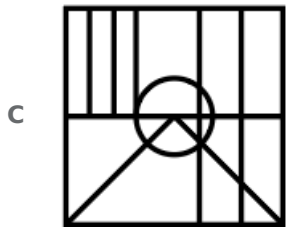
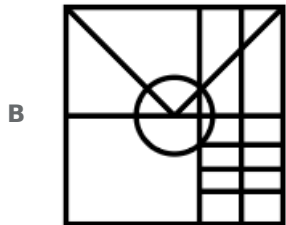
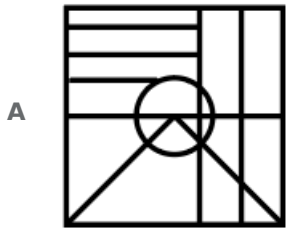
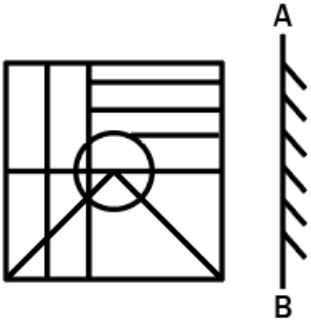
C School

D Black

Answer: A

Question 49

Select the correct mirror image of the given figure when the mirror is placed at line AB.



Answer: A

Question 50

Select the option in which the letters share the same relationship as that shared by the given pair of letters.

JT : NX

A TP : XT

B RK : VG

C GS : KU

D LD : PG

Answer: A

Quant

Instructions

For the following questions answer them individually

Question 51

A travels 15 km with a speed of 30 km/h. He travels another 25 km with a speed of 10 km/h. What is his average speed for the entire journey?

A $\frac{40}{3}$ km/h

B $\frac{80}{3}$ km/h

C 20 km/h

D 12 km/h

Answer: A

Question 52

If $P : Q = 5 : 2$, then $(2P - 3Q) : (3P - 5Q)$ is equal to:

A 5 : 6

B 2 : 7

C 4 : 5

D 3 : 4

Answer: C

Question 53

The Table given below presents the number of books on different subjects kept on separate shelves. Subjects with odd and even numbers are of Arts and Science respectively.

Subjects	Number of books
S1	26
S2	29
S3	31
S4	34
S5	36
S6	38
S7	44

What is the ratio of the number of books of S1 and the average number of books per subject?

A 13 : 17

B 18 : 13

C 14 : 17

D 14 : 13

Answer: A

Question 54

What will be the compound interest on a sum of ₹ 1200 for 2 years at the rate of 20% per annum when the interest is compounded yearly?

A ₹ 624

B ₹ 504

C ₹ 576

D ₹ 528

Answer: D

Question 55

The simple interest on a sum for a certain number of years, same as the rate percentage of the interest, is equal to the sum itself. The number of years is equal to:

A 5

B 10

C 8

D 1

Answer: B

Question 56

Pipe A can fill a tank in 6 hours. Pipe B can fill the same tank in 8 hours. Pipe A, B and C together can fill the same tank in 12 hours. Then which of the following statements is true for pipe C?

A It can fill the tank in 4 hours 40 minutes

B It can fill the tank in 4 hours 48 minutes

C It can empty the tank in 4 hours 48 minutes

D It can empty the tank in 4 hours 40 minutes

Answer: C

Question 57

By selling an article for ₹ 320, a man incurs a loss of 20%. What should be the selling price of an article to gain 20%?

A ₹ 450

B ₹ 480

C ₹ 420

D ₹ 500

Answer: B

Question 58

0.1 percent of 1.728×10^{16} spherical droplets of water, each of diameter 2 mm, coalesce to form a spherical bubble. What is the diameter (in cm) of the bubble?

A 1.2

B 1.6

C 1.8

D 2.4

Answer: D

Question 59

The ratio of monthly incomes of Pawan and Sunil is 4 : 3 and the ratio of their monthly expenditures is 3 : 2. If Pawan and Sunil save ₹ 4000 and ₹ 6000 respectively per month, then what is the sum of their monthly incomes?

A ₹ 60000

B ₹ 70000

C ₹ 50000

D ₹ 36000

Answer: B

Question 60

What is the value of

$$32 \div 4 \text{ of } 2 \times 3 + [5 \text{ of } 6 - \{7 \text{ of } 8(10 + 6 \text{ of } 6^5 \div 5 - 1) \div 80\}] - 7 \times 3 \div 2?$$

A 7.5

B 17.5

C 12.5

D 24.5

Answer: D

Question 61

What is the value of

$$72 \div 9 + 3 - 6 - (2 \times 3) + 5 \text{ of } 3 - (1 + 5 \times 2 - 2) \\ 8 \div 4 + 2 - (6 \times 8 \div 2) + (7 \times 4 - 2 \times 2) \quad ?$$

A $\frac{11}{4}$

B $\frac{5}{4}$

C 0

D $\frac{15}{4}$

Answer: B

Question 62

If the volumes of two cubes are in the ratio of 64 : 125, then what is the ratio of their total surface areas?

A 9 : 16

B 4 : 5

C 16 : 25

D 64 : 125

Answer: C

Question 63

The average of 13 numbers is 42. If a 14th number is included, then the average becomes 44. What is the 14th number?

A 70

B 62

C 66

D 68

Answer: A

Question 64

Radius of base of a right circular cone and a sphere is each equal to r. If the sphere and the cone have the same volume, then what is the height of the cone?

A 7r

B 4r

C 2r

D 3r

Answer: B

Question 65

What is a single discount equivalent to two successive discounts of 10% and 15%?

- A** 21.5%
- B** 23.5%
- C** 25%
- D** 26.5%

Answer: B

Question 66

Selling price of an article is $\frac{8}{7}$ of cost price. What is the profit percentage?

- A** $\frac{100}{9}$
- B** $\frac{100}{11}$
- C** $\frac{100}{8}$
- D** $\frac{100}{7}$

Answer: D

Question 67

What is the HCF of $2^3 \times 3^4$ and $2^5 \times 3^2$?

- A** $2^5 \times 3^3$
- B** $2^3 \times 3^4$
- C** $2^3 \times 3^2$
- D** $2^5 \times 3^4$

Answer: C

Question 68

A number is first increased by 20% and then reduced by 15%. If the final value is 2040, then what is the initial value of the number?

- A** 2100
- B** 1800
- C** 2000
- D** 1900

Answer: C

Question 69

The daily average rainfall on 5 days of a week is 30 mm. If the rainfall on 6th and 7th day are 42 mm and 25 mm respectively, then what is the average daily rainfall for the 7 days?

- A 31
- B 29.5
- C 33
- D 28.5

Answer: A

Question 70

The Table given below presents the number of books on different subjects kept on separate shelves. Subjects with odd and even numbers are of Arts and Science respectively.

Subjects	Number of books
S1	26
S2	29
S3	31
S4	34
S5	36
S6	38
S7	44

The number of books of S3 is what percent (correct to one decimal place) of the average number of Science books?

- A 92.1
- B 91.2
- C 93.1
- D 90.7

Answer: A

Question 71

The Table given below shows the number of students having obtained different marks.

Marks	Number of Students
9-11	6
11-13	5
13-15	2
15-17	2
17-19	5

What is the mean marks per student?

- A 13.5

B 12.25

C 15.5

D 14.25

Answer: A

Question 72

If $\frac{a}{b} = \frac{3}{4}$, $\frac{b}{c} = \frac{4}{5}$ and $\frac{c}{d} = \frac{5}{6}$, then the sum of the numerator and the denominator (which are coprimes) of $\left(\frac{a}{d}\right)^{10}$ is:

A 1025

B 4097

C 2049

D 513

Answer: A

Question 73

A man leaves from P at 6 am and reaches Q at 2 pm on the same day. Another man leaves Q at 8 am and reaches at 3 pm on the same day. At what time do they meet?

A 11:46 am

B 11:24 am

C 10:48 am

D 11:00 am

Answer: C

Question 74

The Table given below presents the number of books on different subjects kept on separate shelves. Subjects with odd and even numbers are of Arts and Science respectively.

Subjects	Number of books
S1	26
S2	29
S3	31
S4	34
S5	36
S6	38
S7	44

What is the ratio of the total number of books on Arts to that of Science?

A 141 : 97

B 145 : 93

C 137: 101

D 149: 89

Answer: C

Question 75

Two teachers A and B can complete an academic work in 10 days and 15 days respectively. They started the work together, but A left after 5 days and another teacher C joined, who alone can complete the work in 60 days. In how many days the work got completed?

A 7

B 5

C 6

D 2

Answer: A

General knowledge

Instructions

For the following questions answer them individually

Question 76

Which article of Indian constitution deals with discrimination against any Indian citizen on various grounds?

A Article 11

B Article 19

C Article 13

D Article 15

Answer: D

Question 77

Silver Fiber Revolution is associated to:

A Leather

B Oil seeds

C Jute

D Cotton

Answer: D

Question 78

The Indian Standard Time is calculated from the clock tower of _____.

- A Hamirpur
- B Rampur
- C Mirzapur
- D Sambalpur

Answer: C

Question 79

Who among the following was the first Indian woman to swim across the English Channel?

- A Arati Saha
- B Ujwala Rai
- C Nisha Millet
- D Karnam Malleswari

Answer: A

Question 80

The name of UTI Bank was changed to _____ in 2007.

- A HDFC Bank
- B IDBI Bank
- C Centurion Bank
- D Axis Bank

Answer: D

Question 81

Which party government announced the formation of a second backward classes commission in 1978?

- A Indian National Congress Party
- B Bharatiya Janata Party
- C Janata Party
- D United Democratic Party

Answer: C

Question 82

Who is the writer of 'Becoming'?

- A** Jhumpa Lahiri
- B** Sudha Murthy
- C** Michelle Obama
- D** Hillary Clinton

Answer: C

Question 83

Blue jay or Indian Roller is the state bird of how many Indian states?

- A** 4
- B** 5
- C** 2
- D** 3

Answer: A

Question 84

The upper part of the respiratory tract is provided with small hair-like structures called _____.

- A** bronchi
- B** cilia
- C** villi
- D** alveoli

Answer: B

Question 85

Which of the following is declared as world heritage site by UNESCO in 2018?

- A** Rani ki vav
- B** The Victorian Gothic and Art Deco Ensembles of Mumbai
- C** Historic city of Ahmedabad
- D** The Architectural Works of Le Corbusier

Answer: B

Question 86

Which of the following gas causes explosion in coal mines?

- A Carbon dioxide
- B Nitrogen
- C Butane
- D Methane

Answer: D

Question 87

What is the contribution of agriculture sector in GDP of India in 2017-18?

- A 0.154
- B 0.192
- C 0.16
- D 0.171

Answer: D

Question 88

Pin valley National park is situated in:

- A Andhra Pradesh
- B Arunachal Pradesh
- C Himachal Pradesh
- D Madhya Pradesh

Answer: C

Question 89

Bhawai is a folk dance of which state?

- A Haryana
- B Maharashtra
- C Gujarat
- D Rajasthan

Answer: D

Question 90

Who is known as the father of Blue Revolution in India?

- A Verghese Kurien
- B Sam Pitroda

- C Hiralal Chaudhuri
- D M.S. Swaminathan

Answer: C

Question 91

Dibyendu Barua is associated with which of the following sport?

- A Chess
- B Hockey
- C Snooker
- D Tennis

Answer: A

Question 92

Which of the following is NOT a nuclear power station?

- A Ramagundam
- B Rawat Bhata
- C Naraura
- D Kalpakkam

Answer: A

Question 93

When did the Quit India Movement Start?

- A 1930
- B 1942
- C 1932
- D 1940

Answer: B

Question 94

Which of the following temple is built by Rastrakutas Dynasty?

- A Kailash Temple
- B Adi Kumbeswarar
- C Brihadeshwara Temple
- D Chennakeshava Temple

Answer: A

Question 95

In which field 'Saraswati Samman' award is given?

- A** Music
- B** Literature
- C** Journalism
- D** Dance

Answer: B

Question 96

Name the Indian sprinter who won the gold medal in women's 100m in World Universiade, 30th Summer University Games held in Naples, Italy?

- A** Dutee Chand
- B** Pinki Pramanik
- C** Hima Das
- D** Santhi Soundara

Answer: A

Question 97

_____ is the study of ancient plants, like mosses, that grow in moist, humid environments.

- A** Ethnobotany
- B** Bryology
- C** Palynology
- D** Dendrology

Answer: B

Question 98

Which of the following committees recommended inclusion of fundamental duties?

- A** Tarapore Committee
- B** Radha Krishnan Committee
- C** Balwantraoi Mehta Committee
- D** Swaran Singh Committee

Answer: D

Question 99

Who became the Nawab of Bengal after Alivardi Khan?

- A** Sarfaraaz Khan
- B** Shuj-ud-din Muhammad Khan
- C** Siraj-ud-Daulah
- D** Mir Zafar

Answer: C

Question 100

Who among the following was popularly known as the 'parrot of India'?

- A** Tansen
- B** Ibn Battuta
- C** Amīr Khosrow
- D** Ziauddin Barani

Answer: C

SSC MTS 2nd August 2019 Shift-2

English

Instructions

For the following questions answer them individually

Question 1

Select the most appropriate synonym of the given word.

Misfortune

- A Benefit
- B Miracle
- C Calamity
- D Support

Answer: C

Question 2

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.
All the students/is done/better this year.

- A No error
- B is done
- C All the students
- D better this year

Answer: B

Question 3

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.

Who can prevent you from getting married now that you are within age?

- A of
- B on
- C No improvement
- D in

Answer: A

Question 4

A sentence has been given with a blank to be filled with an appropriate word. Choose the correct alternative.

The bullet struck a wall and was _____ from its course.

- A deflected
- B crashed

- C twisted
- D reflected

Answer: A

Question 5

In the following question, out of the given four alternatives, select the alternative which best expresses the meaning of the Idiom/Phrase.

Over my dead body

- A Erecting a grave stone
- B Inheriting to fortune
- C Opposing something fiercely
- D Threatening to kill oneself

Answer: C

Instructions

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Comprehension:

Sanitation refers to public health conditions (1)_____ to clean drinking water and adequate treatment and disposal (2)_____ human waste and sewage. (3)_____ human contact with faeces is part of sanitation. Sanitation system (4)_____ to protect human health by providing a clean environment (5) _____ will stop the transmission of disease.

Question 6

Select the most appropriate option for blank No. 1.

- A relate
- B relates
- C relation
- D related

Answer: D

Question 7

Select the most appropriate option for blank No. 2.

- A in
- B of
- C with
- D for

Answer: B

Question 8

Select the most appropriate option for blank No. 3.

- A Facilitating
- B Prohibiting
- C Hampering
- D Preventing

Answer: D

Question 9

Select the most appropriate option for blank No. 4.

- A paves
- B directs
- C ignores
- D aims

Answer: D

Question 10

Select the most appropriate option for blank No. 5.

- A whom
- B that
- C who
- D these

Answer: B

Instructions

For the following questions answer them individually

Question 11

Select the most appropriate option to fill in the blank.

He _____ his portrait in the main hall.

- A hung
- B hang
- C hanged
- D had hanged

Answer: A

Question 12

**Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.
Rakesh is foolish/to said/such things.**

- A** to said
- B** such things
- C** Rakesh is foolish
- D** No error

Answer: A

Question 13

In the following question, out of the given four alternatives, select the alternative which best expresses the meaning of the Idiom/Phrase.

To end in smoke

- A** To come to nothing
- B** To be the cause of a quarrel
- C** To do one's duty well
- D** To not agree to something

Answer: A

Question 14

Select the most appropriate antonym of the given word.

Comic

- A** Tragic
- B** Tickle
- C** Happy
- D** Jubilant

Answer: A

Question 15

**Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.
My aunt/sold her boutique/to a billionaire.**

- A** No error
- B** to a billionaire
- C** sold her boutique

D My aunt

Answer: A

Instructions

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.

Question 16

The doctor has reassure me that the operation was a routine one.

A is reassured me

B had reassured me

C No Improvement

D reassure me

Answer: B

Question 17

Mohan is pleased at the news yesterday.

A had being pleased

B has been pleased

C was pleased

D No Improvement

Answer: C

Instructions

Choose the word that can substitute the given sentence.

Question 18

A building where an audience sits

A Aisle

B Auditorium

C Gymnasium

D Hanger

Answer: B

Question 19

A book of names and addresses

A Journal

B Directory

C Dictionary

D Diary

Answer: B

Instructions

For the following questions answer them individually

Question 20

A sentence has been given with a blank to be filled with an appropriate word. Choose the correct alternative.

I am _____ of winning the competition.

A confident

B resistant

C reliant

D pertinent

Answer: A

Question 21

Select the most appropriate synonym of the given word.

Capable

A Conceited

B Consistent

C Complacent

D Competent

Answer: D

Question 22

Select the most appropriate antonym of the given word.

Inexpensive

A Reasonable

B Dear

C Popular

D Liberal

Answer: B

Question 23

Choose the correctly spelt word.

- A Anthusiasm
- B Enthudiesm
- C Entheusiasm
- D Enthusiasm

Answer: D

Question 24

Select the most appropriate option to fill in the blank.
My teacher is the _____ of all.

- A kinder
- B kind
- C kindly
- D kindest

Answer: D

Question 25

Choose the correctly spelt word.

- A Finencially
- B Financialy
- C Finantially
- D Financially

Answer: D

Reasoning

Instructions

For the following questions answer them individually

Question 26

In a certain code language, 'PRINT' is written as '96512' and 'FROM' is written as '8603'. What will be the code for 'PROMPT' in that code language?

- A 960392
- B 980392
- C 960398
- D 960395

Answer: A

Explanation:

In this question the type of coding is called direct coding. Here, P=9, R=6, I=5, N=1, T=2 and F=8, R=6, O=0, M=3
So, according to this coded number we can write PROMPT= 960392

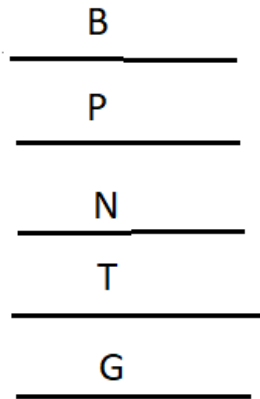
Question 27

Five books labelled B, G, N, P and T are kept one above the other (not necessarily in the same order). Only one book is kept between N and G. B is just above P. B is above N. G is not above N. Which book is at the top?

- A G
- B B
- C P
- D T

Answer: B

Explanation:



So, book B is at the topmost position.

Question 28

In a certain code language, 'TAN' is written as '33' and 'PAM' is written as '28'. What will be the code for 'BUG' in that code language?

- A 29
- B 28
- C 30
- D 32

Answer: B

Explanation:

Here, T=20, A=1, N=14

So, $(20+1+14)-2 = 33$

P=16, A=1, M=13

So, $(16+1+13)-2 = 28$

So, B=2, U=21, G=7

$(2+21+7)-2 = 28$

Question 29

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

Den : Lion :: Stable : ?

A Bird

B Car

C Horse

D Tiger

Answer: C

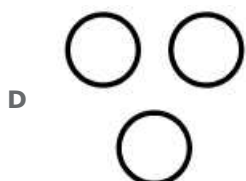
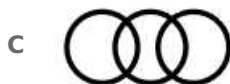
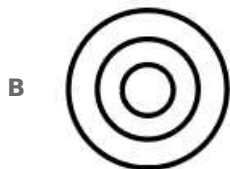
Explanation:

Den is the living place of Lion similarly, Stable is the living place of Horse.

Question 30

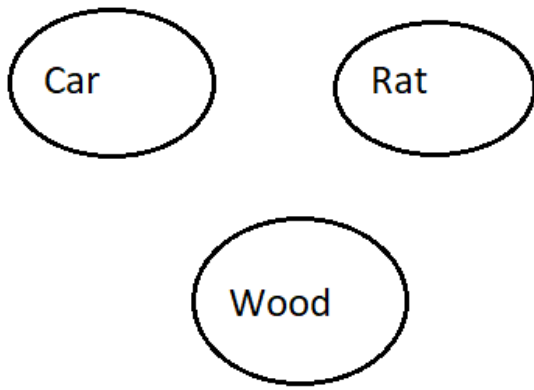
Identify the diagram that best represents the relationship between the given classes.

Car, Wood, Rat



Answer: D

Explanation:



The above mentioned things are completely different from each other so they are represented in three different Venn diagram.

Instructions

Select the number that can replace the question mark (?) in the following series.

Question 31

43, 31, 74, 105, 179, ?

- A** 294
- B** 263
- C** 279
- D** 284

Answer: D

Question 32

69, 109, 159, 219, 289, ?

- A** 369
- B** 349
- C** 359
- D** 379

Answer: A

Explanation:

69, 109, 159, 219, 289, 369
 (+40) (+50) (+60) (+70) (+80)

Instructions

For the following questions answer them individually

Question 33

If the two signs, ' \times and \div ' are interchanged, which of the following equations will be correct?

A $14 + 62 \times 13 \div 31 = 38$

B $14 + 9 \div 24 \times 3 = 86$

C $63 + 59 \div 4 \times 8 = 171$

D $11 \times 12 \div 48 + 6 = 40$

Answer: B

Explanation:

If we interchange ' \times and \div ' then-

$$14 + 9 \times 24 \div 3$$

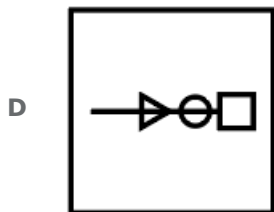
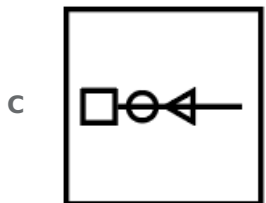
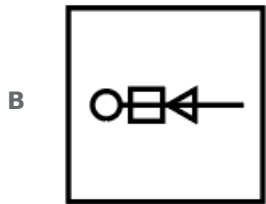
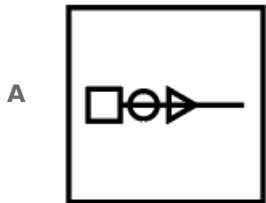
$$= 14 + 72$$

$$= 86$$

Question 34

Select the figure that will come next in the following series.





Answer: A

Explanation:

Here the given figure is moving in 45 degree anti clockwise direction. So the answer figure will be option A.

Question 35

Study the given pattern carefully and select the number that can replace the question mark (?) in it.

4	11	19
5	6	0
9	13	3
18	30	?

A 24

B 20

C 22

D 18

Answer: C

Explanation:

Here in the first column $(4+5+9)=18$

Similarly in second column $(11+6+13) =30$

and in answer column $(19+0+3)=22$

Question 36

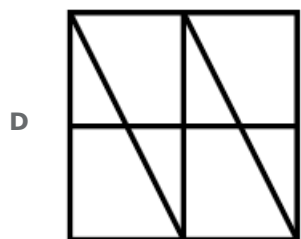
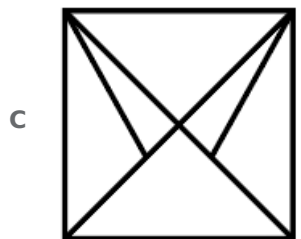
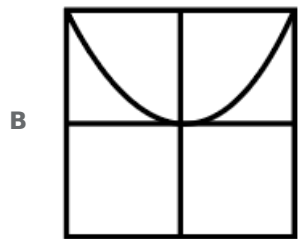
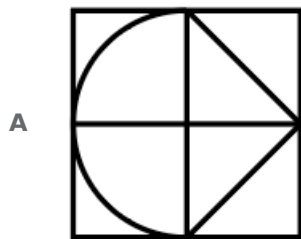
Select the letter-pair that can replace the question mark (?) in the following series.
KP, HM, EJ, BG, ?

- A XC
- B ZE
- C YC
- D YD

Answer: D

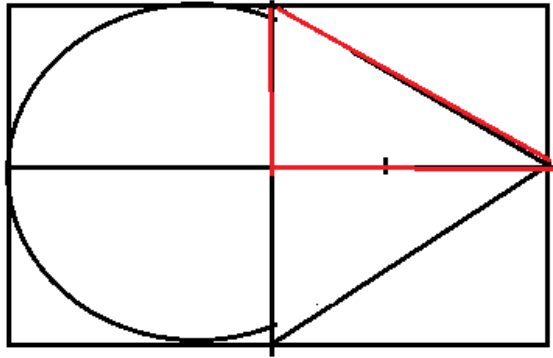
Question 37

Select the option in which the given figure is embedded. (Rotation not allowed)



Answer: A

Explanation:



The embedded portion is highlighted with red color.

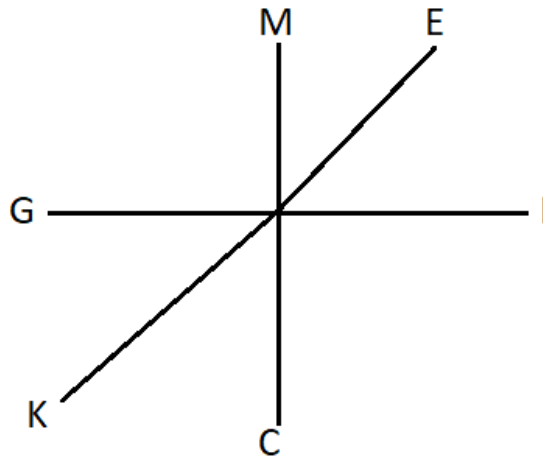
Question 38

Six friends, C, E, G, I, K and M, are sitting around a circular table facing towards the centre and at equal distance from each other (not necessarily in the same order). E is second to the right of C. K is to the immediate right of G. G and I are facing towards each other. Moving towards the left of I, how many friends are sitting between I and M?

- A 3
- B 0
- C 2
- D 1

Answer: A

Explanation:



As all of them are facing towards the center so if we count from the left of I then between I and M only three people are sitting- C,K,G.

Question 39

If digit 2 is interchanged with digit 1, then what will be the value of the following equation?

$$9 + 6 \div 4 \times 21 - 5 = ?$$

- A** 23
- B** 29
- C** 22
- D** 24

Answer: C

Explanation:

If we interchange digit 2 with 1 then-

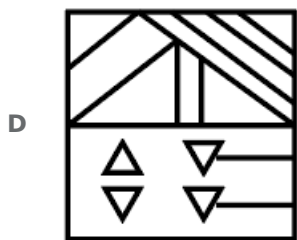
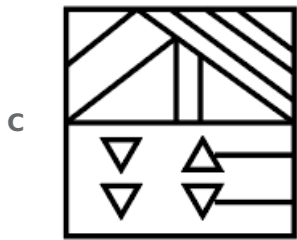
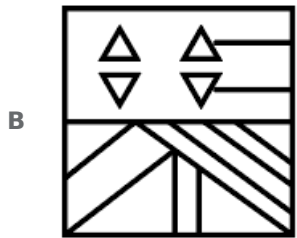
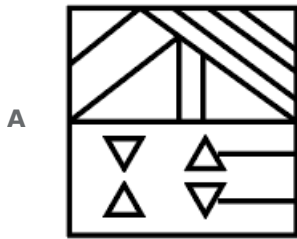
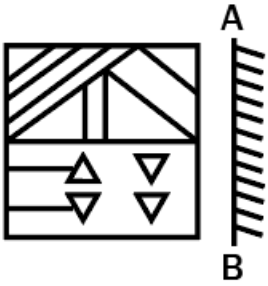
$$9 + 6 \div 4 \times 12 - 5$$

$$= 9 + 18 - 5$$

$$= 22$$

Question 40

Select the correct mirror image of the given figure when the mirror is placed at line AB.



Answer: C

Question 41

Select the option that is related to the third letter-pair in the same way as the second letter pair is related to the first letter-pair.

PB : UW :: JT : ?

A PP

B MO

C OO

D NO

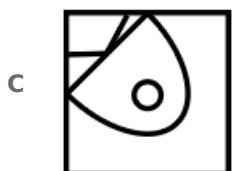
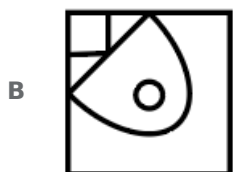
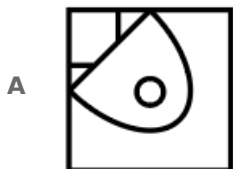
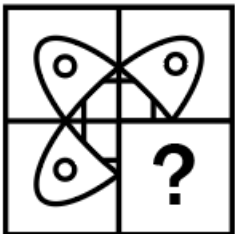
Answer: C

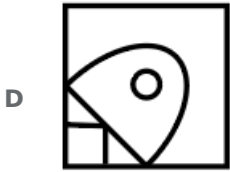
Explanation:

16	2	10	20
P	B	J	T
U	W	O	O
21	23	15	15
(+5)	(-5)	(+5)	(-5)

Question 42

Study the given pattern carefully and select the figure that can replace the question mark (?) in it.





Answer: A

Question 43

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

Statements:

I. Some K are M.

II. No T is M.

Conclusions:

I. Some T are K.

II. Some M are K.

A Only conclusion I follows.

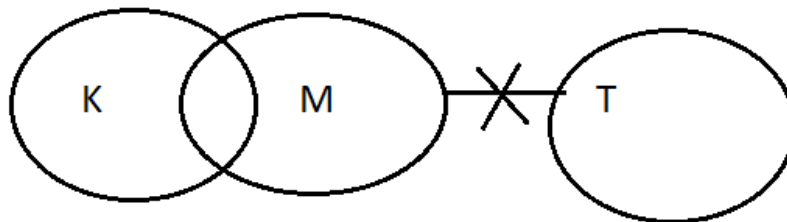
B None of the conclusions follows.

C Only conclusion II follows.

D Both conclusions I and II follow.

Answer: C

Explanation:



Here conclusion two is correct as some portion of K is M. But T is not associated with K.

Question 44

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

36 : 109 :: 25 : ?

- A 72
- B 76
- C 74
- D 78

Answer: B

Explanation:

Here, 109 is related to 36 in the following way-

$$109 = 36 \times 3 + 1$$

Similarly,

$$76 = 25 \times 3 + 1$$

Question 45

Select the word pair in which the two words are related in the same way as the two words in the following word-pair.

Circle : Figure

- A Rodent : Reptile
- B Toy : Play
- C Car : Driver
- D Sharpener : Stationery

Answer: D

Explanation:

Circle is a type of diagram or figure. Similarly Sharpener is a type of stationary item.

Question 46

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

Statements:

Some pots are lamps.

All lamps are trees.

No tree is branches.

Conclusions:

I. Some pots are branches.

II. Some trees are lamps.

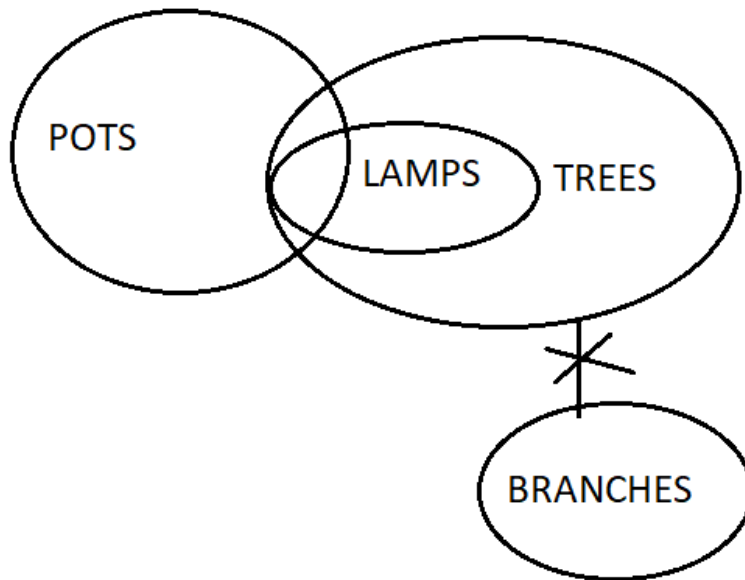
III. Some branches are lamps.

- A Conclusions I and III follow

- B** Only conclusion III follows
- C** Only conclusion II follows
- D** Conclusions I and II follow

Answer: C

Explanation:



Here only conclusion two is correct i.e; some portion of trees are lamps. But branches is not at all connected with pots or lamps so other two conclusion are not true.

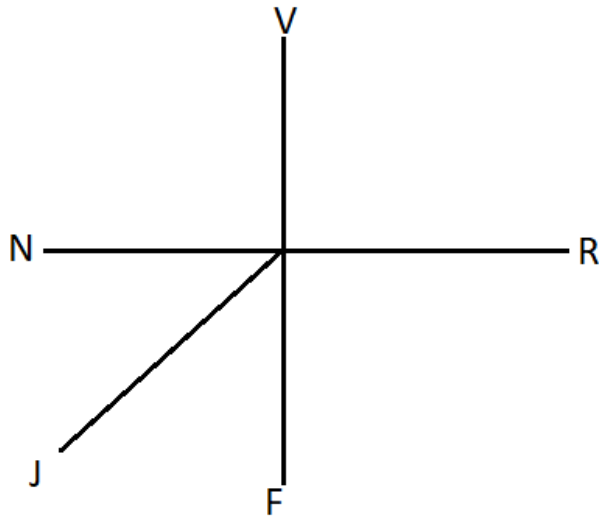
Question 47

Five persons, F, J, N, R and V, are sitting around a circular table facing towards the centre (not necessarily in the same order). J is to the immediate left of F. N is second to the left of F. V is second to the left of J. Who is sitting second to the right of J?

- A** V
- B** N
- C** F
- D** R

Answer: D

Explanation:



As all of them are facing towards center so R is second to the right of J.

Question 48

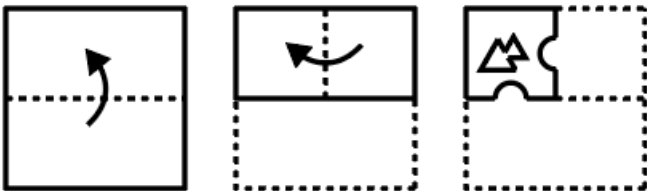
In a certain code language, 'GREAT' is written as 'ALYUN'. What will be the code for 'RAPID' in that code language?

- A LVJCX
- B RVKDY
- C SWLEZ
- D LUJCX

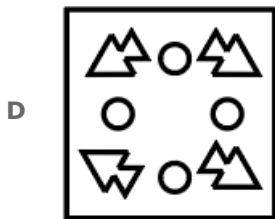
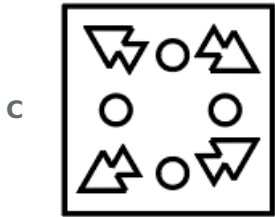
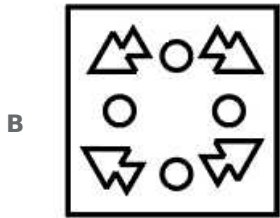
Answer: D

Question 49

A paper is folded and cut as shown below. How will it appear when unfolded?



- A



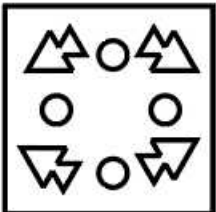
Answer: B

Explanation:

When the paper is unfolded for the first time, two semicircles will be present at the bottom and a circle will be present in the middle. Also two arrows will be present in opposite directions.

When it is unfolded for the second time (full paper), the semicircles of above step will become two circles and another circle will be present in the middle of the unfolded area. Again the two arrows will be present in opposite directions in the unfolded area.

which looks like:



so option B is the answer.

Question 50

In a certain code language, 'STEALH' is written as 'UXGENL'. What will be the code for 'ROBNRT' in that code language?

- A UTESUY
- B UTFSUY
- C TSERTX
- D TSDRTX

Answer: D

Explanation:

As per the english alphabetical order, the pattern followed is:

+2	+4	+2	+4	+2	+4
S	T	E	A	L	H
U	X	G	E	N	L

Therefore in the same way ROBNRT can be written as TSDRTX.

Quant

Instructions

For the following questions answer them individually

Question 51

If $U + V = 80$ and $U : V = 5 : 3$, then what is the value of $U - V$?

- A 15
- B 30
- C 25
- D 20

Answer: D

Explanation:

Given,

$$U + V = 80 \text{ and } U:V = 5:3$$

let U and V be $5x$ and $3x$ respectively.

Substituting U and V in $U + V = 80$,

$$5x + 3x = 80$$

$$8x = 80$$

$$x = 10$$

substituting x in $5x$ and $3x$, we get $U = 50$ and $V = 30$.

Therefore, $U - V = 50 - 30 = 20$

Question 52

Aman spends 10% of his salary on food. He spends 20% of the remaining part on fuel. If he is left with ₹4680, then what is his salary?

- A ₹5000
- B ₹6000
- C ₹5500
- D ₹6500

Answer: D

Question 53

If after two years a sum becomes ₹4000 and after four years it becomes ₹6000 at the same rate of compound interest (compounded annually), then what is the sum?

- A ₹22888.88
- B ₹2866.66
- C ₹2666.66
- D ₹22777.77

Answer: C

Question 54

What is the value of

$$7 \div 2 - [3 \text{ of } 7 \div 4 \div \{(2 \div 5) \times (25 \div 8) \div (5 \div 2)\}]?$$

- A -7
- B -8
- C -9
- D -1

Answer: A

Explanation:

$$7 \div 2 - [3 \text{ of } 7 \div 4 \div \{(2 \div 5) \times (25 \div 8) \div (5 \div 2)\}]$$

$$7 \div 2 - [3 \text{ of } 7 \div 4 \div \left\{ \frac{2}{5} \times \frac{25}{8} \times \frac{2}{5} \right\}]$$

$$\frac{7}{2} - [3 \times \frac{7}{4} \times 1]$$

$$\frac{7}{2} - \frac{21}{2}$$

$$\frac{-14}{2} = -7$$

Question 55

If $x + y + z = 400$ and $x : y : z = 1 : 1 : 2$, then what is the value of z ?

- A 100
- B 200
- C 150
- D 120

Answer: B

Explanation:

Given,

$$x + y + z = 400 \text{ and } x : y : z = 1 : 1 : 2$$

$$\text{let } x = 1p; y = 1p; z = 2p$$

Substituting these values in $x + y + z = 400$

$$1p + 1p + 2p = 400$$

$$4p = 400$$

$$p = 100$$

Therefore $z = 2p = 2 \times 100 = 200$.

Question 56

Speed of a boat in still water is 8 km/h. If the speed of stream is 2 km/h, then how much distance can the boat travel in two hours going up stream?

A 16 km

B 20 km

C 14 km

D 12 km

Answer: D

Explanation:

Given,

Speed of a boat in still water is 8 km/h and the speed of stream is 2 km/h.

Upstream speed = speed in still water - speed of stream

therefore upstream speed = $8 - 2 = 6$.

Distance the boat travels in two hours going up stream = $6 \times 2 = 12\text{km}$

Question 57

An article is sold for ₹1725 at 15% profit. If it is sold at 15% loss, then what will be the selling price?

A ₹1325

B ₹1275

C ₹1475

D ₹1025

Answer: B

Explanation:

Given,

An article is sold for ₹1725 at 15% profit,

let cost price be x .

To find the cost price, $x \times \frac{100+15}{100} = 1725$

$$x \times \frac{115}{100} = 1725$$

$$x = 1725 \times \frac{100}{115}$$

$$x = 75 \times 20$$

$$x = 1500$$

If the article was sold at 15% loss,

$$1500 \times \frac{100-15}{100}$$

$$1500 \times \frac{85}{100}$$

$$15 \times 85 = 1275$$

therefore option B is the answer.

Question 58

The perimeter of a rhombus is 20 cm. The length of one of its diagonals is 6 cm. What is the length of the other diagonal?

- A 9 cm
- B 6 cm
- C 8 cm
- D 10 cm

Answer: C

Question 59

Average of 49, 62, 37, 55 and x is 53. What is the value of x?

- A 62
- B 56
- C 76
- D 68

Answer: A

Explanation:

Given,

Average of 49, 62, 37, 55 and x is 53

$$\text{i.e., } \frac{49+62+37+55+x}{5} = 53$$

$$\frac{203+x}{5} = 53$$

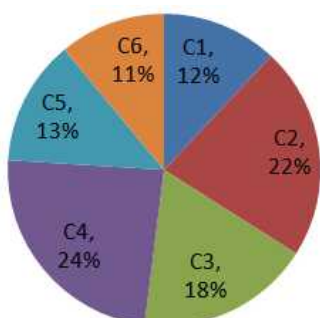
$$203 + x = 265$$

$$x = 62.$$

Instructions

The Pie Chart given below presents the number of laptops as a percentage of the total number of laptops in an office delivered by six different companies.

The central angles shown in the Pie Chart are not as per any chosen scale.



Question 60

If the total number of laptops in the office is 3800, then what is the difference in number of laptops of Companies C2 and C5?

- A 342
- B 382
- C 322
- D 362

Answer: A

Explanation:

Given,

The total number of laptops in the office is 3800.

From the pie chart it is known that, Percentage of laptops delivered by C2 is 22% and C5 is 13%.

Difference in number of laptops of Companies C2 and C5 is,

$$\left(\frac{22}{100} \times 3800\right) - \left(\frac{13}{100} \times 3800\right)$$

$$(22 \times 38) - (13 \times 38)$$

$$836 - 494$$

$$342$$

Question 61

What is the central angle in degrees (correct up to one decimal place) corresponding to the laptops delivered by Company C6?

- A 51.7°
- B 39.6°
- C 45.1°
- D 52.8°

Answer: B

Explanation:

Percentage of laptops delivered by C6 is 11%.

To find the angle,

$$\frac{11}{100} \times 360$$

$$\frac{11}{5} \times 18$$

$$39.6$$

Therefore the central angle in degree corresponding to the laptops delivered by Company C6 is 39.6°

Question 62

What is the ratio of the number of laptops of Company C1 to that of Company C3?

- A 2 : 1

B 2 : 3

C 6 : 11

D 12 : 11

Answer: B

Explanation:

Let the total number of laptops in the office be 100.

C1 has delivered 12% of total laptops while C3 has delivered 18%.

Therefore the ratio of the number of laptops of Company C1 to that of Company C3 is,

$$\frac{12}{100} \times 100 : \frac{18}{100} \times 100$$

12 : 18

2 : 3

Instructions

For the following questions answer them individually

Question 63

A person deposited ₹500 for 2 years, ₹600 for 5 years and ₹1000 for 6 years all at the same rate of simple interest. If he received the total simple interest of ₹1000, then what is the rate of interest per annum?

A 10%

B 5%

C 20%

D 15%

Answer: A

Question 64

Mahesh's salary is ₹12000 more than the Sumit's salary. If the ratio of Mahesh and Sumit salary is 7 : 4, then what is the salary of Sumit?

A ₹ 18000

B ₹ 12000

C ₹ 20000

D ₹ 16000

Answer: D

Explanation:

Given:

Mahesh's salary is ₹12000 more than the Sumit's salary.

Therefore the difference between Mahesh and Sumit's salary is 12000.

Also given that the ratio of their salary is 7:4

let Mahesh's salary be $7x$ and Sumit's salary be $4x$.

Difference of their salary can be written as $7x - 4x = 12000$

$$3x = 12000$$

$$x = 4000$$

The salary of Sumit is $4x = 4 \times 4000 = 16000$

Question 65

Marked price of an article is ₹2500. It is sold at two successive discounts of 12% and 10% respectively. What is the selling price?

A ₹2090

B ₹1760

C ₹1870

D ₹1980

Answer: D

Explanation:

Given,

Marked price of an article is ₹2500 and It is sold at two successive discounts of 12% and 10% respectively.

Two successive discounts of 12% and 10% can be written as $\frac{88}{100}$ and $\frac{90}{100}$

Therefore the selling price is,

$$2500 \times \frac{88}{100} \times \frac{90}{100}$$

$$\frac{25 \times 88 \times 90}{100}$$

1980

Hence option D is the answer.

Question 66

The median date of the year 2019 written as DD.MM is:

A 30.06

B 02.07

C 03.07

D 01.07

Answer: B

Explanation:

2019 is not a leap year, therefore the total number of days in the year 2019 is 365.

To find median day, $\frac{365}{2} = 182.5$

Therefore the 183rd day is the median day, which is 2nd July of 2019.

Question 67

The difference in selling price of article for selling at 25% profit and 37.5% loss is ₹1250. What will be selling price when it is sold at 12.5% profit?

- A ₹1800
- B ₹2400
- C ₹2250
- D ₹2500

Answer: C

Question 68

A car can travel a distance of 300 meters in 6 minutes. What is its average speed in km/h?

- A 50
- B 6
- C 3
- D 12

Answer: C

Explanation:

Given,

A car can travel a distance of 300 meters in 6 minutes.

To convert 300 meters to kilometer $\rightarrow \frac{300}{1000} = \frac{3}{10} \text{ kms}$

To convert 6 minutes to hours $\rightarrow \frac{6}{60} = \frac{1}{10}$

Average Speed = $\frac{\text{Distance}}{\text{Time}}$

$$= \frac{\frac{3}{10}}{\frac{1}{10}}$$

$$= \frac{3}{10} \times \frac{10}{1}$$

$$= 3 \text{ km/hr}$$

Question 69

The length, breadth and height of a cuboid are 15 cm, 12 cm and 11 cm respectively. The length is decreased by $6\frac{2}{3}\%$, the breadth increased by $8\frac{1}{3}\%$, whereas the height is kept unchanged. What is the change in the total area of the four side faces (considering the rectangle contained by the length and breadth as the base) of the cuboid?

- A No change
- B Increase by 22 cm^2
- C Increase by 33 cm^2
- D Decrease by 22 cm^2

Answer: A

Question 70

A = Highest Common Factor of $\frac{3}{4}$ and $\frac{9}{16}$
B = Least Common Multiple of $\frac{16}{5}$ and $\frac{4}{25}$
What is the value of A + B?

- A** $\frac{250}{81}$
- B** $\frac{260}{71}$
- C** $\frac{70}{23}$
- D** $\frac{271}{80}$

Answer: D

Question 71

A alone can do a work in 30 days. B alone can do the same work in 40 days. If they work on alternate days starting with A, then in how many days (correct up to two places of decimal) the work will be completed?

- A** 16.33
- B** 17.25
- C** 32.33
- D** 34.25

Answer: D

Question 72

Side of a square is 6 cm. What is the area of the largest circle that can be drawn inside the square? (Take $\pi = \frac{22}{7}$)

- A** $\frac{198}{7} \text{ cm}^2$
- B** $\frac{156}{7} \text{ cm}^2$
- C** $\frac{252}{7} \text{ cm}^2$
- D** $\frac{318}{7} \text{ cm}^2$

Answer: A

Question 73

A and together can do a piece of work in 20 days. B and C together can do the same of work in 25 days. C and A together can do the same work in 15 days. In how many days A alone can do the same work?

- A** $\frac{600}{23}$

B $\frac{1200}{17}$

C $\frac{600}{17}$

D $\frac{1200}{23}$

Answer: A

Question 74

What is the value of

$\frac{3}{4}$ of $\left(\frac{1}{3} \div \frac{1}{2}\right) + \left(2 - \frac{2}{5}\right) \times \frac{3}{2} + \frac{2}{3}$?

A $\frac{107}{30}$

B $\frac{103}{25}$

C $\frac{109}{17}$

D $\frac{101}{6}$

Answer: A

Explanation:

$$\frac{3}{4} \text{ of } \left(\frac{1}{3} \div \frac{1}{2}\right) + \left(2 - \frac{2}{5}\right) \times \frac{3}{2} + \frac{2}{3}$$

$$\frac{3}{4} \times \left(\frac{1}{3} \times \frac{2}{1}\right) + \left(\frac{10-2}{5}\right) \times \frac{3}{2} + \frac{2}{3}$$

$$\frac{3}{4} \times \frac{2}{3} + \frac{8}{5} \times \frac{3}{2} + \frac{2}{3}$$

$$\frac{6}{12} + \frac{24}{10} + \frac{2}{3}$$

$$\frac{30+144+40}{60}$$

$$\frac{214}{60} = \frac{107}{30}$$

Therefore option A is the answer.

Question 75

Average weight of 8 gold coins is 20 g per coin. Average weight of 12 silver coins is 35 g per coin. What is the average weight per coin for 20 coins?

A 25 g

B 29 g

C 31 g

D 21 g

Answer: B

General knowledge

Instructions

For the following questions answer them individually

Question 76

Which battle was fought between Mohammad Ghori and Prithviraj Chauhan?

- A** Battle of Buxar
- B** Battle of Khanua
- C** Battle of Plassey
- D** Battle of Tarain

Answer: D

Question 77

Who is the writer of 'The silent cry'?

- A** John Milton
- B** Michel Madhusudan Dutta
- C** Haruki Murakami
- D** Kenzaburō Ōe

Answer: D

Question 78

Who appoints the Chief Justice of India?

- A** Vice President
- B** Lok Sabha Speaker
- C** Prime Minister
- D** President

Answer: D

Question 79

As of June 2019, which nuclear power station of India produces maximum power?

- A** Kudankulam
- B** Kaiga
- C** Rawatbhata
- D** Kakrapar

Answer: A

Question 80

Gurjit Kaur is associated with which of the following sport?

- A** Wrestling
- B** Hockey
- C** Weight Lifting
- D** Swimming

Answer: B

Question 81

A book titled 'A Prime Minister to Remember- Memories of a Military Chief' was authored by former Navy Chief Admiral _____.

- A** Sushil Kumar
- B** Arun Prakash
- C** Nirmal Kumar
- D** Devendra Kumar

Answer: A

Question 82

Surajkund Lake is situated in which of the following state?

- A** Haryana
- B** Punjab
- C** Gujarat
- D** Rajasthan

Answer: A

Question 83

The President of 19th session of the Indian National Congress was _____.

- A** Surendrnath Banerjee
- B** Lal Mohan Ghosh
- C** Gopal Krishan Gokhale
- D** Sir Henry Cotton

Answer: B

Question 84

Gunmetal is an alloy of:

- A Copper, Lead, Silver
- B Copper, Iron, Nickel
- C Copper, Tin, Zinc
- D Copper, Zinc, Lead

Answer: C

Question 85

Which of the following is the Largest Cricket Stadium in the world?

- A Melbourne Cricket Ground
- B Lord's Cricket Stadium
- C Eden Gardens
- D Perth Stadium

Answer: A

Question 86

Which of the following Noble gas is used as anesthetic agent?

- A Argon
- B Helium
- C Neon
- D Xenon

Answer: D

Question 87

The Consumer Protection Bill 2018 replaces the Consumer Protection Act which was enacted in ____.

- A 1988
- B 1989
- C 1986
- D 1984

Answer: C

Question 88

'Amukta Malyada' was written by ____.

- A Brahmadeva Raya
- B Harihara Raya

C Krishnadeva Raya

D Bukka Raya

Answer: C

Question 89

Who was the writer of 'Ain-i-Akbari'?

A Khafi Khan

B Bhimsen

C Abul Fazl

D Akbar

Answer: C

Question 90

Which of the following feature was borrowed from the Union of Soviet Socialist Republics (USSR) in Indian Constitution?

A Fundamental Rights

B Concurrent list

C Preamble

D Five year Plan

Answer: D

Question 91

Which of the following is the folk dance of Goa?

A Fugdi

B Maanch

C Bihu

D Fagua

Answer: A

Question 92

Fiscal Deficit means _____.

A Total revenue collected by the government

B Total borrowing of the Government

- C** Total expenditure of government
- D** Difference between total revenue and total expenditure of the government

Answer: D

Question 93

Dugong is the key fauna of which Biosphere Reserve?

- A** Manas
- B** Great Runn of Kutch
- C** Simlipal
- D** Gulf of Mannar

Answer: D

Question 94

In which year the Communist Party was formed in India?

- A** 1922
- B** 1925
- C** 1927
- D** 1930

Answer: B

Question 95

Which of the following festival is celebrated in Odisha?

- A** Chappar mela
- B** Bali Trutiya
- C** Hornbill
- D** Bonalu

Answer: B

Question 96

How many members are there in the GST council?

- A** 23
- B** 33
- C** 25
- D** 35

Answer: B

Question 97

In which state of India is the Gol Gumbaz situated?

- A** Maharashtra
- B** Karnataka
- C** Andrapradesh
- D** Kerala

Answer: B

Question 98

Which of the following cell organelles is known as suicide bag?

- A** Endoplasmic Reticulum
- B** Lysosome
- C** Mitochondria
- D** Golgi Apparatus

Answer: B

Question 99

Which symbiotic bacterium is responsible for nitrogen fixation?

- A** Pseudomonas
- B** Rhizobium
- C** Lactobacillus
- D** Azotobacter

Answer: B

Question 100

Beriberi is caused by deficiency of:

- A** Vitamin B3
- B** Vitamin B12
- C** Vitamin B6
- D** Vitamin B1

Answer: D

SSC MTS 2nd August 2019 Shift-3

English

Instructions

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Comprehension:

Deforestation 1. _____ the permanent destruction of forests in order to 2. _____ the land available for other uses. It 3. _____ around the world, though tropical rain forests are particularly 4. _____. If current deforestation levels 5. _____, the world's rain forests may completely vanish in as little as 100 years, according to National Geographic.

Question 1

Select the most appropriate option for blank No. 1.

- A have
- B are
- C is
- D has

Answer: C

Question 2

Select the most appropriate option for blank No. 2.

- A makes
- B make
- C made
- D making

Answer: B

Question 3

Select the most appropriate option for blank No. 3 .

- A occurs
- B occurred
- C occurring
- D occur

Answer: A

Question 4

Select the most appropriate option for blank No. 4.

- A targeted

- B** robbed
- C** looted
- D** aimed

Answer: A

Question 5

Select the most appropriate option for blank No. 5.

- A** maintain
- B** continue
- C** follow
- D** proceed

Answer: B

Instructions

For the following questions answer them individually

Question 6

Select the most appropriate synonym of the given word.

Demolish

- A** Repair
- B** Taunt
- C** Reveal
- D** Dismantle

Answer: D

Question 7

Select the most appropriate word for the given group of words.

Something no longer in use

- A** Obdurate
- B** Odious
- C** Obsolete
- D** Ominous

Answer: C

Question 8

**Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.
My visiting to my family are few and far between. /No error**

- A** No error
- B** few and far between
- C** My visiting to
- D** my family are

Answer: C

Question 9

**Select the most appropriate option to fill in the blank.
It is quite tough to _____ which candidate will win the presidential elections.**

- A** pretend
- B** elect
- C** predict
- D** argue

Answer: C

Question 10

**Select the most appropriate antonym of the given word.
Fluctuate**

- A** Stabilize
- B** Mobilize
- C** Waver
- D** Stumble

Answer: A

Instructions

In the following question, out of the given four alternatives, select the alternative which best expresses the meaning of the Idiom/Phrase.

Question 11

Fit as a fiddle

- A** To play a melodious tune
- B** In a perfectly healthy condition
- C** A severe and conclusive test

D To be a perfect match

Answer: B

Question 12

Nail-biting

A Suspenseful

B Plentiful

C Peaceful

D Joyful

Answer: A

Instructions

For the following questions answer them individually

Question 13

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.

The government seems to have no interest for the welfare of the common man.

A any interest in

B no interest to

C No Improvement

D no interest in

Answer: D

Question 14

Choose the correctly spelt word.

A Dominent

B Diseese

C Deminish

D Dependent

Answer: D

Question 15

Select the most appropriate option to fill in the blank.

Though I am tall, I feel inferior _____ others.

A to

B than

C upon

D from

Answer: A

Question 16

Select the most appropriate antonym of the given word.

Disperse

A Gather

B Neglect

C Send

D Hold

Answer: A

Question 17

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.

She wanted telling you who you could approach for your problem. /No error

A No error

B who you could approach

C for your problem

D She wanted telling you

Answer: D

Question 18

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.

I don't think many people will be able to attend the meeting tomorrow.

A is able

B No improvement

C have able

D are able

Answer: B

Question 19

Select the most appropriate option to fill in the blank.

I watched him _____.

A to falling

B to fell

C fell

D fall

Answer: D

Question 20

Select the most appropriate synonym of the given word.

Chide

A Flatter

B Commend

C Approve

D Rebuke

Answer: D

Question 21

Select the most appropriate word for the given group of words.

Something which leads to death

A Fatal

B Trial

C Penal

D Vital

Answer: A

Question 22

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.

She insisted to driving her kids to school.

A to be driving

B on driving

C to drive

D No Improvement

Answer: B

Question 23

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.

Their friendship will not last long. /No error

- A will not
- B last long
- C No error
- D Their friendship

Answer: C

Question 24

Choose the correctly spelt word.

- A Bachelor
- B Existence
- C Calender
- D Antedote

Answer: B

Question 25

**Select the most appropriate option to fill in the blank.
The businessman has _____ connections in the industry.**

- A respective
- B respectable
- C receptive
- D responsible

Answer: B

Reasoning

Instructions

For the following questions answer them individually

Question 26

Select the option in which the letters share the same relationship as that shared by the given pair of letters.

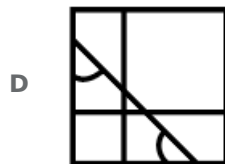
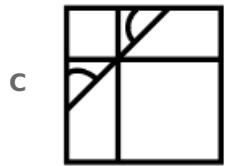
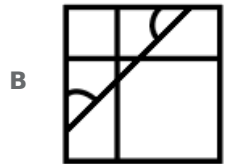
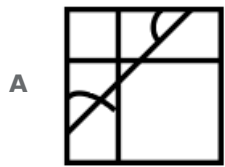
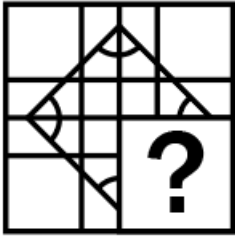
DP : FR

- A DJ : BH
- B JZ : HB
- C LQ : NU
- D MA : OC

Answer: D

Question 27

Study the given pattern carefully and select the figure that will complete the pattern given in the question figure.



Answer: B

Instructions

Select the number that can replace the question mark (?) in the following series.

Question 28

137, 148, 161, 176, 193, ?

A 214

B 212

C 224

D 232

Answer: B

Question 29

5, 10, 17, 26, 37, ?

A 48

B 50

C 47

D 49

Answer: B

Instructions

For the following questions answer them individually

Question 30

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

Circumference : Circle :: Perimeter : ?

A 3D

B Big

C Breadth

D Square

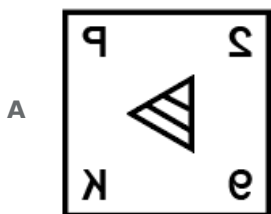
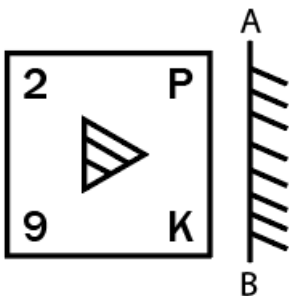
Answer: D

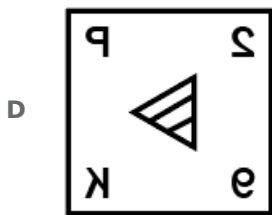
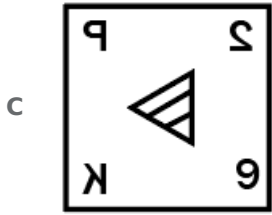
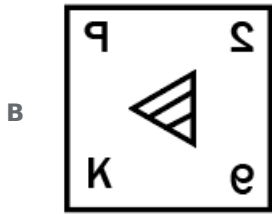
Explanation:

The periphery of circle is known as circumference similarly, for square it is perimeter.

Question 31

Select the correct mirror image of the given figure when the mirror is placed at line AB.





Answer: D

Explanation:

If the mirror is at AB then according to the law of mirror image formation i.e; nearest one will remain the nearest one after forming the mirror image so, the mirror image of the given figure will be look like option D.

Instructions

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

Question 32

Statements:

- I. All red are cars.
- II. Some yellow are red.

Conclusions:

- I. Some yellow are cars.
- II. No yellow is red.

- A Only conclusion II follows.
- B None of the conclusions follows.
- C Both conclusions I and II follow.
- D Only conclusion I follows.

Answer: D

Question 33

Statements:

- I. All wood are chairs.**
- II. All chairs are blue.**
- III. No chair is a table.**

Conclusions:

- I. Some tables are blue.**
- II. No wood is a table.**
- III. Some blue are wood.**

- A** Only conclusion II follows.
- B** Only conclusion III follows.
- C** All conclusions, I, II and III, follow
- D** Both conclusions II and III follow.

Answer: D

Instructions

For the following questions answer them individually

Question 34

Five articles, K, L, P, R and T, are kept one above the other (not necessarily in the same order). K is just above T and just below R. L is just above P and just below T. Which article is at the second position from the bottom?

- A** L
- B** T
- C** P
- D** K

Answer: A

Question 35

In a certain code language, 'TOPAS' is written as 'WRSDV'. What will be the code for 'FREIGHT' in that code language?

- A** KWJNLMY
- B** JVIMKLX
- C** IUHLJKW
- D** IVHLJKW

Answer: C

Question 36

Six computers labelled E, F, G, H, I and J are placed in a row facing towards the north (not necessarily in the same order). Two computers are placed between E and I. G is placed second to the right of J. F is placed second to the right of E. I is placed to the left of E. Which computer is placed to the right of G?

A E

B H

C F

D G

Answer: C

Question 37

Which two numbers need to be interchanged to make the following equation correct?

$$4 + 2 \div 3 \times 8 - 1 = 6$$

A 8 and 4

B 2 and 4

C 3 and 8

D 3 and 4

Answer: D

Explanation:

If we interchange 3 and 4 then-

$$3 + 2 \div 4 \times 8 - 1$$

$$= 3 + 4 - 1$$

$$= 6$$

Question 38

Select the word pair in which the two words are related in the same way as the two words in the following word-pair.

Pen : Author

A Knife : Chef

B Surgeon : Scalpel

C Carpenter : Saw

D Gun : Gardener

Answer: A

Explanation:

Pen is the main weapon of an author similarly knife is the main weapon of a chef.

Question 39

Select the letter-cluster that can replace the question mark (?) in the following series.

RAP, SCS, TEV, UGY, ?

A VJB

B WJC

C VIB

D WJB

Answer: C

Question 40

In a certain code language, 'ROAD' is written as '40' and 'HEAR' is written as '34'. What will be the code for 'POEM' in that code language?

A 50

B 47

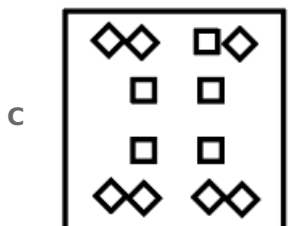
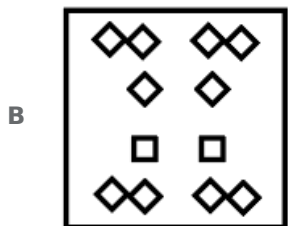
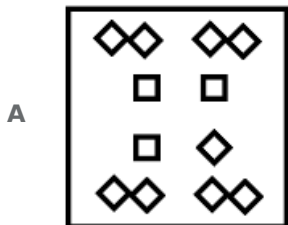
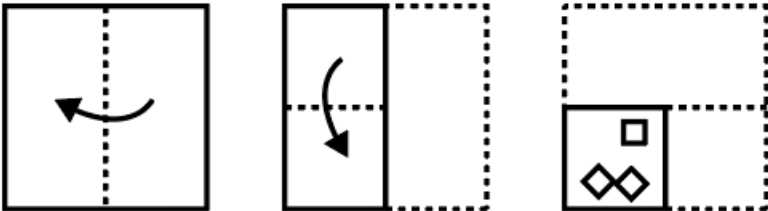
C 51

D 49

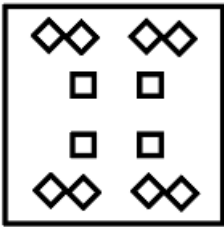
Answer: C

Question 41

A paper is folded and cut as shown below. How will it appear when unfolded?



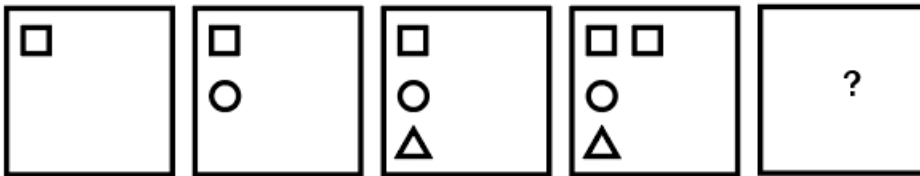
D



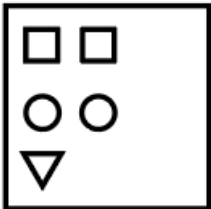
Answer: D

Question 42

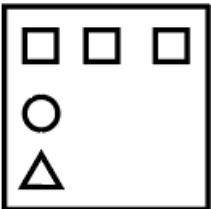
Select the figure that will come next in the following series.



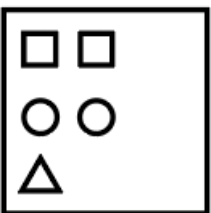
A



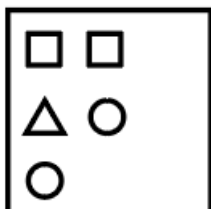
B



C



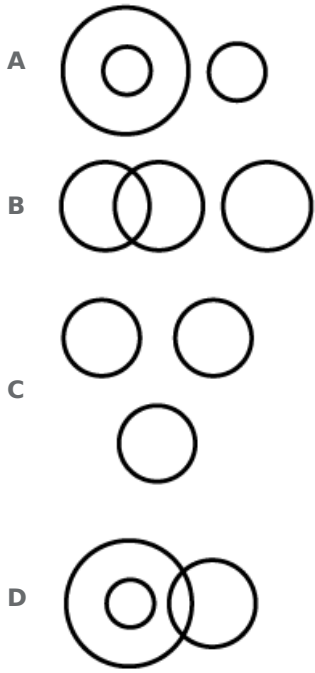
D



Answer: C

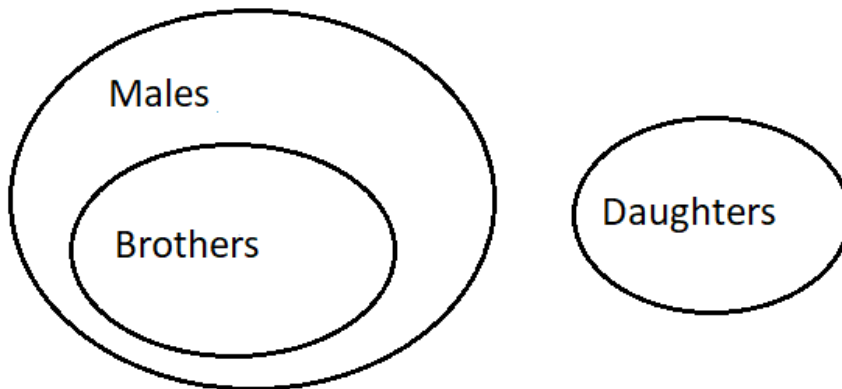
Question 43

Identify the Venn diagram that best represents the relationship between the given classes. Males, Brothers, Daughters



Answer: A

Explanation:



Question 44

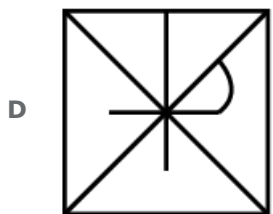
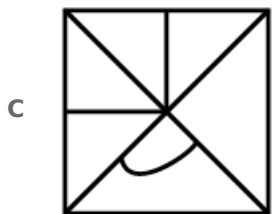
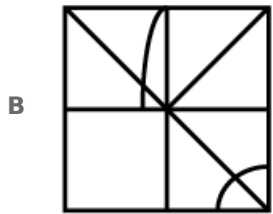
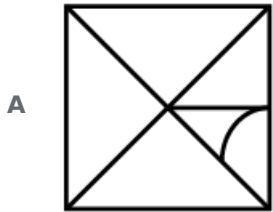
In a certain code language, 'ROCKER' is written as 'SNDJFQ'. What will be the code for 'PRIEST' in that code language?

- A SSLFVU
- B QQJDTS
- C QQJDTU
- D RRKEUT

Answer: B

Question 45

Select the option in which the given figure is embedded. (Rotation is not allowed)



Answer: D

Question 46

Five products, N, L, T, V and R, are placed in a row facing towards the east (not necessarily in the same order). T is second to the left of U. N is second to the right of L. R is to the immediate right of U. Which product is at the second position from the north end?

A T

B U

C N

D L

Answer: A

Question 47

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

32 : 61 :: 44 : ?

A 71

B 89

C 73

D 67

Answer: C

Question 48

In a certain code language, 'PAIN' is written as '161914' and 'TYRE' is written as '2025185'. What will be the code for 'LONG' in that code language?

A 1215917

B 1215197

C 1215147

D 1215417

Answer: C

Question 49

Study the given pattern carefully and select the number that can replace the question mark (?) in it.

5	7	9
6	8	2
3	4	1
48	?	20

A 94

B 84

C 88

D 98

Answer: C

Question 50

If digit 3 is interchanged with digit 1, then what will be the value of the following equation?

$$6 + 9 \div 1 \times 3 - 2 = ?$$

A 8

B 9

C 6

D 7

Answer: D

Quant

Instructions

For the following questions answer them individually

Question 51

An article is sold for ₹ 2070 at a 15% profit. If the article is sold for ₹ 1890, then what will be the gain/loss percent?

A 10% loss

B 5% loss

C 10% gain

D 5% gain

Answer: D

Explanation:

selling price = 2070

cost price = 100

$$\begin{aligned}\text{Profit of 1st article} &= \frac{15}{100} \times 100 \\ &= 15\end{aligned}$$

S.p = cost price + profit

$$= 100 + 15 = 115$$

115 = 2070(given)

$$= 18$$

c.p = 100 × 18

$$= 1800$$

If article is sold at 1890

$$= \frac{1890 - 1800}{1800} \times 100$$

Gain = 5

Question 52

What is the smallest number which when increased by 5 is divisible by 12, 18 and 30?

A 175

B 115

C 235

D 195

Answer: A

Explanation:

$$175 + 5 = 200$$

This a no. Which is divisible by all 3

115+5 = 120 is not divisible by 18 and remaining nos. Are bigger than 175

Question 53

What is the value of $1 - \frac{1}{3} + \frac{1}{4} \times \left(1 + \frac{1}{3}\right)$?

A $\frac{7}{10}$

B $\frac{9}{19}$

C $\frac{19}{10}$

D $\frac{7}{11}$

Answer: C

Explanation:

firstly solve bracket than apply bodmass rule

$$1 - \frac{1}{3} + \frac{1}{4} \times \left(1 + \frac{1}{3}\right)$$

$$\frac{3}{3} - \frac{1}{3} + \frac{1}{4} \times \frac{4}{3}$$

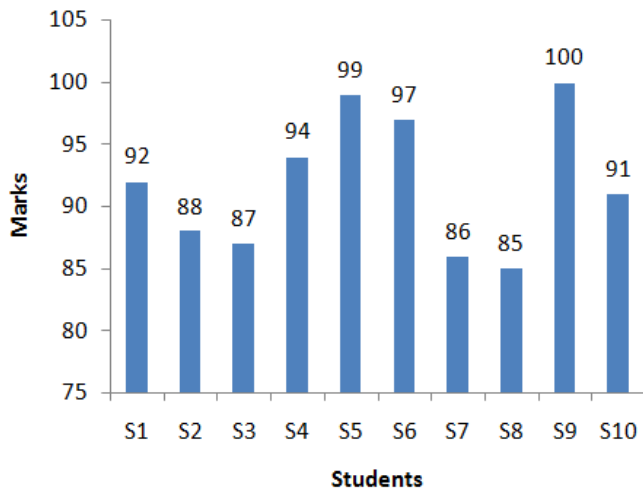
$$\frac{2}{3} + \frac{1}{3}$$

$$\frac{3}{3} + \frac{2}{3}$$

19
10

Question 54

The Bar graph given below presents the marks (out of 100) obtained by 10 students in a subject.



What is the average of the marks obtained by all the students?

- A 91.9
- B 90.9
- C 82.9
- D 89.9

Answer: A

Question 55

A is 20% more than B, which is 25% less than C. Which of the following is true about A and C?

- A $A = 0.9C$
- B $A = 1.1C$
- C $A = 0.95C$
- D $A = C$

Answer: A

Explanation:

Consider $C=100$

Given $B=25\%$ less than $C = 100 - (100 \times 25\%)$

$$= 100 - (100 \times 0.25)$$

$$= 100 - 25$$

$$= 75$$

$A=20\%$ more than B

$$= 75 + (0.2 \times 75)$$

$$= 90$$

To find C is how much percent less than A, we have $C = 100$ and $A = 90$, $B= 75$

$$\frac{A}{C} = \frac{90}{100}$$

$$\frac{A}{C} = 0.9$$

Question 56

A mixture has milk and water in the ratio (by volume) of 8 : 3. If 3 litres of water is added to it, then new ratio of milk and water becomes 2 : 1. What are the quantities of milk and water respectively in the mixture initially?

- A 24 litres and 12 litres
- B 32 litres and 12 litres
- C 40 litres and 15 litres
- D 16 litres and 6 litres

Answer: A

Explanation:

Initially mixture is 8:3

After adding 3 lit water it becomes 2:1

It means quantity of milk is remain unchanged and water is changed in mixture

2:1 $\times 4$ (to equal the milk quantity)

= 8:4

Now milk ratio is same and water is changed after adding water (8:3)-(8:4)

1- \rightarrow 3 lit

Given that intial mix. Ratio =8:3

Milk = $8 \times 3 = 24$ litre

Water = $3 \times 3 = 9$ litre

Question 57

What is the average of first seven prime numbers (correct to two decimal places)?

- A 7.14
- B 8.76
- C 7.64
- D 8.29

Answer: D

Explanation:

first 7 prime no. Is 2,3,5,7,11,13,17

$$\text{Avg} = \frac{\text{sum of no}}{\text{no. of term}}$$

$$= \frac{58}{7}$$

$$= 8.29$$

Question 58

An article is sold for ₹ 810 at a loss of 10%. What should be the selling price if the loss is 20%?

- A ₹ 750
- B ₹ 630
- C ₹ 600
- D ₹ 720

Answer: D

Explanation:

selling price = 810

cost price = 100

$$\begin{aligned}\text{Loss of 1st article} &= \frac{10}{100} 100 \\ &= 10\end{aligned}$$

$$\begin{aligned}\text{selling price} &= \text{c.p} - \text{loss} \\ &= 100 - 10 \\ &= 90\end{aligned}$$

$$90 = 810 \text{ (given)}$$

$$1 = 9$$

$$\begin{aligned}\text{c.p} &= 100 \times 9 \\ &= 900\end{aligned}$$

In 2nd article

Cost price is same = 900

$$\begin{aligned}\text{Loss of 2nd article} &= \frac{20}{100} 900 \\ &= 180\end{aligned}$$

$$\begin{aligned}\text{s.p} &= \text{c.p} - \text{loss} \\ &= 900 - 180 \\ &= \text{Rs } 720\end{aligned}$$

Question 59

The side of a cube is 15 cm. What is the base area of a cuboid whose volume is 175 cm^3 less than that of the cube and whose height is 32 cm?

- A 200 cm^2
- B 100 cm^2
- C 160 cm^2
- D 325 cm^2

Answer: B

Explanation:

vol of cube - 175 = vol of cuboid

side of cube = 15 cm

$$\begin{aligned}\text{vol of cube} &= \textit{side}^3 \\ &= 3375 \textit{ cm}^3\end{aligned}$$

so

$$\begin{aligned}\text{vol of cuboid} &= 3375 - 175 \\ &= 3200 \textit{ cm}^3\end{aligned}$$

$$\text{vol of cuboid} = l \times b \times h$$

$$3200 = l \times b \times 32$$

$$l \times b = 100 \textit{ cm}^2 = \text{base area}$$

Question 60

An article is sold for ₹ 7650 after two successive discounts of 15% and 25%. What is the marked price of the article?

A ₹ 15000

B ₹ 10000

C ₹ 14000

D ₹ 12000

Answer: D

Explanation:

formula of successive discount = $d1 + d2 - d1 \times d2 \div 100$

$$= 15$$

$$= 36.25$$

marked price = Rs 100

$$\begin{aligned}\text{discount} &= \frac{36.25}{100} \times 100 \\ &= 36.25\end{aligned}$$

$$\text{Selling price} = 100 - 36.25 = 63.75$$

Given that

$$\text{Selling price} = 7650$$

$$63.75 = 7650$$

$$1 = 7650 \div 63.75$$

$$= 120$$

Means 1 value is 120

And we assumed above that

100 is our marked price

$$1 = 120$$

$$100 = 12000$$

So marked price is Rs 12000

Question 61

The total surface area of a hollow cuboid is 340 cm^2 . If the length and the breadth of the cuboid are 10 cm and 8 cm respectively, then what is the length of the longest stick that can be fitted inside the cuboid?

- A 10 cm
- B $4\sqrt{41}$ cm
- C $3\sqrt{21}$ cm
- D 21 cm

Answer: C

Explanation:

$$\text{vol of cuboid} = 2 \times (l \times b + b \times h + h \times l)$$

$$340 = 2 \times (10 \times 8 + 8 \times h + h \times 10)$$

$$h = 5 \text{ cm}$$

length of longest rod = diagonal of cuboid

$$\begin{aligned} \text{diagonal of cuboid} &= \sqrt{l^2 + b^2 + h^2} \text{ cm} \\ &= \sqrt{10^2 + 8^2 + 5^2} \text{ cm} \\ &= 3\sqrt{21} \text{ cm} \end{aligned}$$

Question 62

A sum of money becomes 3 times in 10 years at the rate of compound interest (compounded annually). In how many years will it become 81 times?

- A 40 years
- B 50 years
- C 35 years
- D 30 years

Answer: A

Explanation:

$$\text{amount with compound interest} = P\left(1 + \frac{R}{100}\right)^n$$

$$3P = P\left(1 + \frac{R}{100}\right)^{10}$$

$$3 = \left(1 + \frac{R}{100}\right)^{10} \rightarrow (1)$$

$$\text{amount with compound interest} = P\left(1 + \frac{R}{100}\right)^n$$

$$81P = P\left(1 + \frac{R}{100}\right)^T$$

$$3^4 = \left(1 + \frac{R}{100}\right)^T \rightarrow (2)$$

Equating both the equations

$$\left(\left(1 + \frac{R}{100}\right)^{10}\right)^4 = \left(1 + \frac{R}{100}\right)^T$$

$$T = 40 \text{ years}$$

Question 63

The ratio of monthly incomes of Ram and Rahim is 4 : 3 and the ratio of their monthly expenditures is 3 : 2. If each saves ₹ 5000 per month, then what are the respective monthly incomes of Ram and Rahim?

- A ₹ 12000 and ₹ 9000
- B ₹ 10000 and ₹ 7500
- C ₹ 16000 and ₹ 12000
- D ₹ 20000 and ₹ 15000

Answer: D

Explanation:

profit = income- expenditure

income of ram and rahim is $4x$ and $3x$

and their expenditure is $3y$ and $2y$

saving by ram is

$$4x - 3y = 5000$$

saving by rahim is $3x - 2y = 5000$

by solving both equation we get

$$x = y$$

put $x = y$ in above equations we get

$$x = 5000$$

$$y = 5000$$

$$\text{so } 4x = 4 \times 5000 = \text{RS } 20000$$

$$3x = 3 \times 5000 = \text{RS } 15000$$

Question 64

A boat can travel 60 km in 3 hours while going downstream, It can travel 90 km in 5 hours while going upstream. What is the ratio of the speed of boat in still water to the speed of the stream?

- A 6 : 1
- B 4 : 1
- C 19 : 1
- D 10 : 9

Answer: C

Explanation:

$$\text{downstream} = \frac{\text{distance}}{\text{time}}$$

$$\text{downstream} = \frac{60}{3}$$

$$= 20 \text{ km/hr}$$

$$\text{downstream} = \frac{\text{distance}}{\text{time}}$$

$$\text{upstream} = \frac{\text{distance}}{\text{time}}$$

$$\text{upstream} = \frac{90}{5}$$

$$= 18 \text{ km/hr}$$

$$\text{Speed of boat} = \frac{\text{speed of upstream} + \text{speed of downstream}}{2}$$

$$= 19 \text{ km/hr}$$

$$\text{Speed of stream} = \frac{\text{speed of upstream} - \text{speed of downstream}}{2}$$

$$= 1 \text{ km/hr}$$

$$\text{Ratio} = 19 : 1$$

Question 65

The simple interest for 9 years on a principal is $\frac{3}{5}$ of the principal. What is the rate of interest per annum?

A 6%

B 4%

C $6\frac{2}{3}\%$

D $5\frac{2}{3}\%$

Answer: C

Explanation:

$$\text{S.I} = \frac{P \times R \times T}{100}$$

$$\frac{3}{5}P = \frac{P \times R \times 9}{100}$$

$$R = 6\frac{2}{3}\%$$

Question 66

A can do a piece of work alone in 8 days. B can do the same work alone in 21 days. If they work together for 3 days, then how much work is completed?

A $\frac{29}{67}$

B $\frac{31}{65}$

C $\frac{27}{64}$

D $\frac{29}{56}$

Answer: D

Explanation:

A = 8 days

B = 21 days

Total work = lcm (8,21) = 168 days

A's efficiency = $168 \div 8 = 21$ daysB's efficiency = $168 \div 21 = 8$ daysA+B = $168 \div 29$ A+B's one day work = $29 \div 168$

$$\begin{aligned} \text{A+B's 3 day work} &= 29 \div 168 \div 3 \\ &= \frac{29}{56} \end{aligned}$$
Question 67

What is the value of $\frac{3}{7} \div \frac{9}{21} + 2 - \frac{4}{3} + \frac{1}{2}$ of $\frac{12}{5} \times \frac{25}{18} \div 9$?

A 2

B $\frac{17}{3}$ C $\frac{14}{3}$

D 4

Answer: C**Explanation:**

$$\frac{3}{7} \div \frac{9}{21} + 2 - \frac{4}{3} + \frac{1}{2} \text{ of } \frac{12}{5} \times \frac{25}{18} \div 9$$

$$\frac{3}{7} \div \frac{9}{21} + 2 - \frac{4}{3} + \frac{6}{5} \times \frac{25}{18} \div 9$$

$$1 + 2 - \frac{4}{3} + \frac{6}{5} \times 2$$

$$1 + 2 - \frac{4}{3} + 3$$

$$6 - \frac{4}{3}$$

$$= \frac{14}{3}$$
Question 68

What is the average of first six natural numbers, which are multiples of 3?

A 10.5

B 11

C 12

D 9.5

Answer: A

Explanation:

First 6 natural no. Of multiple of 3 is 3,6,9,12,15,18

$$\text{Avg} = \frac{\text{sum of no}}{\text{no. of term}}$$

$$= \frac{63}{6}$$
$$= 10.5$$

Question 69

A train crosses a 600 metres long platform in 50 seconds. It crosses another 900 metres long platform in 60 seconds. What are the length and the speed of the train? (Assuming the train is going at constant speed)

A 900 metres, 96 km/h

B 900 metres, 108 km/h

C 600 metres, 108 km/h

D 700 metres, 96 km/h

Answer: B

Explanation:

$$\text{speed} = \frac{\text{length of train} + \text{length of platform}}{\text{time}}$$

In both. The case speed of train will be same so,

$$\frac{L + \text{length of platform}}{\text{time}} = \frac{L + \text{length of platform}}{\text{time}}$$

$$\frac{L + 600}{50} = \frac{L + 900}{60}$$

$$L = 900 \text{ m}$$

$$\text{Speed} = \frac{900 + 600}{50}$$

$$= 30 \text{ m/s}$$

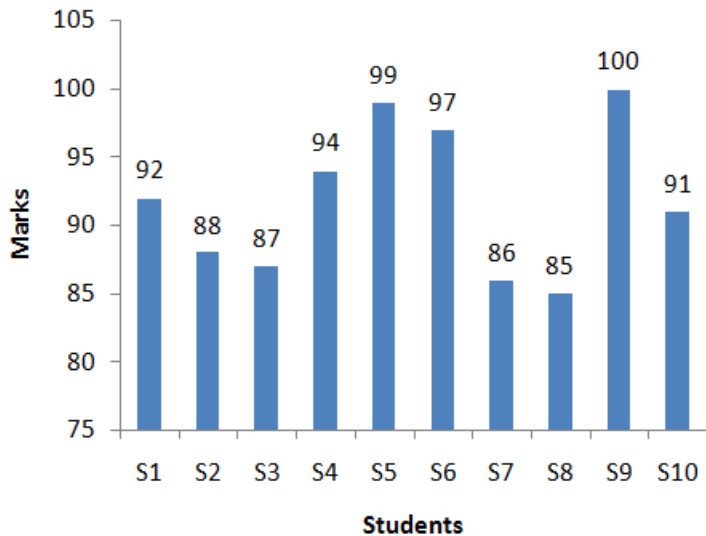
Change into km/hr

$$30 \times \frac{18}{5}$$

$$= 108 \text{ km/hr}$$

Question 70

The Bar graph given below presents the marks (out of 100) obtained by 10 students in a subject.



The average of marks obtained by S3 and S5 is what percent less than the marks obtained by S9?

- A 7%
- B 9%
- C 8%
- D 10%

Answer: A

Question 71

The height of a right circular cone is 5 cm and its base radius is 12 cm. What is the curved surface area of the cone?

- A $132\pi\text{cm}^2$
- B $143\pi\text{cm}^2$
- C $156\pi\text{cm}^2$
- D $168\pi\text{cm}^2$

Answer: C

Explanation:

$$\text{cone} = \pi \times r \times l$$

Given

$$\text{Height} = 5 \text{ cm}$$

$$\text{Radius} = 12 \text{ cm}$$

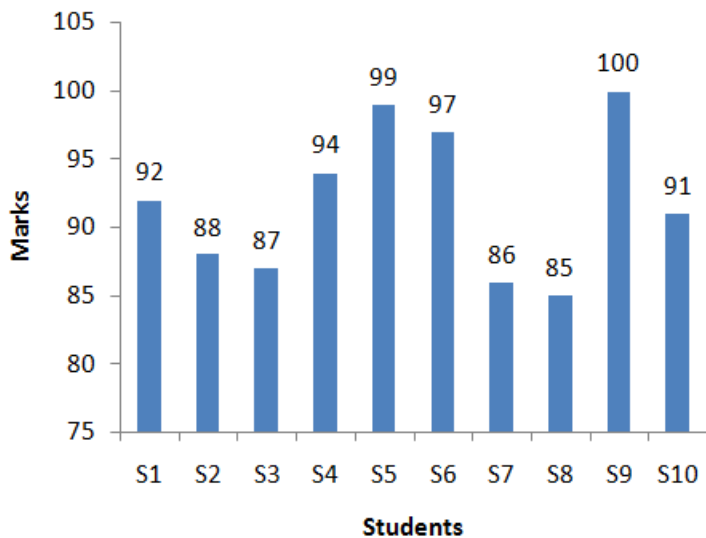
$$\text{So Slant height} = \sqrt{(5^2 + 12^2)} = 13 \text{ cm}$$

$$\text{Cone} = \pi \times 12 \times 13$$

$$156\pi\text{cm}^2$$

Question 72

The Bar graph given below presents the marks (out of 100) obtained by 10 students in a subject.



The marks obtained by S5 is how much percent more than the average marks of the students (correct to two decimal)?

- A 7.73%
- B 22.73%
- C 12.73%
- D 17.73%

Answer: A

Question 73

Pipe P can fill a tank alone in 7 hours. Pipe Q can fill the same tank alone in 13 hours. In how much time can they together fill the tank?

- A 3 hours 18 minutes
- B 3 hours 45 minutes
- C 4 hours 12 minutes
- D 4 hours 33 minutes

Answer: D

Explanation:

P = 7 hrs

Q = 13 hrs

Total work = LCM (7,13) = 91 hrs

P's efficiency = $91 \div 7 = 13$

Q's efficiency = $91 \div 13 = 7$

(P+Q)'s together takes = $Total\ work \div\ total\ efficiency$
 $= 91 \div 20$

$$\begin{aligned}\text{convert 91 hrs into minutes} &= 91 \times 60 = 5460 \\ &= 5460 \div 20 \\ &= 273 \text{ min} \\ &= 273 \div 60 \\ &= 4 \text{ hours } 33 \text{ minutes}\end{aligned}$$

Question 74

For three numbers, the ratio of the first and the second number is 2 : 3 and that of the second and the third number is 4 : 5. If the sum of the three numbers is 140, then what is the second number?

- A 60
- B 48
- C 96
- D 32

Answer: B

Explanation:

first and second ratio = 2:3

second and third ratio = 4:5

Second no. Ratio should be equal in both the case

To equal both the case multiply with 4 and 3 respectively

$$2 : 3 \times 4 = 8:12$$

$$4 : 5 \times 3 = 12:15$$

ATQ

$$\text{sum of three} = 140$$

$$8x + 12x + 15x = 140$$

$$35x = 140$$

$$x = 4$$

$$\text{Second no.} = 12 \times 4$$

$$= 48$$

Question 75

What is the median of 6, 9, 13, 8, 3, 2, 5, 7 and 11?

- A 7

B 6.5

C 8

D 6

Answer: A

Explanation:

Firstly arrange the number in ascending order 6, 9, 13, 8, 3, 2, 5, 7 and 11

2,3,5,6,7,8,9,11,13

The middle term is median = 7

General knowledge

Instructions

For the following questions answer them individually

Question 76

Who among the following tennis player has won the most Grand Slam tournament titles (as of January 2019)?

A Rafael Nadal

B Serena Williams

C Steffi Graf

D Roger Federer

Answer: B

Question 77

Book 'A brief history of time' is written by:

A John Green

B J K Rowling

C Suzame Colling

D Stephen Hawking

Answer: D

Question 78

Anna Rajam Malhotra who died in 2018 was:

A First female Indian MLA

B First female Indian Chief Secretary

- C First female Indian IAS officer
- D First female Indian IPS officer

Answer: C

Question 79

Which of the following pairs is INCORRECTLY matched?

- A Tawa - Gujarat
- B Korba - Chattisgarh
- C Nagarjunasagar - Andhra Pradesh
- D Farakka - West Bengal

Answer: A

Question 80

Reserve Bank of India (RBI) does not transact the business of which of the following State Government?

- A Bihar
- B Jammu and Kashmir
- C Telangana
- D Meghalaya

Answer: B

Question 81

Vyas Samman 2018 conferred to:

- A Mamta Kalia
- B Amitav Ghosh
- C Leeladhar Jagudi
- D K Siva Reddy

Answer: C

Question 82

Which of the following writs provides a remedy for a person who has been unlawfully held in prison?

- A Certiorari
- B Habeas Corpus
- C Mandamus
- D Prohibition

Answer: B

Question 83

Which of the following pairs is INCORRECTLY matched?

- A** Colosseum - Italy
- B** Chichen Itza - Brazil
- C** Petra - Jordan
- D** Machu Picchu - Peru

Answer: B

Question 84

The Dargah of Sheikh Khwaja Qutubuddin Bakhtiyar Kaki is located in:

- A** Ajmer
- B** Ajodhan
- C** Delhi
- D** Agra

Answer: C

Question 85

Who among the following became the country's Vice President twice?

- A** Bhairon Singh Shekhawat
- B** Mohammad Hidayatullah
- C** Sarvapalli RadhaKrishnan
- D** K R Narayanan

Answer: C

Question 86

Kishtwar National Park is located in:

- A** Jharkhand
- B** Jammu and Kashmir
- C** Himachal Pradesh
- D** Uttrakhand

Answer: B

Question 87

Who was the President of Congress during Belgaum Summit of Congress in 1924?

- A** K.L. Nehru
- B** Charu Majumdar
- C** J.L. Nehru
- D** M.K. Gandhi

Answer: D

Question 88

With reference to the steel plants in India, which of the following pairs is correct?

- A** Durgapur - Odisha
- B** Salem - Tamil Nadu
- C** Rourkela - West Bengal
- D** Bokaro - Bihar

Answer: B

Question 89

Who of the following is referred to as Dhing Express?

- A** Hima Das
- B** Milkha Singh
- C** Dutee Chand
- D** P.T. Usha

Answer: A

Question 90

Which of the following is NOT related to fundamental rights?

- A** Right to form association
- B** Right to education
- C** Right to life
- D** Right to property

Answer: D

Question 91

Gir National Park is situated in:

- A** West Bengal
- B** Gujarat
- C** Rajasthan
- D** Assam

Answer: B

Question 92

Fiscal Policy is formulated by _____ in India.

- A** NITI Ayog
- B** Finance Ministry
- C** RBI
- D** Different Banks

Answer: B

Question 93

Who among the following is NOT associated to the Mughal empire?

- A** Kamran Mirza
- B** Sher Shah Suri
- C** Shah Alam II
- D** Dara Sikoh

Answer: B

Question 94

Muga silk is associated to which of the following states of India?

- A** Assam
- B** Bihar
- C** Arunachal Pradesh
- D** Maharashtra

Answer: A

Question 95

Einstein was awarded the Nobel Prize for:

- A Theory of relativity
- B Theory of photoelectric effect
- C Theory of specific heat
- D Theory of Brownian motion

Answer: B

Question 96

Graphene is:

- A Isotope of boron
- B An alloy of iron
- C Allotrope of Carbon
- D An alloy of tin

Answer: C

Question 97

Which of the following disease is caused by virus?

- A Tetanus
- B Leprosy
- C Rubella
- D Malaria

Answer: C

Question 98

Kumbh Mela is NOT held at:

- A Allahabad
- B Ujjain
- C Puri
- D Haridwar

Answer: C

Question 99

Which of the following is richest in Vitamin C?

- A Soya Milk
- B Apple

C Amla

D Carrot

Answer: C

Question 100

In which of the following is reference of Indian Dance forms found?

A Abhang

B Natya Shashtra

C Kama sutra

D Bramha Sutra

Answer: B