## SSC CPO 3 July 2017 Morning Shift

## Reasoning Instructions For the following questions answer them individually **Question 1** In the following question, select the related word from the given alternatives. Smoke: Pollution:: Fire:? Death Sound Ash Cold Answer: C **Explanation:** Second arises because of second. Pollution comes from smoke, and ash is the by product of fire. => Ans - (C) **Question 2** In the following question, select the related word pair from the given alternatives. Players: Team::?:? A Car: Group Ship: Fleet Airplane: Flight Pen: Heap Answer: B **Explanation:** The collection of first is called second, a group of players form a team, similarly a group of sheep is called fleet. => Ans - (B) Instructions In the following question, select the related letters from the given alternatives. **Question 3** GLOR: FJLN:: TWQK:? SUNG SUMG SUGN SUGM Answer: A

**Explanation:** 

Expression = GLOR: FJLN:: TWQK:?

The pattern followed is:

G L		0	R	
(-1) (-2)		(-3)	(-4)	
F	J	L	N	

Similarly, for TWQK: SUNG

T W		Q	К	
(-1)	(-1) (-2)		(-4)	
S	S U		G	

=> Ans - (A)

Question 4

GHI: DFH::LMN:?

A IMK

**B** JLM

C ILM

D IKM

Answer: D

**Explanation:** 

Expression = GHI : DFH : : LMN : ?

The pattern followed is:

G	Н	I
(-3)	(-2)	(-1)
D	F	Н

Similarly, for LMN : IKM

L	М	N
(-3)	(-2)	(-1)
ı	К	М

=> Ans - (D)

#### Instructions

In the following question, select the related number from the given alternatives.

**Question 5** 

8:512::6:?

**A** 216

**B** 312

**C** 408

**D** 512

#### Answer: A

#### **Explanation:**

Expression = 8:512::6:?

The pattern followed is =  $n:n^3$ 

Eg :- 
$$(8)^3 = 512$$

Similarly, 
$$(6)^3 = 216$$

#### Question 6

In the following question, select the related number from the given alternatives.

122:145::226:?

- **A** 255
- **B** 256
- C 257
- **D** 259

Answer: C

#### **Explanation:**

Expression = 122:145::226:?

The pattern followed is =  $[(n)^2 + 1] : [(n+1)^2 + 1]$ 

Eg : 
$$(11)^2 + 1 = 122$$
 and  $(11+1)^2 + 1 = 144 + 1 = 145$ 

Similarly,  $(15)^2 + 1 = 226$ 

$$=> (15+1)^2+1=256+1=257$$

#### Instructions

For the following questions answer them individually

#### **Ouestion 7**

In the following question, select the odd word from the given alternatives.

- A Skin
- **B** Lungs
- C Heart
- **D** Kidneys

Answer: A

#### **Explanation:**

Lungs, heart and kidneys are internal organs of the body, while skin can be seen from outside.

#### **Question 8**

In the following question, select the odd word pair from the given alternatives.

Α	Ink: Inkpot
В	Bottle : Wine
С	Tea : Cup
D	Water: Jug
1	Answer: B
	planation: st is kept in second, ink in inkpot, tea in cup and water in jug, but wine is kept in bottle not the other way around, hence it is the odd on t.
=>	Ans - (B)
Ins	structions
In <sup>1</sup>	the following question, select the odd letters from the given alternatives.
Qu	estion 9
Α	GJM
В	PSV
С	MPR
D	KNQ
4	Answer: C
	planation: ): G (+3 letters) = J (+3 letters) = M
(B)	: P (+3 letters) = S (+3 letters) = V
(C)	: M (+3 letters) = P ( <b>+2</b> letters) = R
(D)	): K (+3 letters) = N (+3 letters) = Q
=>	Ans - (C)
Qu	estion 10
Α	MT
В	CJ
С	SZ
D	FN
1	Answer: D
	planation: ): M (+7 letters) = T

(B): C (+7 letters) = J
(C): S (+7 letters) = Z
(D): F (+8 letters) = N

=> Ans - (D)

#### Instructions

In the following question, select the odd number pair from the given alternatives.

#### **Question 11**

- **A** 11 44
- **B** 12 72
- **C** 13 52
- **D** 14 48

Answer: D

#### **Explanation:**

Second number is completely divisible by first number apart from the last pair.

- (A):  $^{44}_{11} = 4$
- (B):  $^{72}_{12} = 6$
- (C):  $^{52}_{13} = 4$
- (D):  $\overset{48}{14} = 3.42$
- => Ans (D)

#### **Question 12**

- **A** 5-30
- **B** 12 84
- **C** 11 66
- **D** 8 48

Answer: B

#### **Explanation:**

If we divide the second number by first number, the quotient will be 6 apart from the last pair.

- (A):  $^{30}_{5} = 6$
- (B):  $^{84}_{12} = 7$
- (C):  $^{66}_{11} = 6$
- (D):  ${}^{48}_{8} = 6$
- => Ans (B)

#### Instructions

Arrange the given words in the sequence in which they occur in the dictionary.

#### **Question 13**

- 1. Rangle
- 2. Regal
- 3. Royal
- 4. Room
- 5. Rested
- **A** 15432
- **B** 45312

c <sup>12543</sup>
<b>D</b> 13542
Answer: C
Explanation: As per the order of dictionary,
= Rangle -> Regal -> Rested -> Room -> Royal
<b>≡</b> 12543
=> Ans - (C)
Question 14
1. Soul 2. Strain 3. Syrup 4. Sand 5. Strained
<b>A</b> 41253
<b>B</b> 42153
<b>C</b> 54312
<b>D</b> 45312
Answer: A
Explanation: As per the order of dictionary,
= Sand -> Soul -> Strain -> Strained -> Syrup
$\equiv$ 41253
=> Ans - (A)
Instructions
A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
Question 15 GD, DI, AP, XY, ?
A UH
B IU
<b>c</b> st
<b>D</b> UJ
Answer: D
Explanation: Expression: GD, DI, AP, XY,?
The pattern followed in each letter of the terms is :
1st letter: G (-3 letters) = D (-3 letters) = A (-3 letters) = X (-3 letters) = U

2nd letter: D (+5 letters) = I (+7 letters) = P (+9 letters) = Y (+11 letters) = J Thus, missing term: UJ => Ans - (D) **Question 16** WVU, TSR, QPO, ? A NML **B** LMN C LMK D KLM Answer: A **Explanation:** Expression: WVU, TSR, QPO,? The pattern followed in each letter of the terms is: 1st letter: W (-3 letters) = T (-3 letters) = Q (-3 letters) = N 2nd letter: V (-3 letters) = S (-3 letters) = P (-3 letters) = M 3rd letter: U (-3 letters) = R (-3 letters) = O (-3 letters) = L Thus, missing term: NML => Ans - (A) Instructions For the following questions answer them individually **Question 17** In the following question, select the missing number from the given series. 1, 1, 3, 4, 5, 9, 7, 16, 9, 25, 11, ? **A** 17 36 С 49 37 Answer: B **Explanation:** Series: 1, 1, 3, 4, 5, 9, 7, 16, 9, 25, 11, ? It is a combination of 2 series at alternate positions. Numbers at odd position are consecutive odd numbers, while numbers at even position are squares of consecutive natural numbers. 1st series: 1, 3, 5, 7, 9, 11 2nd series: 1, 4, 9, 16, 25, 36 => Ans - (B)

In the following question, select the missing number from the given series.

?, 5, 15, 45, 113

- **A** 1
- **B** 2
- **C** 3
- **D** 4

Answer: C

#### **Explanation:**

If we reverse the series as: 113, 45, 15, 5,?

Then number of the form =  $(n^3 + n)$  are subtracted, where n is a natural number.

113 - 
$$(4^3 + 4)$$
 = 45

$$45 - (3^3 + 3) = 15$$

$$15 - (2^3 + 2) = 5$$

$$5 - (1^3 + 1) = 3$$

**Question 19** 

6 people are sitting in a row. A is sitting towards immediate left of B and immediate right of C. C is sitting to immediate right of F. D is immediate right of E who is to the left of F, then which two people are sitting in the center?

- A D and B
- **B** A and B
- C F and C
- **D** E and D

Answer: C

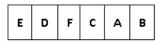
#### **Explanation:**

A is sitting towards immediate left of B and immediate right of C, => CAB

C is sitting to immediate right of F, => FCAB

D is immediate right of E who is to the left of F, => EDF

Thus, final arrangement is:



... F and C are sitting in the center.

=> Ans - (C)

#### Question 20

Sunil's position from the left in a row of boys is 20th and Deepak's position from the right is 36th. After interchanging their position, Sunil becomes 28th from the left. How many boys are there in the row?

- **A** 52
- **B** 63
- **C** 59
- **D** 48

Answer: B

#### **Explanation:**

Deepak's initial position = 36th from right and Sunil final position = 28th from left

Also, after interchanging Deepak's initial position = Sunil's final position

Thus, number of boys = (36+28)-1=63

=> Ans - (B)

#### **Question 21**

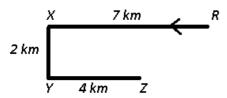
Vikram started from point R and walked straight 7 km west, then turned left and walked 2 km and again turned left and walked straight 4 km. In which direction is he from R?

- A North-East
- **B** South-West
- C South-East
- D North-West

Answer: B

#### **Explanation:**

Vikram started from point R and walked straight 7 km west to X, then turned left and walked 2 km towards south and again turned left and walked straight 4 km towards east to reach point Z.



.: He is in **south-west** direction from R.

=> Ans - (B)

#### Instructions

In the following question, select the word which cannot be formed using the letters of the given word.

#### **Question 22**

Liberation

- A Ratio
- **B** Aion
- **C** Bear
- **D** Liberal

Answer: D

#### **Explanation:**

The word LIBERATION does not contain two L's, thus the term Liberal cannot be formed.

=> Ans - (D)

#### **Question 23**

**Deliberate** 

- A Dilate
- B Tail
- **C** Betray
- **D** Elated

Answer: C

#### **Explanation:**

The word DELIBERATE does not contain any 'Y', thus the term Betray cannot be formed.

=> Ans - (C)

#### Instructions

For the following questions answer them individually

#### **Ouestion 24**

In a certain code language, "SATURN" is written as "JVQXWW" and "URANUS" is written as "OYJENY". How is "JUITER" written in that code language?

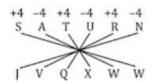
- A NIPMQN
- **B** NIPMYF
- C NQMPIN
- **D** FYLMPI

Answer: A

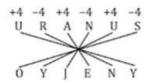
#### **Explanation:**

Expression = "SATURN" is written as "JVQXWW"

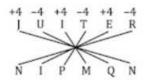
The pattern followed is:



Also, "URANUS" is written as "OYJENY"



Similarly, for JUPITER: NIPMQN



In a certain code language, "CAGES" is written as "NADYB" and "SILVER" is written as "LZRIGR". How is "WATER" written in that code language?

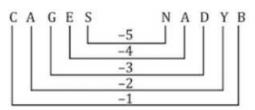
- A MAQYV
- **B** SGWEB
- C QCPVR
- **D** VYQAM

Answer: A

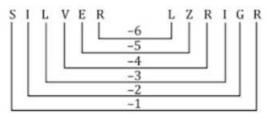
#### **Explanation:**

Expression = "CAGES" is written as "NADYB"

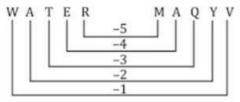
The pattern followed is:



Also, "SILVER" is written as "LZRIGR"



Similarly, for WATER: MAQYV



=> Ans - (A)

#### Question 26

If "B" denotes "multiplied by", "C" denotes "subtracted from", "A" denotes "added to" and "D" denotes "divided by", then which of the following equation is true?

- **A** 36 D 6 B 3 A 2 = 74
- **B** 24 D 12 B 3 A 12 = 18
- C 42 A 7 B 2 D 2 = 35
- **D** 56 D 14 B 2 C 4 = 12 **Answer:** B

#### **Explanation:**

(A): 36 D 6 B 3 A 2 = 74

$$\equiv 36 \div 6 \times 3 + 2 = 74$$

L.H.S. = 
$$\binom{36}{6} \times 3 + 2 = 20 \neq \text{R.H.S.}$$

$$\equiv 24 \div 12 \times 3 + 12 = 18$$

L.H.S. = 
$$\binom{24}{12} \times 3 + 12 = 18 = \text{R.H.S.}$$

If "-" denotes "divided by", "+" denotes "subtracted from", " $\times$ " denotes "added to" and " $\div$ " denotes "multiplied by", then  $4 \div 16 \times 5 + 4 - 2 = ?$ 

- **A** 2
- **B** 43
- **C** 22
- **D** 67

Answer: D

#### **Explanation:**

Expression :  $4 \div 16 \times 5 + 4 - 2 = ?$ 

$$\equiv 4 \times 16 + 5 - 4 \div 2$$

$$=(4\times16)+5-\binom{4}{2}$$

$$=64+5-2=67$$

#### **Question 28**

If 38 # 49 = 24 and 96 # 51 = 21, then 87 # 78 = ?

- **A** 26
- **B** 21
- **C** 28
- **D** 30

Answer: D

#### **Explanation:**

Given: 38 # 49 = 24 and 96 # 51 = 21

The pattern followed is that the sum of digits of both the numbers is equal to the number at the right.

Eg: 
$$(3+8)+(4+9)=24$$

and 
$$(9+6)+(5+1)=21$$

Similarly, 
$$(8+7) + (7+8) = 30$$

=> Ans - (D)

#### Question 29

If 27 \* 4 = 77 and 31 \* 9 = 239, then 21 \* 6 = ?

Δ	92

**B** 107

**C** 99

**D** 106

Answer: C

#### **Explanation:**

Given: 27 \* 4 = 77 and 31 \* 9 = 239

The pattern followed is :  $a*b = a \times (b-1) - b$ 

Eg :- 
$$27 \times (4-1) - 4 = (27 \times 3) - 4 = 77$$

and 
$$31 \times (9-1) - 9 = (31 \times 8) - 9 = 239$$

Similarly, 
$$21 \times (6-1) - 6 = (21 \times 5) - 6 = 99$$

=> Ans - (C)

#### Question 30

In the following question, select the number which can be placed at the sign of question mark (?) from the given alternatives.

12	3
4	2

8	4	
1	9	

8	6	
3	?	

Α ΄

**B** 2

**C** 4

**D** 12

Answer: B

#### **Question 31**

In the following question, select the number which can be placed at the sign of question mark (?) from the given alternatives.

1	1 4		13	
3	6	5	95	
2	4	3	?	

A 12

**B** 24

**C** 26

**D** 29

Answer: D

#### **Explanation:**

In each row, the number at the end is equal to the sum of product of the three numbers and '5'.

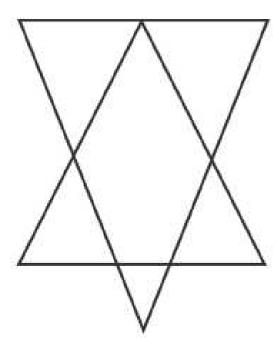
Eg : 
$$(1 imes 4 imes 2) + 5 = 13$$

and 
$$(3 \times 6 \times 5) + 5 = 95$$

Similarly, 
$$(2 imes4 imes3)+5=29$$

#### **Question 32**

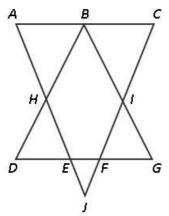
How many triangles are there in the given figure?



- **A** 6
- **B** 7
- **C** 8
- **D** 10

Answer: B

**Explanation:** 



Small triangles = ABH, BCI, DEH, FIG, EFJ

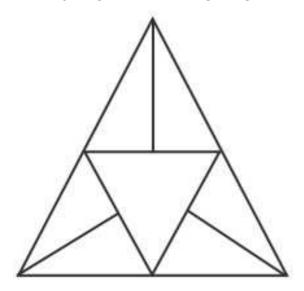
Big triangles = ACJ, BDG

Thus, total triangles = 7

=> Ans - (B)

Question 33

How many triangles are there in the given figure ?



**A** 10

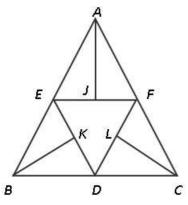
**B** 11

**C** 12

**D** 14

Answer: B

**Explanation:** 



Small triangles = AEJ, AJF, BEK, BKD, CDL, FLC, DEF

Triangles (containing 2 triangles) = AEF, BDE, CDF

Big triangles = ABC

Thus, total triangles = 11

=> Ans - (B)

#### Instructions

In each of the following question below are given some statements followed by some conclusions. Taking the given statements to be true even if they seem to be at variance from commonly known facts, read all the conclusions and then decide which of the given conclusion logically follows the given statements.

#### **Question 34**

#### Statements:

- I. No cups are plate.
- II. All plates are spoons.

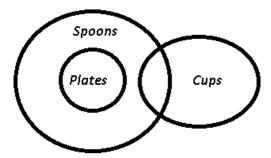
#### **Conclusions:**

- I. Some cups are not spoons.
- II. Some spoons are plates.
- III. Some plates are spoons.
- A Only conclusion (II) follows
- B Only conclusion (III) follows
- C Only conclusion (I) and (III) follow
- D Only conclusion (II) and (III) follow

Answer: D

#### **Explanation:**

The venn diagram for above statements is :



#### Conclusions:

- I. Some cups are not spoons = falsse
- II. Some spoons are plates = true
- III. Some plates are spoons = true

Thus, only conclusion (II) and (III) follow.

#### Statements:

- I. All men are hardworking.
- II. No advocate is hardworking.
- III. Some beautiful are men.

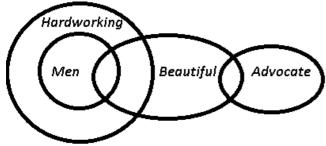
#### **Conclusions:**

- I. Some beautiful are hardworking.
- II. Some advocates are not beautiful.
- III. Some beautiful are not advocate.
- A Only conclusion (I) follow
- B Only conclusion (I) and (III) follow
- C Only conclusion (II) and (III) follow
- D Only conclusion (I) and (II) follow

Answer: A

#### **Explanation:**

The venn diagram for above statements is:



#### Conclusions:

- I. Some beautiful are hardworking = true
- II. Some advocates are not beautiful = may or may not be true
- III. Some beautiful are not advocate = may or may not be true

Thus, only conclusion (I) follows.

=> Ans - (A)

#### Instructions

For the following questions answer them individually

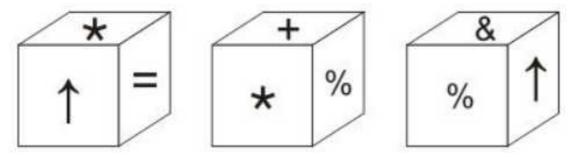
#### **Question 36**

Two positions of a cube are shown below. What will come opposite to face containing '1'?

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

Answer: B

Three positions of a cube are shown below. What will come opposite to face containing  $'\star'$ ?



- **A** ↑
- B %
- C +
- D 8.

Answer: D

#### **Explanation:**

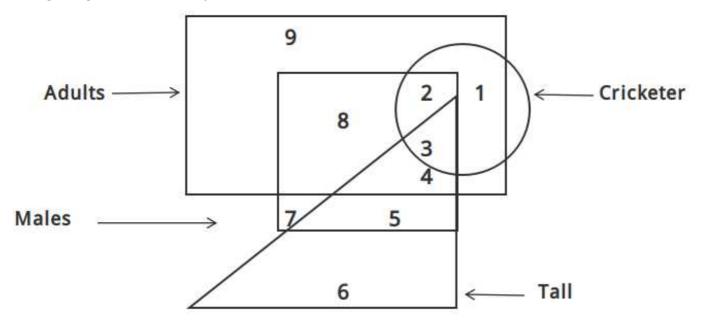
From the first two figures, we can see that the 4 faces that are adjacent to ' $\star$ ' are ' $\uparrow$  = + %', thus these can never be opposite to the star.

Thus, the only remaining symbol which will come opposite to face containing  $'\star'$  = &

=> Ans - (D)

#### **Question 38**

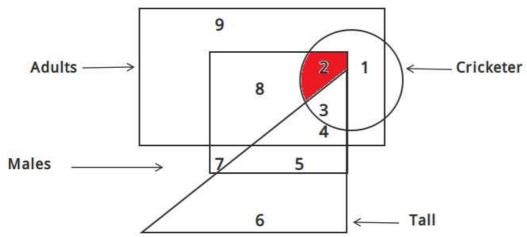
In the given figure, which number represents male cricketers who are adults but are not tall?



- **A** 3
- **B** 2
- **C** 8
- D

Answer: B

#### **Explanation:**

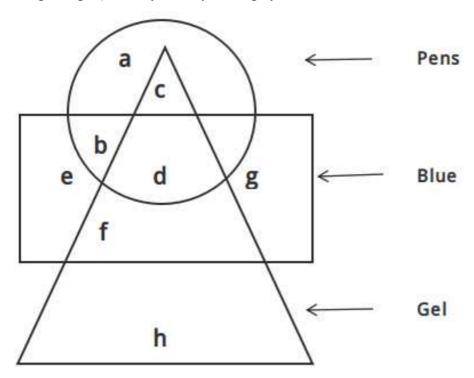


Male cricketers who are adults but are not tall = 2

=> Ans - (B)

#### **Question 39**

In the given figure, which alphabet represents gel pens which are not blue?



**A** c

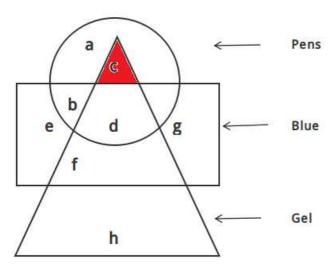
**B** d

C h

**D** b

Answer: A

**Explanation:** 

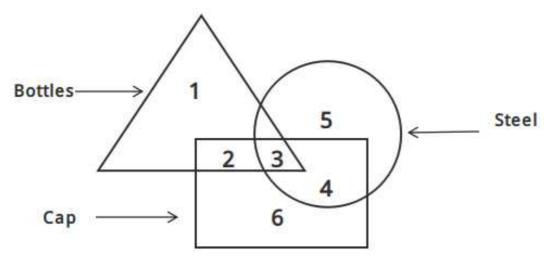


Gel pens which are not blue are represented by = **c** 

=> Ans - (A)

#### **Question 40**

In the given figure, which number represents steel bottles which are caps?



**A** 2

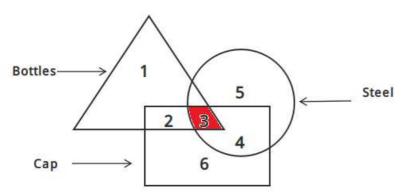
**B** 4

**C** 3

**D** 6

Answer: C

#### **Explanation:**

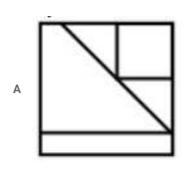


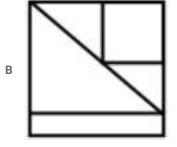
Steel bottles which are caps are represented by =  $\bf 3$ 

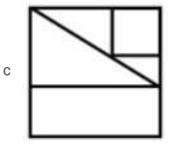
**Question 41** 

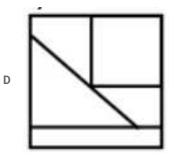
Which answer figure will complete the pattern in the question figure?











Answer: A

#### **Explanation:**

The question figure will be completed by :

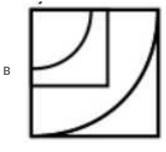


=> Ans - (A)

Which answer figure will complete the pattern in the question figure?









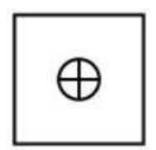


Answer: A

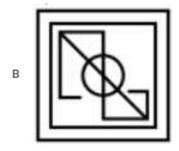
#### **Explanation:**

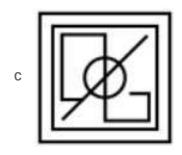
The missing figure which is at the top right side of the square must have 3 concentric circles pointing at bottom left, which is only given in the first image. Also, it must contain a square at the bottom left hand side, hence first option fits in the above description.

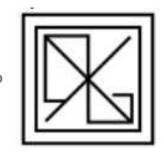
From the given answer figures, select the one in which the question figure is hidden/embedded.











Answer: A

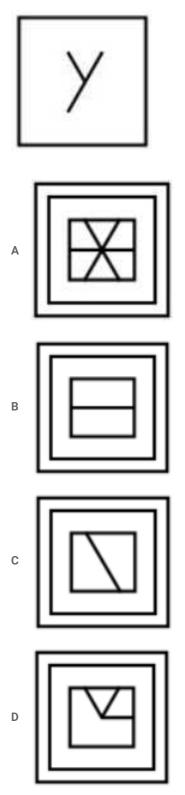
#### **Explanation:**

The above figure is represented by 'red' color and is hidden in :



=> Ans - (A)

From the given answer figures, select the one in which the question figure is hidden/embedded.



Answer: A

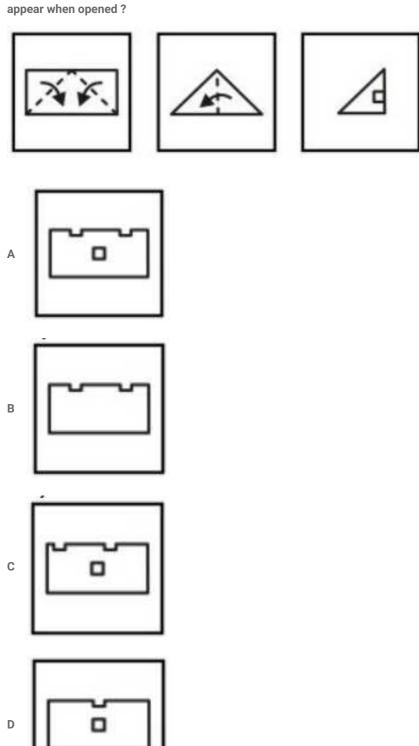
#### **Explanation:**

The above figure is represented by 'red' color and is hidden in :



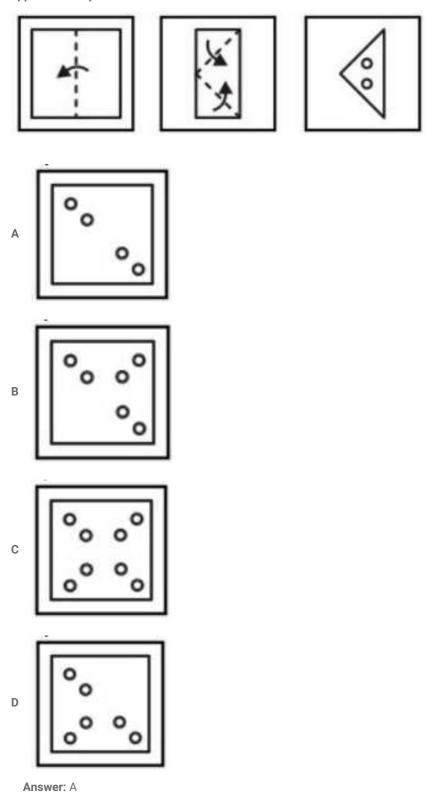
=> Ans - (A)

A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?

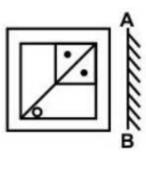


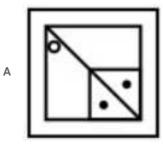
Answer: A

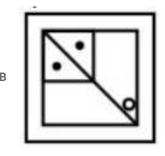
A piece of paper is folded ans punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?

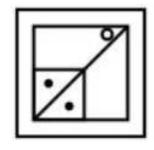


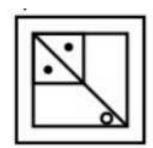
If a mirror is placed on the line AB, then which of the answer figures is the right image of the given figure?











Answer: D

#### **Explanation:**

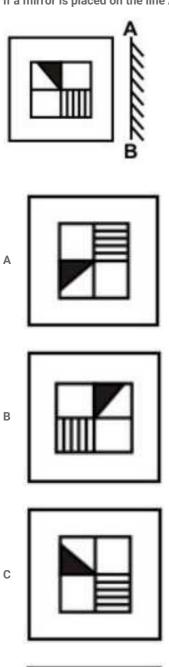
A vertical mirror is placed, so the object on the left will appear right in reverse position and vice-versa.

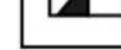
So the small square (with 2 dots) at top right corner will be reversed and will appear at top left corner, thus the first and third options will be eliminated.

Also, in the question figure, the small circle at bottom left corner is right side of the diagonal, hence it will appear at left side, hence fourth option is the right image.

=> Ans - (D)

If a mirror is placed on the line AB, then which of the answer figures is the right image of the given figure?





Answer: B

#### **Explanation:**

A vertical mirror is placed, so the object on the left will appear right in reverse position and vice-versa.

So the group of vertical lines at the bottom right side part of the inner square will appear at bottom left side but will still remain vertical, hence second option is the right image.

=> Ans - (B)

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two dasses of alphabets as shown in the given two matrices. The columns and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by column, for example, 'D' can be represented by 11, 42 etc., and 'D' can be represented by 68, 99, etc. Similarly, you have to identify the set for the word "NOSE".

		Mat	rix-		
	0	1	2	3	4
0	L	Α	N	0	D
1	0	D	L	Α	N
2	Α	N	0	D	L
3	D	L	Α	N	0
4	N	0	D	L	Α

	5	6	7	8	9
5	E	I	С	Р	S
6	Р	S	Ε	I	С
7	I	С	P	S	E
8	S	E	Ĩ	C	Р
9	С	P	S	E	I

Matrix II

- **A** 21, 10, 78, 98
- **B** 13, 22, 66, 56
- **C** 02, 34, 59, 68
- **D** 41, 42, 85, 86

Answer: A

#### **Explanation:**

(A): 21, 10, 78, 98: **NOSE** 

(B): 13, 22, 66, 56: AOSI

(C): 02, 34, 59, 68: NOSI

(D): 41, 42, 85, 86: ODSE

=> Ans - (A)

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two dasses of alphabets as shown in the given two matrices. The columns and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by column, for example, 'S' can be represented by 10, 34 etc., and 'Y' can be represented by 57, 95, etc. Similarly, you have to identify the set for the word "PARK".

Matrix-I					
	0	1	2	3	4
0	Р	Т	Α	S	Ε
1	S	E	P	Т	Α
2	Т	Α	S	E	Р
3	E	Р	T	Α	S
4	Α	S	Е	Р	Т

	T I	viali	IY-I	ı	
	5	6	7	8	9
5	K	Ι	Y	C	R
6	C	R	K	I	Υ
7	I	Υ	C	R	K
8	R	K	Ι	Υ	C
9	Υ	С	R	K	I

Matriv\_II

**A** 13, 14, 85, 55

**B** 31, 02, 78, 98

**C** 23, 22, 66, 67

**D** 00, 40, 59, 78

Answer: B

#### **Explanation:**

(A): 13, 14, 85, 55: TARK (B): 31, 02, 78, 98: **PARK** (C): 23, 22, 66, 67: ESRK

(D): 00, 40, 59, 78: PARR

=> Ans - (B)

### **General Awareness**

#### Instructions

For the following questions answer them individually

#### Question 51

What is the full form of GNI?

- A Gross National Interest
- **B** Gross National Income

D	Gross Net Income			
	Answer: B			
	estion 52			
wr	ich among the following is an apex institution in the sphere of Agriculture credit in India?			
Α	NABARD (National Bank for Agriculture and Rural Development)			
В	SIDBI (Small Industries Development Bank of India)			
С	EXIM Bank			
D	NAFED (National Agricultural Cooperative Marketing Federation of India Ltd.)			
	Answer: A			
Ou	estion 53			
	ich organisation measures Gross Domestic Product in India?			
**1	ich organisation measures oross bomestic i roduct in mala:			
Α	Reserve Bank of India			
В	NITI Aayog			
С	State Bank of India			
D	Central Statistics Office			
1	Answer: D			
Ou	estion 54			
	oo among the following suggested the 'Rolling Plan'?			
Α	John W. Miller			
В	D. T. Lakdawala			
С	Gunnar Myrdal			
D	Sukhmay Chakarborty			
1	Answer: C			
٥	action 55			
Question 55 Why was 'Tendulkar Committee' constituted?				
441	ny mas remainan committee constituteu:			
Α	To measure unemployment			
В	To measure growth rate			

c Gross Net Interest

**C** To measure poverty

D	To measure agricultural produce
	Answer: C
Qι	uestion 56
W	hich of the following is not a branch of federal form of government?
Α	Judiciary
	Executive
	Legislative
	Media
	Answer: D
٥.	uestion 57
	hat is meant by 'defection'?
A	Changing party after winning election
В	Changing party before winning election
С	Changing party after losing election
	Changing party before losing election
	Answer: B
	nestion 58  The section 58 results that 'Democracy is the government of the people, for the people and by the people'?
•••	ito uniong the following said that belillocacy is the government of the people, for the people and by the people.
Α	Aristotle
В	Plato
С	Abraham Lincoln
D	George Bush
	Answer: A
	planation:
	aham Lincoln uestion 59
	ow many types of emergencies can be proclaimed in India?
	Five
В	Six
С	Two
	Three
	Answer: D

# Question 60 **Indian Constitution contains how many Parts?** Twelve Parts Twenty-two Parts Eighteen Parts Twenty-five Parts Answer: D Question 61 Money bill can be introduced first in which house of Parliament? A Only in Lok Sabha Only in Rajya Sabha Both in Lok Sabha and Rajya Sabha Either in Lok Sabha or in Rajya Sabha Answer: A **Question 62** In how many ways Indian citizenship can be lost? One Two Three Four Answer: C **Question 63** Who of the following appoints the Prime Minister of India?

- A President of India
- **B** Chief Justice of India
- C Attorney General of India
- **D** Governor

Answer: A

Qu	estion 64
Wł	no among the following was one of the discoverers of Indus Valley Civilization?
Α	Lord Wooley
В	Daya Ram Sahni
С	V. S. Agarwal
D	A. L. Basham
1	Answer: B
Qu	estion 65
Wŀ	nen was Delhi declared as the capital of India?
Α	1901
В	1911
С	1913
D	1921
4	Answer: B
Qu	estion 66
Ma	ngical charms and spells are given in which of the following Vedas?
Α	Rig Veda
В	Sama Veda
С	Yajurveda Veda
D	Atharva Veda
1	Answer: D
Qu	estion 67
ln	Indus valley civilization, Dholavira is famous for which of the following?
Α	Rock cut architecture
В	Sea port

- **C** Water Conservation
- **D** Pottery

Answer: C

Question 68

Who was the founder of Arya Samaj?

Α	Mula Shankar		
В	Bal Gangadhar Tilak		
С	Swami Dayanand Saraswati		
D	Rabindra Nath Tagore		
A	Answer: C		
Que	estion 69		
Wh	ich of the following pair is CORRECT?		
Α	23.5° South - Tropic of Cancer		
В	23.5° South - Tropic of Capricorn		
С	23.5° North - Tropic of Capricorn		
D	66° North - Antarctic Circle		
A	Answer: B		
	estion 70		
Wh	ich of the following sea has highest salanity?		
Α	Red Sea		
В	Black Sea		
С	Dead Sea		
D	Arabian Sea		
A	Answer: C		
Que	estion 71		
Ох-	bow lakes are formed when river is		
Α	Fast moving		
В	At steep slope		
С	At very low gradient		
D	At near point of origin		
A	Answer: C		
Question 72			
In which country Cape Comorin is located?			
Α	India		

**B** Pakistan

C	South Africa				
0	South America				
	Answer: A				
	estion 73				
Which among the following is a green house gas? . Methane I. Carbon dioxide II. Nitrogen dioxide					
Δ	I and II				
3	I and III				
С	II and III				
O	All options are correct.				
	Answer: A				
Qι	estion 74				
ΝI	nich of the following cell organelle is present only in plant cell?				
Δ.	Mitochondria				
3	Cell wall				
С	Cell membrane				
0	Vacuole				
	Answer: B				
Qu	estion 75				
ΝI	nich of the following is a vestigial organ in human body?				
4	Wisdom teeth				
3	Spleen				
С	Thyroid				
O	Gall bladder				
	Answer: A				
٦.	postion 76				

Which of the following enzyme is essential for clotting of blood?

**A** Amylase

В	Thrombin	
С	Pepsin	
D	Renin	
A	Answer: B	
Qu	estion 77	
Wh	nich of the following is a genetic disease?	
Α	Down syndrome	
В	Elephantisis	
С	Asthama	
D	Night blindness	
A	Answer: A	
Qu	estion 78	
On	ion is an example of bulb, which is a modified	
Α	Stem	
В	Root	
С	Leaf	
D	Flower	
A	Answer: A	
Qu	estion 79	
Wh	nich of the following gives colour to human skin?	
Α	Adenosine	
В	Thymine	
С	Melanin	
D	Guanine	
A	Answer: C	
Question 80		
A flying jet possesses		
	Potential energy	
В	Kinetic energy	
С	Wind energy	

Both kinetic and potential energy
Answer: D
estion 81
ection of heat flow depends on
Density
Energy
Mass
Temperature
Answer: D
estion 82
ich of the following phenomena is involved in Kaleidoscope?
Refraction
Reflection
Total Internal reflection
Diffraction
Answer: B
estion 83
a magnifying glass lens is used.
Convex
Concave
Plano concave
Plano convex
Answer: A
estion 84
nich of the following is also termed as main memory of computer?
DAM.
RAM
ROM
Hard disk Compact disk

BIT is also known as \_\_\_\_.

- A Binary language
- **B** Binary digit
- C Binary Number
- **D** Gigabyte

Answer: B

# **Question 86**

Match the following.

	Nature		Substance
1	Acidic	а	Distil water
2	Basic	b	Carbonated drink
3	Neutral	С	Soap

- **A** 1 a, 2 c, 3 b
- **B** 1 b, 2 c, 3 a
- **C** 1 a, 2 b, 3 c
- **D** 1 c, 2 a, 3 b

Answer: B

# **Question 87**

Which of the following is radioactive in nature?

- A Helium
- **B** Sodium
- **C** Thorium
- **D** Platinum

Answer: C

# **Question 88** Which of the following is used as fuel rods in Atomic reactor? Sodium Uranium Graphite Boron Answer: B **Question 89** Bleaching action of Chlorine is due to which reaction? Oxidation Hydrolysis Redox Decomposition Answer: A **Question 90** Which of the following is a major component of water pollution in Bengal Basin? Chromium Arsenic Calcium Potassium Answer: B **Question 91** Identify correct type of food chain: Dead animal ---> maggots ---> frog ---> snake Decomposer food chain Detritus food chain Grazing food chain

Answer: B

Parasitic food chain

**Question 92** 

In which of the following ecosystem pyramid of biomass is upright?

А	Pond ecosystem	
В	Grassland ecosystem	
С	Fresh water ecosystem	
D	Forest ecosystem	
1	Answer: B	
Qu	estion 93	
Mi	nistry of Health and family welfare has launched the 'Test and Treat Policy' for patients.	
Α	Polio	
В	HIV	
С	Malaria	
D	Cancer	
1	Answer: B	
Qu	estion 94	
Ka	rl Landsteiner is known for the discovery of which one of the following?	
Α	Cresco graph	
В	Radioactivity	
С	Blood group	
D	X-rays	
1	Answer: C	
Qu	estion 95	
Na	tional sport of Malaysia is	
Α	Badminton	
В	Hockey	
С	Table Tennis	
D	Chess	
4	Answer: A	
Question 96		
Lotus Temple is known for which religion?		
Α	Judaism	

**B** Buddhism

•		
D	Taoism	
1	Answer: C	
Qu	estion 97	
Wł	no is the recipient of Padma Shri for the year 2016 in the field of sports - Cricket along with Virat Kohli?	
Α	Polly Umrigar	
В	Amit Bhandari	
С	Shekhar Naik	
D	Bishan Singh Bedi	
1	Answer: C	
Qu	estion 98	
Wŀ	no has written the book named 'The People's President: Dr. A.P.J. Abdul Kalam'?	
Α	S. M. Khan	
В	Sourabh Duggal	
С	Tarun Vijay	
D	Shri Vijay Kumar	
1	Answer: A	
Qu	estion 99	
Wŀ	nich country has opened its consulate in Chennai on 28 April 2017?	
Α	Kazakhstan	
В	Uzbekistan	
С	Iran	
D	Israel	
4	Answer: A	
Question 100		
Katchatheevu Island was ceded by India to which country in 1974?		
Α	Sri Lanka	
В	Maldives	

Bahai

**C** Indonesia

Answer: A

# Quant

#### Instructions

For the following questions answer them individually

# **Question 101**

If  $\stackrel{1}{N}=\stackrel{(\sqrt{6}+\sqrt{5})}{\sqrt{6}-\sqrt{5}}$  , then what is the value of N ?

**A** 
$$6 - \sqrt{30}$$

**B** 
$$6 + \sqrt{30}$$

**c** 
$$11 - 2\sqrt{30}$$

**D** 
$$11 + 2\sqrt{5}$$

Answer: C

# **Explanation:**

Given : 
$$N = \sqrt{6} + \sqrt{5}$$

=> 
$$N=\sqrt[\sqrt{6}-\sqrt{5}]{6+\sqrt{5}}$$

Rationalizing the denominator, we get :

$$\Rightarrow N = \sqrt[\sqrt{6}-\sqrt{5}]{6+\sqrt{5}} \times \sqrt[\sqrt{6}-\sqrt{5}]{6-\sqrt{5}}$$

$$\Rightarrow N = \frac{(\sqrt{6} - \sqrt{5})^2}{(\sqrt{6} + \sqrt{5})(\sqrt{6} - \sqrt{5})}$$

$$=>N= \begin{array}{c} 6+5-2(\sqrt{6})(\sqrt{5}) \\ 6-5 \end{array}$$

$$=> N = 11 - 2\sqrt{30}$$

# Question 102

What is the value of positive square root of  $\,69+28\sqrt{5}$  ?

**A** 
$$7 + 2\sqrt{5}$$

B 
$$7 - 2\sqrt{5}$$

$$\mathbf{C} \quad 2 + 7\sqrt{5}$$

D 
$$2-7\sqrt{5}$$

Answer: A

# **Explanation:**

Let 
$$x = 69 + 28\sqrt{5}$$

$$\Rightarrow x = 69 + 2(2)(7)(\sqrt{5})$$

$$\Rightarrow x = (49) + (20) + 2(7)(2\sqrt{5})$$

$$\Rightarrow x = (7)^2 + (2\sqrt{5})^2 + 2(7)(2\sqrt{5})$$

$$\Rightarrow x = (7 + 2\sqrt{5})^2$$

=> Positive square root of  $\,x=7+2\sqrt{5}\,$ 

#### Question 103

 $3^{11} + 3^{12} + 3^{13} + 3^{14}$  is divisible by \_\_\_\_\_.

- **A** 7
- **B** 8
- **C** 11
- **D** 14

Answer: B

# **Explanation:**

Expression :  $3^{11} + 3^{12} + 3^{13} + 3^{14}$ 

$$=3^{11}(1+3+3^2+3^3)$$

$$=3^{11}\times(1+3+9+27)$$

$$=3^{11} \times (40)$$

 $\therefore 40$  is divisible by 8, hence the above expression is also divisible by 8

=> Ans - (B)

# **Question 104**

A boy added all natural numbers from 1 to 12, however he added one number twice due to which the sum becomes 80. What is the number which he added twice?

- **A** 3
- **B** 2
- C
- **D** 8

Answer: B

# **Explanation:**

Sum of first 
$$'n'$$
 natural numbers =  $\binom{n(n+1)}{2}$ 

=> Sum of first 12 natural numbers = 
$$\frac{12(12+1)}{2} = 78$$

Thus, number that was added twice = 80-78=2

# **Question 105**

What smallest value must be added to 508, so that the resultant is a perfect square?

- Δ /
- **B** 9
- **C** 18
- **D** 21

Answer: D

# **Explanation:**

We know that 484 < 508 < 529

$$\Rightarrow (22)^2 < 508 < (23)^2$$

Thus, smallest number to be added = 529 - 508 = 21

=> Ans - (D)

#### **Question 106**

Raman is 25% more efficient than Aman. If Aman can complete a piece of work in 25 days, then Raman can complete the same work in how many days?

- **A** 12
- **B** 15
- **C** 16
- **D** 20

Answer: D

#### **Explanation:**

Let Aman's efficiency = 1 unit/day

=> Total work to be done =  $1 \times 25 = 25$  units

Raman is 25% more efficient than Aman, => Raman's efficiency =  $1 imes 125 \atop 100 = 1.25$  units/day

. Time taken by Raman working alone =  $^{25}_{1.25} = 20 \ \mathrm{days}$ 

=> Ans - (D)

#### **Question 107**

A and B together can complete a work in 30 day. They started together but after 6 days A left the work and the work is completed by B after 36 more days. A alone can complete the entire work in how many days?

- **A** 45
- **B** 90
- **C** 60
- **D** 120

Answer: B

# **Explanation:**

Let total work to be done = L.C.M. (30,36) = 180 units

=> (A+B)'s 1 day's work = 
$$\frac{180}{30}$$
 = 6 units/day

Let B's efficiency = b units/day

According to ques, =>  $(6 \times 6) + (36 \times b) = 180$ 

$$\Rightarrow 36b = 180 - 36 = 144$$

$$\Rightarrow b = \frac{144}{36} = 4$$

Thus, A's efficiency = 6-4=2 units/day

 $\therefore$  Time taken by A working alone =  $\begin{bmatrix} 180 \\ 2 \end{bmatrix} = 90$  days

=> Ans - (B)

#### **Question 108**

The marked price of an article is 40% more than its cost price. If 10% discount is given, then what is the profit percentage?

- **A** 10
- **B** 20
- **C** 26
- **D** 32

Answer: C

# **Explanation:**

Let cost price of article = Rs. 100

=> Marked price after 40% markup =  $100 + \left( \begin{smallmatrix} 400\\100 \end{smallmatrix} imes 100 \right)$ 

$$= 100 + 40 = Rs. 140$$

Discount % = 10%

=> Selling price = 
$$140 - \begin{pmatrix} 100 \\ 100 \\ \times 140 \end{pmatrix}$$

$$= 140 - 14 = Rs. 126$$

.: Profit % = 
$$\frac{(126-100)}{100} \times 100 = 26\%$$

=> Ans - (C)

#### **Question 109**

What will be the net discount (in percent) after giving three successive discounts of 10%, 20% and 30%?

- **A** 50.4
- **B** 49.6
- C 45.3
- **D** 48.4

Answer: B

#### **Explanation:**

Let marked price = Rs. 100

Selling price after first discount of 10% =  $100 - (\frac{10}{100} \times 100)$ 

$$= 100 - 10 = Rs. 90$$

Similarly, selling price after second discount of 20% =  $~90-\left(\frac{20}{100}\times90\right)$ 

$$=90-18=Rs.72$$

And selling price after third discount of 30% =  $72-\left( \begin{smallmatrix} 30\\100 \end{smallmatrix} imes 72 \right)$ 

$$=72-21.6=Rs.\,50.4$$

$$\therefore$$
 Net discount =  ${}^{(100-50.4)}_{100} \times 100 = 49.6\%$ 

The ratio of two numbers is 3:5. If both numbers are increased by 8, the ratio becomes 13:19. What is the sum of the two numbers?

- **A** 32
- **B** 48
- **C** 40
- **D** 72

Answer: B

# **Explanation:**

Let the numbers be 3x and 5x

According to ques,

$$3x+8 = 13 \\ 5x+8 = 19$$

$$\Rightarrow 57x + 152 = 65x + 104$$

$$\Rightarrow 65x - 57x = 152 - 104$$

$$\Rightarrow x = {}^{48}_{8} = 6$$

$$\therefore$$
 Sum of numbers =  $3x+5x=8 imes 6=48$ 

#### **Question 111**

If 3A = 5B, then what is the value of (A + B)/B?

- **A** 8/3
- **B** 8/5
- **C** 5/8
- **D** 5/3

Answer: A

# **Explanation:**

Given : 
$$3A = 5B$$

$$=> B = 3$$

Let 
$$A=5$$
 and  $B=3$ 

To find : 
$$\stackrel{(A+B)}{B}$$

$$= {5+3 \choose 3} = {8 \choose 3}$$

# Question 112

What is the average of first 29 even numbers?

- **A** 30
- **B** 31
- **C** 32
- **D** 33

Answer: A

# **Explanation:**

Sum of first n even numbers = n(n+1)

- => Sum of first 29 even numbers = 29(29+1)=29 imes 30
- => Required average =  $^{29\times30}_{29}=30$
- => Ans (A)

#### **Question 113**

The average of 5 consecutive odd numbers is 27. What is the product of the first and the last number?

- **A** 621
- **B** 667
- **C** 713
- **D** 725

Answer: C

# **Explanation:**

Average of 5 consecutive odd numbers = 27

=> Middle number = 27

Thus, the consecutive odd numbers are = 23,25,27,29,31

- => Product of first and last numbers =  $23 \times 31 = 713$
- => Ans (C)

# Question 114

A man bought 9 pens for a rupee. How many pens should he sell for a rupee to gain 50%?

- **A** 3
- **B** 6
- **C** 7
- **D** 8

Answer: B

# **Explanation:**

Cost price of 1 pen = Rs.  $\frac{1}{9}$ 

Let he sells x pen, => Selling price of 1 pen = Rs.  $\begin{bmatrix} 1 \\ x \end{bmatrix}$ 

=> Profit % = 
$$\frac{(\textit{S.P.-C.P.})}{\textit{C.P.}} \times 100 = 50\%$$

$$\Rightarrow \left[ \left( \begin{smallmatrix} 1 \\ x - \begin{smallmatrix} 1 \\ 9 \end{smallmatrix} \right) \div \left( \begin{smallmatrix} 1 \\ 9 \end{smallmatrix} \right) \right] \times 100 = 50$$

$$=> x^{9-x} = 1$$

$$=> 18 - 2x = x$$

$$\Rightarrow x + 2x = 3x = 18$$

$$\Rightarrow x = \frac{18}{3} = 6$$

... The man should sell 6 pens to gain 50%

#### **Question 115**

On an article the profit is 210% of the cost price. If the cost price increase by 40% but the selling price remains constant, then approximately what percentage of selling price will be the profit?

- **A** 55
- **B** 62
- **C** 74
- **D** 85

Answer: A

#### **Explanation:**

Let cost price = Rs. 100

=> Profit = 
$$^{210}_{100} imes 100 = Rs.~210$$

=> Selling price = 
$$210 + 100 = Rs.310$$

Now new cost price =  $100 + \left( \begin{smallmatrix} 40 \\ 100 \end{smallmatrix} imes 100 \right) = Rs.~140$ 

Thus, new profit = 310 - 140 = Rs. 170

=> Required % = 
$$^{170}_{310}\times 100\approx 55\%$$

# **Question 116**

If the price of apple increases from Rs 80/kg to Rs 100/kg, then by what percentage a person should decrease the consumption of apple so that his expenditure remains same?

- **A** 25
- **B** 22
- **C** 20
- **D** 18

Answer: C

# Explanation:

Let a person initially consumes 10 kg apples

Expenditure on original price =  $80 \times 10 = Rs.800$ 

New price = Rs. 100/kg

=> New consumption = 
$$^{800}_{100} = 8 \ \mathrm{kg}$$

.:. % decrease in consumption =  $^{(10-8)}_{10} imes 100 = 20\%$ 

=> Ans - (C)

#### **Question 117**

If 25% of a number is 6, then what is the number which is 50% more than the initial number?

**A** 36

**B** 24

**C** 30

**D** 18

Answer: A

# **Explanation:**

Let the number be  $\boldsymbol{x}$ 

According to ques,

$$\Rightarrow {}^{25}_{100} \times (x) = 6$$

$$\Rightarrow x = 6 \times 4 = 24$$

. . Number which is 50% more than the initial number =  $\,24+\left({}^{\,50}_{\,100}\, imes24
ight)$ 

$$=24+12=36$$

=> Ans - (A)

#### **Question 118**

A boat travels 60 kilometers downstream and 20 kilometers upstream in 4 hours. The same boat travels 40 kilometers downstream and 40 kilometers upstream in 6 hours. What is the speed (in km/hr) of the stream?

**A** 24

**B** 16

**C** 18

**D** 20

Answer: B

# **Explanation:**

Let speed of boat =  $x \, \mathrm{km/hr}$  and speed of stream =  $y \, \mathrm{km/hr}$ 

Thus, downstream speed = (x+y) km/hr and upstream speed = (x-y) km/hr

Using, time = distance/speed

$$\Rightarrow$$
  $\begin{pmatrix}60\\x+y\end{pmatrix} + \begin{pmatrix}20\\x-y\end{pmatrix} = 4$ 

$$\Rightarrow x+y + x-y = 1$$
 -----(i)

Similarly, 
$$\begin{pmatrix} 40 \\ x+y \end{pmatrix} + \begin{pmatrix} 40 \\ x-y \end{pmatrix} = 6$$

$$x + y + x - y = 20$$
 -----(ii)

Solving equations (i) and (ii), we get :  $x=24\,\mathrm{and}\ y=16$ 

.: Speed of stream = 16 km/hr

50 trees are standing in a line such that distance between any two consecutive trees is same. A car takes 18 seconds to travel from 13th tree to 34th tree. How much time (in seconds) will it take to reach from 1st tree to 50th tree?

- **A** 42
- **B** 42.85
- **C** 45
- **D** 49

Answer: A

# **Explanation:**

Let the distance between each tree = d metres

Thus, distance between 1st and 50th tree = 49d metres

Distance covered by car from 13th to 34th tree = 21d

=> Speed of car = 
$$x={21d\over 18}$$
 -----(i)

 $\therefore$  Time taken to reach from 1st tree to 50th tree =  $\begin{array}{c} 49d \\ x \end{array}$ 

= 
$$^{\stackrel{49d}{21d}}_{^{\phantom{1}18}}=49 imes^{\stackrel{\phantom{1}18}{21}}=42$$
 seconds

=> Ans - (A)

# Question 120

What will be the amount on Rs 12500 at the rate of 20% per annum compounded yearly for 3 years?

- **A** 21080
- **B** 21560
- **C** 20600
- **D** 21600

Answer: D

# **Explanation:**

Principal sum = Rs. 12,500

Rate of interest = 20% and time period = 3 years

Amount after compound interest =  $P(1 + {r \choose 100})^T$ 

$$=12500(1+\frac{20}{100})^3$$

$$=12500 \times ({}^{6}_{5})^{3}$$

= 
$$100 imes 216 = Rs.\ 21,600$$

# Question 121

A certain sum becomes 7 times in 8 years, at simple interest, then in how many years it will become 19 times?

<sub>D</sub> 1

**C** 28

**D** 24

Answer: D

# **Explanation:**

Let principal sum = Rs. P and rate of interest = r%

Amount under simple interest after 8 years =  $P + \frac{P \times R \times T}{100}$ 

$$\Rightarrow P + \binom{P \times r \times 8}{100} = 7P$$

$$=> 100 = 7 - 1 = 6$$

$$=> r = {600 \atop 8} = 75\%$$

Let after t years it becomes 19 times

$$\Rightarrow P + \binom{P \times 75 \times t}{100} = 19P$$

$$= 75t \atop 100 = 19 - 1 = 18$$

$$\Rightarrow t = \frac{1800}{75} = 24$$

... After 24 years, the sum becomes 19 times.

=> Ans - (D)

#### Instructions

The table given below shows the runs scored by 5 players in four matches.

Player		Ma	tch	
	I	II	III	IV
Α	70	105	55	135
В	40	35	95	72
С	60	68	75	85
D	95	45	55	60
Е	105	110	125	122

# **Question 122**

What is the difference between total runs scored by A and B in four matches?

**A** 111

**B** 123

**C** 98

**D** 135

Answer: B

**Explanation:** 

Total runs scored by A in four matches = 70 + 105 + 55 + 135 = 365

Total runs scored by B in four matches = 40 + 35 + 95 + 72 = 242

=> Required difference = 365 - 242 = 123

=> Ans - (B)

# **Question 123**

Runs scored by C in match II is how much percent more than the runs scored by C in match I?

- **A** 11.76
- **B** 16.66
- **C** 17.12
- **D** 13.33

Answer: D

# **Explanation:**

Runs scored by C in match I = 60

Runs scored by C in match II = 68

=> Required % = 
$${}^{(68-60)}_{60}$$
  $\times$   $100$ 

= 
$$^{800}_{60} = 13.33\%$$

=> Ans - (D)

# **Question 124**

Runs scored by A in match II is what percent of the total runs scored by these five players in match II?

- **A** 71.07
- **B** 35.14
- C 28.92
- **D** 55.13

Answer: C

#### **Explanation:**

Runs scored by A in match II = 105

Total runs scored by these five players in match II = 105 + 35 + 68 + 45 + 110 = 363

=> Required % = 
$$^{105}_{363}\times100=28.92\%$$

=> Ans - (C)

# **Question 125**

What is the correct order of averages of the given players in the 4 matches?

- A E > A > C > D > B
- **B** E > A > D > C > B
- C A > E > C > D > B

#### **Explanation:**

Decreasing order of average = Decreasing order of total runs scored.

Runs scored by:

$$A = 70 + 105 + 55 + 135 = 365$$

$$B = 40 + 35 + 95 + 72 = 242$$

$$C = 60 + 68 + 75 + 85 = 288$$

$$D = 95 + 45 + 55 + 60 = 255$$

#### Instructions

For the following questions answer them individually

#### **Question 126**

A solid metallic sphere of radius 21 cm is melted and recast into a cone with diameter of the base as 21 cm. What is the height (in cm) of the cone?

- **A** 336
- **B** 112
- C 224
- **D** 66

Answer: A

#### **Explanation:**

Radius of sphere,  $R=21\,\mathrm{cm}$ 

Let height of cone = h cm and radius of cone =  $r=\frac{21}{2}$  cm

According to ques, Volume of cone = Volume of sphere

$$\Rightarrow \frac{1}{3}\pi r^2 h = \frac{4}{3}\pi R^3$$

$$\Rightarrow \binom{21}{2}^2 \times h = 4 \times (21)^3$$

$$\Rightarrow h = 4 \times 4 imes {(21)^3 \over (21)^2}$$

=> 
$$h=16 imes 21=336 \ \mathrm{cm}$$

# Question 127

The radius of a wheel is 3.5 cm. What is the distance (in cm) travelled by the wheel in 20 revolutions?

- **A** 220
- **B** 440
- **C** 880

# **Explanation:**

Circumference of wheel (r=3.5) =  $2\pi r$ 

= 
$$2 imes \overset{22}{7} imes 3.5 = 22$$
 cm

Distance covered in 1 revolution = Circumference of wheel = 22 cm

=> Distance covered in 20 revolutions =  $22 \times 20 = 440$  cm

=> Ans - (B)

# **Question 128**

If the perimeter of a square is 44 cm, then what is the diagonal (in cm) of the square?

- **A**  $11\sqrt{2}$
- **B**  $2\sqrt{11}$
- **C** 11
- **D**  $44\sqrt{2}$

Answer: A

# **Explanation:**

Let side of square = s cm

=> Perimeter = 4s = 44

$$\Rightarrow s = {}^{44}_{4} = 11 \text{ cm}$$

Thus, diagonal =  $d=\sqrt{s^2+s^2}$ 

$$\Rightarrow d = s\sqrt{2}$$

$$\Rightarrow d = 11\sqrt{2} \text{ cm}$$

=> Ans - (A)

# Question 129

What is the curved surface area (in cm $^2$ ) of a cylinder having radius of base as 14 cm and height as 10 cm?

- **A** 440
- **B** 880
- **C** 220
- **D** 1320

Answer: B

# Explanation:

Radius of cylinder =  $r=14\,\mathrm{cm}$  and height =  $h=10\,\mathrm{cm}$ 

=> Curved surface area =  $2\pi rh$ 

= 
$$2 \times \overset{22}{7} \times 14 \times 10$$

$$=44 \times 20 = 880 \ cm^2$$

=> Ans - (B)

#### Question 130

Three circles of radius 63 cm are placed in such a way that each circle touches the other two. What is the area of the portion enclosed by the three circles?

A 
$$7938\sqrt{3} - 4158$$

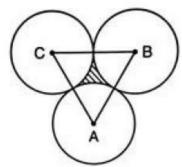
**B** 
$$3969\sqrt{3} - 4158$$

**c** 
$$7938\sqrt{3} - 6237$$

D 
$$3969\sqrt{3} - 6237$$

Answer: D

# **Explanation:**



Radius of each circle =  $r=63~\mathrm{cm}$ 

$$\Rightarrow$$
 AC =  $r+r=126~\mathrm{cm}$ 

Similarly, AB = 126 cm and BC = 126 cm

=>  $\triangle$  ABC is an equilateral triangle having  $\angle A = \angle B = \angle C = 60^\circ$ 

Thus, area of shaded portion = (Area of  $\triangle$  ABC) - (3× Area of each sector)

= 
$$\left(\begin{smallmatrix}\sqrt{3}\\4\end{smallmatrix}\times s^2\right) - \left(3\times\begin{smallmatrix}\theta\\360^\circ\end{smallmatrix}\times\pi r^2\right)$$

= 
$$\binom{\sqrt{3}}{4} \times 126 \times 126$$
 -  $\binom{60^{\circ}}{360^{\circ}} \times \binom{22}{7} \times 63 \times 63$ 

$$=(3969\sqrt{3})-(11\times9\times63)$$

= 
$$(3969\sqrt{3} - 6237) cm^2$$

# Question 131

If  $(x/y)^{5a-3} = (y/x)^{17-3a}$ , then what is the value of a?

- **A** -7
- **B** -5
- **C** 0
- **D** 3

Answer: A

# **Explanation:**

Given:  $(x/y)^{5a-3} = (y/x)^{17-3a}$ 

$$\Rightarrow (x/y)^{5a-3} = (x/y)^{3a-17}$$

$$\Rightarrow 5a - 3 = 3a - 17$$

$$\Rightarrow 5a - 3a = -17 + 3$$

$$\Rightarrow 2a = -14$$

$$\Rightarrow a = {\begin{array}{c} -14 \\ 2 \end{array}} = -7$$

What is the value of  $\begin{pmatrix} x^2-x-6 \\ x^2+x-12 \end{pmatrix}$   $\div$   $\begin{pmatrix} x^2+5x+6 \\ x^2+7x+12 \end{pmatrix}$ ?

- **A** 1
- **B** (x-3)/(x+3)
- **C** (x + 4) / (x 3)
- **D** (x-3)(x+4)

Answer: A

# **Explanation:**

Expression = 
$$\begin{pmatrix} x^2 - x - 6 \\ x^2 + x - 12 \end{pmatrix}$$
  $\div$   $\begin{pmatrix} x^2 + 5x + 6 \\ x^2 + 7x + 12 \end{pmatrix}$ 

$$=\left(\begin{smallmatrix}x^2-x-6\\x^2+x-12\end{smallmatrix}\right)\times\left(\begin{smallmatrix}x^2+7x+12\\x^2+5x+6\end{smallmatrix}\right)$$

$$= \begin{pmatrix} (x-3)(x+2) & (x+4)(x+3) \\ = & ((x+4)(x-3)) \times & ((x+3)(x+2)) \end{pmatrix}$$

# Question 133

If  $x^2+\frac{1}{x^2}=\frac{7}{4}$  for x > 0, then what is the value of  $x^3+\frac{1}{x^3}$ 

- $\mathbf{A} = \frac{3\sqrt{3}}{\sqrt{5}}$
- **B**  $\frac{3\sqrt{15}}{5}$
- **c**  $\frac{3\sqrt{15}}{8}$
- D  $\frac{3\sqrt{5}}{8}$

Answer: C

# **Explanation:**

Given : 
$$x^2 + \frac{1}{x^2} = \frac{7}{4}$$

$$\Rightarrow (x + \frac{1}{x})^2 - 2(x)(\frac{1}{x}) = \frac{7}{4}$$

$$\Rightarrow (x + \frac{1}{x})^2 = \frac{7}{4} + 2 = \frac{15}{4}$$

$$\Rightarrow x + x = 2$$

Cubing both sides, we get :

$$\Rightarrow x^3 + x^3 + 3(x)(x^1)(x + x^1) = (x^{15})^3$$

$$\Rightarrow x^3 + \frac{1}{x^3} + 3(\frac{\sqrt{15}}{2}) = \frac{15\sqrt{15}}{8}$$

$$\Rightarrow x^3 + \frac{1}{x^3} = \frac{15\sqrt{15}}{8} - \frac{3\sqrt{15}}{2}$$

$$\Rightarrow x^3 + \frac{1}{x^3} = \frac{3\sqrt{15}}{8}$$

If  $x^2 - 8x + 1 = 0$ , then what is the value of  $x^2 + \frac{1}{x^2}$ ?

- **A** 18
- **B** 34
- **c** 40
- D 62

Answer: D

# **Explanation:**

Given :  $x^2 - 8x + 1 = 0$ 

Dividing both sides by  ${}^{\prime}x^{\prime}$ 

$$\Rightarrow x + \frac{1}{x} = 8$$

Squaring both sides, we get:

$$\Rightarrow x^2 + \frac{1}{x^2} + 2(x)(\frac{1}{x}) = 64$$

$$\Rightarrow x^2 + \frac{1}{x^2} = 64 - 2 = 62$$

# Question 135

What is the simplified value of  $(x^{32}+x^{\frac{1}{32}})(x^8+x^{\frac{1}{8}})(x-x^{\frac{1}{2}})(x^{16}+x^{\frac{1}{26}})(x+x^{\frac{1}{2}})(x^4+x^{\frac{1}{24}})$ ?

- **A**  $(x^{64} + x^{64})$
- $\begin{array}{cc} & (x^{64} \frac{1}{x^{64}}) \\ \textbf{B} & (x^2 + \frac{1}{x^2}) \end{array}$
- $\mathbf{c} = (x^{64} x^{64} x^{64})$
- $\mathbf{D} \quad \begin{array}{c} (x^{32} \frac{1}{x^{32}}) \\ \mathbf{D} \quad (x + \frac{1}{x}) \end{array}$

Answer: B

# **Explanation:**

Expression =  $(x^{32} + \frac{1}{x^{32}})(x^8 + \frac{1}{x^8})(x - \frac{1}{x})(x^{16} + \frac{1}{x^{16}})(x + \frac{1}{x})(x^4 + \frac{1}{x^4})$ 

$$=(x^{32}+\tfrac{1}{x^{32}})(x^8+\tfrac{1}{x^8})(x^2-\tfrac{1}{x^2})(x^{16}+\tfrac{1}{x^{16}})(x^4+\tfrac{1}{x^4})$$

Multiply and divide by  $(x^2+rac{1}{x^2})$  , we get :

$$= x^{\frac{1}{2}} \times (x^{32} + x^{\frac{1}{2}})(x^{8} + x^{\frac{1}{8}})(x^{2} - x^{\frac{1}{2}})(x^{2} + x^{\frac{1}{2}})(x^{16} + x^{\frac{1}{16}})(x^{4} + x^{\frac{1}{4}})$$

$$=x^{2^{\frac{1}{1}}} \times (x^{32} + x^{\frac{1}{32}})(x^{8} + x^{\frac{1}{8}})(x^{16} + x^{\frac{1}{16}})(x^{4} + x^{\frac{1}{4}})(x^{4} - x^{\frac{1}{4}})$$

$$=x^{\frac{1}{2}} \times (x^{32} + x^{\frac{1}{32}})(x^8 + x^8)(x^{16} + x^{\frac{1}{16}})(x^8 - x^8)$$

$$=x^{\frac{1}{2}} \times (x^{32} + x^{\frac{1}{2}})(x^{16} + x^{\frac{1}{16}})(x^{16} - x^{\frac{1}{16}})$$

$$= x^{2+\frac{1}{x^{2}}} \times (x^{32} + \frac{1}{x^{32}})(x^{32} - \frac{1}{x^{32}})$$

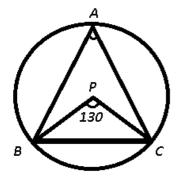
$$= x^{2} + x^{2} \times (x^{64} - x^{64})$$

If P is the circum-center in  $\triangle$ ABC,  $\angle$ BPC = 130°, then what is the value (in degrees) of  $\angle$ BAC?

- **A** 30
- **B** 60
- **C** 65
- **D** 105

Answer: C

# **Explanation:**



Given : P is the circum-center in  $\triangle$ ABC and  $\angle$ BPC = 30°

To find :  $\angle$  BAC = ?

Solution: In a circle, angle subtended by an arc at the centre is double the angle subtended by the same arc on any other point on the circle

$$\Rightarrow$$
  $\angle BPC = 2 \times \angle BAC$ 

=> 
$$\angle$$
 BAC =  $^{130^{\circ}}_{2}=65^{\circ}$ 

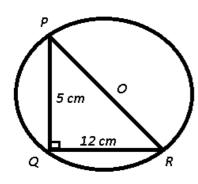
=> Ans - (C)

# Question 137

In ΔPQR, ∠PQR = 90°, PQ = 5 cm and QR = 12. What is the radius (in cm) of the circum-circle of ΔPQR?

- **A** 6.5
- **B** 7.5
- **C** 13

#### **Explanation:**



Given : In  $\triangle PQR$ ,  $\angle PQR = 90^{\circ}$ , PQ = 5 cm and QR = 12 cm

To find: OR =?

Solution : In  $\triangle$  PQR,

$$=> (PR)^2 = (PQ)^2 + (QR)^2$$

$$\Rightarrow (PR)^2 = (5)^2 + (12)^2$$

$$\Rightarrow (PR)^2 = 25 + 144 = 169$$

$$\Rightarrow PR = \sqrt{169} = 13 \, \mathrm{cm}$$

Also, in a right angled triangle, circumradius is half the hypotenuse of the triangle.

$$\therefore$$
 OR =  $r=\frac{13}{2}=6.5$  cm

# **Question 138**

In the given figure, O is the centre of the circle,  $\$ \angle\\$PQO=30  $\$ \angle\\$\ \angle\\$\ QRO =  $\$ \circ\\$\\$. What is the value (in degrees) of  $\$ \angle\\$POR?

- **A** 150
- **B** 110
- **C** 160
- **D** 130

Answer: A

# Question 139

In the given figure, O is the centre of the circle, OQ is perpendicular to RS and  $\$  and  $\$  and  $\$  and  $\$  and  $\$  and  $\$  are then what is the value of PR\$\(^2\?

- **A**  $200(1 + \sqrt{3})$
- **B**  $300(2 + \sqrt{3})$
- **C**  $200(2 + \sqrt{3})$

#### $100(3 + 2\sqrt{3})$

Answer: C

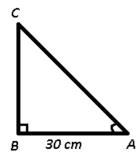
#### **Question 140**

If  $\triangle$ ABC is right angled at B, AB = 30 and  $\angle$ ACB = 60°, then what is the value of AC?

- A \$\$20\$\$
- **B** \$\$20\sqrt{3}\$\$
- C \$\$40\$\$
- **D** \$\$60\$\$

Answer: B

# **Explanation:**



It is given that \$\$\triangle\$\$ ABC is a right angled at B, AB = 30 cm and \$\$\angle C=60^\circ\$\$

Now, in right \$\$\triangle\$\$ ABC,

- =>  $\$  (\angle C)=\frac{AB}{AC}\$\$
- => \$\$sin(60^\circ)=\frac{30}{AC}\$\$
- => $\frac{30}{AC}$ \$
- => \$\$AC=\frac{2}{\sqrt3}\times30=20\sqrt3\$\$ cm
- => Ans (B)

# Question 141

If  $\$ \\teta=\\cos(90-\theta)\$\$, then what is the value of  $\$ \

- **A** \$\$\sqrt{3}-1\$\$
- **B** \$\$\sqrt{3}+1\$\$
- C \$\$\frac{(\sqrt{3}+1)}{2}\$\$
- **D** \$\$\frac{(\sqrt{3}-1)}{2}\$\$

Answer: C

# **Explanation:**

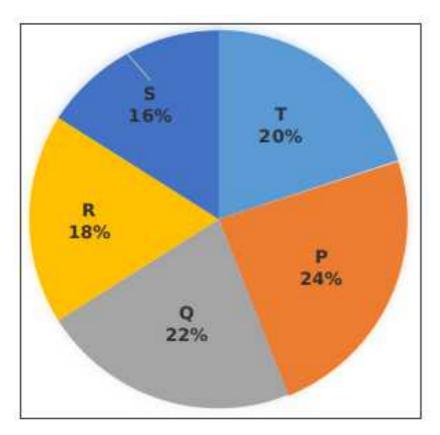
Given: \$\$sin\theta+cos\theta=\sqrt3cos(90^\circ-\theta)\$\$

- => \$\$sin\theta+cos\theta=\sqrt3sin\theta\$\$
- =>  $\c =$  \\$\cos\theta=\sin\theta(\sqrt3-1)\\$\\$

```
=> \frac{1}{\sqrt{1}}
=> \$ tan the ta=\frac{1}{\sqrt{1}}\times \frac{1}{\sqrt{1}}\times \frac{1}{\sqrt{1}}
=> $$tan\theta=\frac{\sqrt3+1}{3-1}$$
=> $$tan\theta=\frac{\sqrt3+1}{2}$$
=> Ans - (C)
Question 142
If A = \frac{1}{3} \ and B = \frac{2}{5}, then what is the value of (2A + B)?
A 8/15
B 6/13
  37/115
   23/14
  Answer: D
Explanation:
Given: \frac{1}{3} and \frac{2}{5}
=> $$tan2A=\frac{2tanA}{1-tan^2A}$$
=> $\tan2A=\frac{2\times\frac{1}{3}}{1-(\frac{1}{3})^2}$$
=> $$tan2A=\frac{\frac{2}{3}}{\frac{8}{9}}$$
=> $\tan2A=\frac{2}{3}\times\frac{9}{8}=\frac{3}{4}$$
To find: $$tan(2A+B)$$
= $$\frac{tan(2A)+tan(B)}{1-tan(2A)tan(B)}$$
= $\frac{3}{4}+\frac{2}{5}}{1-(\frac{3}{4})(\frac{2}{5})}$$
= \frac{(15+8)}{20}}{1-\frac{3}{10}}$
= $\frac{23}{20}\times\frac{10}{7}$$
= $$\frac{23}{14}$$
=> Ans - (D)
Question 143
What is the simplified value of [(1 + \sec 2\theta) \$ \tan^{2} \$ \theta] + 1?
  cos2 θ
В
  1
\mathbf{C} sec 2\theta
  cosec θ
  Answer: C
```

What is the simplified value of [1+  $\frac{2}{\$} \theta \$  \$\$\cosec^{2}\\$\\$\theta\$] - \$\$\cot^{2}\\$\\$\theta\$?

С 1 Answer: C **Explanation:** Expression: \$\$[1+cos^2\theta cosec^2\theta]-cot^2\theta\$\$ =  $$[1+\frac{\cos^2\theta}{\sin^2\theta}]-\cot^2\theta$ =  $$1+\cot^2\theta=1$ \$ => Ans - (C) **Question 145** If  $$$(\cos \theta + 31\%circ)=\sin 47\%circ$ , then what is the value of  $$\sin 5\theta$ . A \$\$\frac{1}{2}\$\$ **B** \$\$\frac{1}{\sqrt{2}}\$\$ C \$\$\frac{\sqrt{3}}{2}\$\$ D \$\$0\$\$ Answer: C **Explanation:** Given: \$\$cos(\theta+31^\circ)=sin(47^\circ)\$\$ => \$\$cos(\theta+31^\circ)=sin(90^\circ-43^\circ)\$\$ Using,  $$\sin(90^\circ circ - x) = cos(x)$ \$ => \$\$cos(\theta+31^\circ)=cos(43^\circ)\$\$ => \$\$\theta+31^\circ=43^\circ\$\$ => \$\$\theta=43^\circ-31^\circ\$\$ => \$\$\theta=12^\circ\$\$ \$\$\therefore\$\$ \$\$\sin(5\theta)=\sin(5\times12^\circ)\$\$ =  $\frac{60^\circ}{\sin(60^\circ)} = \frac{3}{2}$ \$ => Ans - (C) Instructions The following pie chart shows the expenditure (in percentage) of five companies P, Q, R, S and T in the year 2016. Total Expenditure = 48 crores.



**Question 146** 

What was the total expenditure (in Rs crores) of the company Q, R and T together?

**A** 19.2

**B** 28.8

**C** 24.3

**D** 31.4

Answer: B

# **Explanation:**

Total expenditure (in Rs crores) = 48

% expenditure of the company Q, R and T together = (22+18+20) = 60%

- => Total expenditure (in Rs crores) of the company Q, R and T together = \$\$\frac{60}{100}\times48\$\$
- = \$\$\frac{144}{5}=28.8\$\$
- => Ans (B)

# **Question 147**

By how much percent expenditure of company Q and R together greater than that of company P?

- **A** 33.33
- **B** 60
- **C** 66.67
- **D** 75

Answer: C

# Explanation: % amount spent by company P = 24% % amount spent by company Q and R = (22+18) = 40% => Required percent = \$\$\frac{(40-24)}{24}\times100\$\$ = \$\$\frac{2}{3}\times100=66.67\%\$\$ => Ans - (C) Question 148

What is the respective ratio between the total expenditure of company P, Q and S together to the total expenditure?

- **A** 31:60
- **B** 50:31
- **C** 60:31
- **D** 31:50

Answer: D

#### **Explanation:**

Total expenditure of company P, Q and S together (in %) =  $$$(24+22+16)=62\$ 

Total expenditure of all companies (in %) = \$\$100\%\$\$

- => Required ratio = \$\$\frac{62}{100}=31:50\$\$
- => Ans (D)

#### **Question 149**

Total amount spent by company S is what percent of total amount spent by company T and R?

- **A** 42.1
- **B** 43
- **C** 39.68
- **D** 41

Answer: A

# **Explanation:**

% amount spent by company S = 16%

% amount spent by company T and R = (20+18) = 38%

- => Required percent spent by company S = \$\$\frac{16}{38}\times100\$\$
- =\$\frac{800}{19}=42.1\%\$\$
- => Ans (A)

#### **Question 150**

The profit earned by company R is equal to the 1/4th of the expenditure of company Q. What is the profit (in Rs crores) of company R?

**A** 3.24

B <sup>4.84</sup>	
<b>C</b> 2.64	
<b>D</b> 5.66	
Answer: C	
Funlanations	
Explanation: Total expenditure (in Rs crores) = 48	
Expenditure of company Q = \$\$\frac{22}{100}\times48\$\$	
Also, Profit earned by company R = \$\$\frac{1}{4}^{th}\$\$ Expenditure of company Q	
=> Profit earned by company R = $\$\frac{1}{4}\times \frac{22}{100}\times 8$	
= \$\$\frac{22\times12}{100}=2.64\$\$	
=> Ans - (C)	
English	
Instructions	
In the following question, some part of the sentence may have errors. Find out which part of the sentence has a appropriate option. If a sentence is free from error, select 'No Error'.	n error and select the
Question 151	
Three summons have been (a:/ issued by the district court (b:/ but he has not turned up yet. (c:/ No Error (d:	
<b>A</b> 1	
<b>B</b> 2	
<b>C</b> 3	
D 4	
Answer: A	
Question 152	
Her aunt didn't (a:/ give me (b:/ a minute of peace. (c:/ No Error (d:	
<b>A</b> 1	
<b>B</b> 2	
C 3	
D 4	
Answer: C	
Question 153	
Aayushi has come (a:/ here to do a master (b:/ degree in Social Work. (c:/ No Error (d:	

Α	1
В :	2
C :	3
D 4	4
Aı	nswer: B
Que	stion 154
The	re is no money in (a:/ the bank in Rajesh's and (b:/ Reena's joint account. (c:/ No Error (d:
Α	
B :	2
C	3
D 4	4
Aı	nswer: D
	stion 155
This	master book concludes with pages (a:/ that contain lists of all (b:/ MBA colleges across India. (c:/ No Error (d:
A	1
В :	2
C :	3
D 4	4
	nswer: B
Inot	ructions
	ructions The following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the
	and indicate it by selecting the appropriate option.
	stion 156
The	man felt when he got to know that he had been cheated.
A	worried
В	horrified
C I	humiliated
D (	disgraced
	nswer: C
Que	stion 157
	chairman the company's funds, so he was dismissed.

Α	pirated	
В	misplaced	
С	misappropriated	
D	enticed	
1	Answer: C	
Qu	estion 158	
Ro	han yelled her and she hastily retreated.	
Α	towards	
В	to	
С	on	
D	at	
	Answer: D	
•	450	
	estion 159	
не	stood Ankita, but could not utter a single word for quite some time.	
Α	to	
В	for	
С	before	
D	towards	
1	Answer: C	
Qu	estion 160	
We are all accountable team leader for our work on this project.		
Α	of	
В	with	
С	for	
D	to	
	Answer: D	

# Instructions

In the following question, out of the four alternatives, select the word similar in meaning to the word given.

# **Question 161** Malevolent confused despiteful frugal С sedate Answer: B Question 162 Querulous grouchy delusion belittle indecent Answer: A Question 163 Meander sanctify barren wander futile Answer: C **Question 164** Fraternise A regulate luxuriate appreciate associate Answer: D **Question 165 Ensconce**

Α	unveil
В	praise
С	reveal
D	conceal
1	Answer: D
Ins	structions
In ·	the following question, out of the four alternatives, select the word opposite in meaning to the word given.
Qu	estion 166
Ob	estinate
Α	brighten
В	degrade
С	flexible
D	repel
4	Answer: C
Qu	estion 167
	cry
Α	convict
В	reject
С	synthesis
D	praise
1	Answer: D
Qu	estion 168
	arse
Α	scanty
В	smooth
С	disperse
D	accept
1	Answer: B
Qu	estion 169
De	bonair

Α	cheerless
В	rational
С	inadequate
D	nigged
1	Answer: A
	estion 170
Su	avity
Α	pleasant
В	politeness
С	misbehavior
D	stupidity
1	Answer: C
Ins	tructions
In f	the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.
Qu	estion 171
Ву	fair means or foul
Α	By any means
В	To make sense
С	Undecided controversial
D	To get puzzled
1	Answer: A
Qu	estion 172
Sw	ord of Damocles
Α	Life full of quarrels
В	Imminent danger
С	In a state of suspense and anxiety
D	Remain faithful to the cause
	Answer: D

# **Question 173** Out of elbows A By all means Old **C** Poor Forever Answer: C **Question 174** Pandora's box Arguments for and against To act dubiously Popular **D** A prolific source of trouble Answer: D **Question 175** A nig-nog A Watchful **B** Very old A fool **D** Rich Answer: C Instructions Improve the bracketed part of the sentence. Hardly had I finished cooking dinner (before) Rajesh arrived. A when then while no improvement Answer: A

# **Question 177** I met the two boys, (whom I believe are) twins. who I believe to be who I believe are who to my belief, are no improvement Answer: B **Question 178** Let's buy a new phone with the annual bonus, (can we)? shall we can't we don't we no improvement Answer: B **Question 179** I have not written any letter to her since my brother (had died). A was died died has died no improvement Answer: C **Question 180** Reyansh (gave) most of his time to music. A devoted spent lent no improvement Answer: A

# Instructions

In the following question, out of the four alternatives, select the alternative which is the best substitute of the phrase.

A	cadaverous		
В	defalcation		
С	sinecure		
D	pestiferous		
	Answer: D		
Question 182			
Α	temple dedicated to all the gods		
Α	pantheon		
В	kiln		
С	scullery		
D	cellar		
	Answer: A		
Qı	uestion 183		
That which cannot be satisfied			
A	camouflage		
В	insatiable		
С	undecipherable		
D	tenacious		
	Answer: B		
Qı	uestion 184		
Free from punishment			
Α	posterity		
В	stoicism		
С	impunity		
D	wrath		
	Answer: C		

# **Question 185** Fear of foreigners stenophobia clinophobia ballistophobia xenophobia Answer: D Instructions In the following question, four words are given out of which one word is incorrectly spelt. Select the incorrectly spelt word. **Question 186** accessory accelerate accesion accompany Answer: C **Question 187** chracteristic chancellor chauffeur chocolate Answer: A **Question 188** etiquette espoinage expedient enthusiasm Answer: B **Question 189**

haemoglobin

gyneacologist

0	haematite			
O	inquietude			
	Answer: B			
Qu	Question 190			
Δ	deliquescence			
3	pertinacious			
0	pisiculture			
0	renaissance			
	Answer: C			
ns	structions			
	the following passage some of the words have been left out. Read the passage carefully and select the correct answer for the given ank out of the four alternatives.			
of	an and his are two distinct things, whereas a good deed should call forth approbation and a deed, disapprobation, the doer the deed whether good or always deserves or pity as the case may be. Hate the sin and not the sinner is a precept which, bugh easy enough to understand, is rarely and that is why the poison of hatred spreads in the world.			
Qu	nestion 191			
Vla	an and his are two distinct things,			
Δ	working			
3	deeds			
С	knowledge			
0	altitude			
	Answer: B			
Qu	estion 192			
٨ŀ	nereas a good deed should call forth approbation and a deed, disapprobation,			
4	wicked			
3	useless			
0	violent			
0	sharp			
4	Answer: A			
Qu	estion 193			
The doer of the deed whether good or				
4	reliable			

resistible resistible
C bad
<b>D</b> evil
Answer: C
Question 194
Always deserves or pity as the case may be.
A punishment
B accolade
C applaud
D respect
Answer: D
Question 195
Is rarely and that is why the poison of hatred spreads in the world.
<b>A</b>
<ul><li>A followed</li><li>B practised</li></ul>
C justified
D acknowledged
Answer: B
Instructions
A pagaga is given with five guestions following it. Doed the pagaga carefully and calcut the best answer to each guestion out of

A passage is given with five questions following it. Read the passage carefully and select the best answer to each question out of the given four alternatives.

Superstitions are a universal phenomena having their own peculiar place in the cultural ethos and milieu of a people. They epitomize man's fear of the unknown, fear of evil, blind faith in omens and portents. Superstitions are inter-woven with myth, legend, unnatural phenomena and disaster, customs and traditions, and are mainly the outcome of ignorance. They are unreasoned and irrational beliefs that gradually become matters of faith. When certain things and happenings are rationally inexplicable people tend to assign mysterious and supernatural reasons for their operation. Thus a natural disaster is explained in terms of God's wrath and the failure of one's project is assigned to the black cat which crossed the path just as one set out on the errand. The primitive human beings were mainly governed by superstitions. Superstitions were widespread before the dawn of civilization when science had not advanced. Thus, ignorance of the primitive people and the resultant growth of superstitions were the direct outcome of the lack of scientific advancement. Unenlightened people always tend to be superstitious. The belief in the sanctity of time and old traditions of the ancestors bind the people into knots of superstitious thought.

Besides, the unscrupulous priests and religious officials exercise a dominating, unhealthy effect upon the people believing in religious orthodoxy. They encourage superstitions for their own ulterior motives. Superstitions are not only universally prevalent but even have strikingly common features whether believed in India or in as far off a place as Canada. There are some common superstitions which are shared by people all over the world. Beliefs in spirits, ghosts and witches and reincarnation are quite common among all the peoples of the world. Belief in witches still prevails in India, France, Scotland, England and many other countries. In countries of the East, especially in India, belief in ghosts and spirits still exists. The cries of certain birds like owls and ravens and the howl of cats are regarded with superstition as portents of evil throughout the world. Then there is a very common belief that the sighting of comets portends the death of kings or great men or some unforeseen catastrophe. Shakespeare refers to such a superstition in his Julius Ceaser, Halley's Comet in the twentieth century evoked a similar response in many a mind.

What is the main reason behind once superstitions?			
Α	ignorance		
В	customs and traditions		
С	fear of the unknown		
D	blind faith in omens and portents		
	Answer: A		
Ou	estion 197		
	Who were mainly governed by superstitions?		
Α	unenlightened people		
В	religious officials		
С	primitive human beings		
D	unscrupulous priests		
,	Answer: C		
	nestion 198		
WI	nich of the following is INCORRECT with respect to passage?		
Α	superstitions is also prevailing in Canada		
В	superstitions are a universal phenomena		
С	superstitions are unreasoned and rational beliefs		
D	a natural disaster is regarded as a god's wrath by the superstitious people		
	Answer: C		
Qu	nestion 199		
According to passage which of the following is not regarded as a superstition by the people?			
Α	howl of cats		
В	cries of children		
С	crossing of path by black cat		
D	sighting of comets		
	Answer: B		

# What can only be the effective counter of superstition?

- A belief in the sanctity of time
- B awareness through plays like Julius Ceaser by Shakespeare
- **c** explaining the theory of reincarnation
- **D** a broad light of scientific discovery

Answer: D