Year	Questions	Marks
2012	20	20
2013	20	20
2014	15	15
2015	15	15
2016	15	15
Total	85	85

1.	. If 'sand' is called 'air', 'air' is called 'plateau', 'plateau' is called 'well', 'well' is called	'island' a	and '	Island'	is
	called 'sky', then from where will a woman draw water?				

(A) Well

(B) Island

(C) Sky

(D) Air

Ans: B

Solution: Well is called Island, so the woman draws water from Island.

[2012]

2. Forty boys are standing in a row facing the North. Arun is eleventh from the left and Deepak is thirty-first from the right end of the row. How far will Shreya, who is third to the right of Arun in the row, be from Deepak?

(A) 2nd

(B) 3rd

(C) 4th

(D) 5th

Ans: C

Solution: Arun is 11th person from left and also 30th person from right

Deepak is 31st person from right it means 9th person from left

Shreya is 3rd from arun's right implies she is 4th person from Deepak.

[2013]

3. A trader in order to code the cost price of an article used the letters of psychology in the form of '0 to 9' respectively. If an article was sold for `1015.58 to earn the 16% gain, then which of the following code stands for cost price?

(A) AIL.HP

(B) AIL.HS

(C) ZY(A) HO

(D) ZAO.OP

Ans: D

Solution: S.P = Rs.1015.58, P% = 16%

=> (C) $P = \frac{1015.58}{1.16}$ = Rs.875.50 ie: ZAO.OP (from the Alphabets code given).

[2014]

4. Four friends Mohit, Raj, Varun and Anuj live in a same locality. The house of Raj is in the East of Mohit's house and in the North of Varun's house. The house of Varun is in the West of Anuj's house. Anuj's house is in which direction w.r.t. Mohit's house?

(A) South-East

(B) South

(C) North-West

(D) West

Ans: A

Solution: We can clearly see the house of Anuj is in South East of Mohit's house.

[2015]

5. How many such 1's are there in the given arrangement, each of which is immediately preceded by a perfect square?

64125285264139181258613514

9473217259

- (A) None
- (B) One
- (C) Two
- (D) Three

Ans: D

Solution: Three 1's are there in the given arrangement, each of which is immediately preceded by a perfect Square. So, option D is the correct option.

[2016]

6. The given question is based on the symbols/numeric/alphabets as given below:

 $A \& ft Y \uparrow PQn \times M \neq r @ Z \& C £? 87 Ru V Be$

If the first half of the above series is written in the reverse order, then which letter/symbol will be 7th letter from the left of 15th letter from right end?

- (A) M
- (B) n

(C) f

(D) Q

Ans: B

Solution: Writing the first half in the reverse order and the rest remains same is r#MxnQP"A↑xtf&A@Z&C£?8TRuVBe then the 7th letter from the left of the 15th letter from right end is n.

[2012]

7. Find the missing character.



(A)5

(B) 9

- (C) 11
- (D) 13

Ans: B

[2013]

- 8. An enterprising businessman earns an income of 1 on the first day of his business. On every subsequent day, he earns an income which is just double of that made on the previous day. On the 10th day of business, his income is
 - (A) 29
- (B) 210

- (C) 10
- (D) 102

Ans: A Solution:

1 st Day	2 nd Day	3 rd Day	4 th Day	5 th Day	6 th Day	7 th Day	8 th Day	9 th Day	10 th Day
1	2	4	8	16	32	64	128	256	512

[2014]

9. Which of the following Venn diagrams best represents the relationship amongst, 'Gas, Water and Helium'?

Ans: C

Solution: 10: Helium is a gas and Water is in Liquid state. Option C describes Helium, Gas and water correctly.

[2015]

- 10. Study the following information and answer the question that follows.
 - 'P Q' means 'P is neither greater than nor smaller than Q'.
 - 'P Q' means 'P is either greater than or equal to Q'. 'P \$ Q' means 'P is either smaller than or equal to Q'.
 - 'P % Q' means 'P is greater than Q'. 'P @ Q' means 'P is smaller than Q'.

If the given statements are true, then which of the following two conclusions I and II given below is/ are definitely true?

Statements: V \$ T, T # R, R @ B Conclusions: I. V @ B II. B % T

(A) Only I

(B) Only II

(D) Neither I nor II

Ans: D

Solution: As per given statements, neither I nor II conclusions are true. So, option D is the right answer.

(C) Both I and II

[2016]

- 11. Read the following information carefully and answer the question given below.
 - (i) There are five types of cards viz. A, B, C, D and E. There are three cards of each type. These are to be inserted in envelopes of three colors - Red, Yellow and Brown. There are five envelopes of each color.
 - (ii) B, D and E type cards are inserted in red envelopes. A, B and C type cards are to be inserted in yellow envelopes and C, D and E type cards are to be inserted in brown envelopes.
 - (iii) Two cards each of B and D type are inserted in red envelopes.

Which of the following combinations of color of the envelope and the number of cards is definitely correct in respect of E - type cards?

(A) Red-1, Yellow - 2

(B) Yellow -1, Brown-2

(C) Red - 1, Brown-2

(D) None of these

Ans: C

Solution: Red -1, Brown -2.

[2012]

- 12. The door of Aditya's house faces east. From the back side of his house, he walks straight 50 meters, then turns to the right and walks 50 meter's again. Finally, he turns towards left and stops after walking 25 meter's. Now, Aditya is in which direction from the starting point?
 - (A) South-east
- (B) North-east
- (C) West
- (D) North-west

Ans: D Solution:



[2013]

13. 'X + Y mean 'Y is brother of X'; 'X × Y' means 'Y is husband of X'; 'X – Y' means 'X is mother of Y'; and 'X ÷ Y' means 'X is father of Y'. Then which of the following expressions indicates 'P is grandmother of T'?

- (A) $Q P + R \div T$ (B) $P \times Q \div R T$ (C) $P \times Q \div R + T$
- (D) $P + Q \div R T$

Ans: B

Solution: Option 2 is correct.

Follow the instructions to get,

P (wife) – Q (husband)

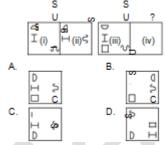
Q (father) – R (daughter)

R (mother) – T (child)

So P becomes grandmother of T.

[2014]

- 14. There is a certain relationship between figures
 - (i) And (ii) Establish the similar relationship between figures
 - (iii) And (iv) by selecting a suitable figure from the options which will replace the (?) in fig. (iv).



Ans: A

Solution: The number and symbols on of the box is being rotated by 90° in counter clockwise and 2nd column symbols interchange their positions. Such arrangements are possible only in the option (A).

[2015]

15. This question is based on the six numbers given below:

271 361 912 714 459 187

If the first and the second digits of each number are interchanged and if the third digit of each number is placed between these two digits, then which number will be the third number from the top, if the new numbers are arranged in the descending order?

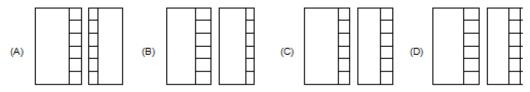
- (A) 187
- (B) 271
- (C) 459
- (D) 361

Ans: D

Solution: After rearranging all the numbers according to given instructions, the numbers will become like 712, 613, 129, 147, 594, 871. If new numbers arranged in descending order then third number from top is 613. So, option D is the correct answer.

[2016]

16. Machine 'A' produces 60% cloth and remaining is produced on machine 'B'. 25% of each machine's production is defective. Choose the diagram that best represents the situation. The shaded portion depicts defective cloth.



Ans: A

Solution: Percentage of cloths Machine A produces = 60 %

Percentage of cloths Machine B produces = 40 %

Percentage of defective productivity for both machines = 25 %

Non defective productivity of Machine A = 60 - 25 = 35 %

Non defective productivity of Machine A = 40 - 25 = 15 %

Therefore the best diagram represents the situation is Option (A).

[2012]

17. In the given question, two rows of numbers are given. The resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered The operations of numbers progress from left to right.

Rules

- I. If an odd number is followed by a two-digit even number, then they are to be added
- II. If an odd number is followed by a two-digit odd number, then the second number is to be subtracted from the first number.
- III. If an even number is followed by a number which is a perfect square of a number, and then the second number is to be divided by the first number.
- IV. If an even number is followed by a two-digit even number, then the first number is to be multiplied by the second number.

13	11	4
17	13	12

If the resultant of the first set of numbers is multiplied by the resultant of the second set of numbers, what will be the outcome?

(A) 48

(B) 69

(C) 75

(D) 96

Ans: D

Solution: Numbers are as follows

13	11	4
17	13	12

Operations to be applied as per the given conditions

For 1st row

$$(13-11)=2$$
 4

$$4 = 4/2 = 2$$

For 2nd row

$$(17 - 13) = 4$$
 12

Thus,
$$48 \times 2 = 96$$

[2013]

18. There are three figures X, Y and Z showing a sequence of folding of a sheet of paper. Figure (Z) shows the manner in which the folded sheet has been cut. Select the figure from the options which would resemble the unfolded form of paper.





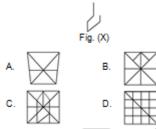


Ans: B

Solution: Option B resembles the unfolded form of the given paper pattern.

[2014]

19. In which of the following options, Fig. (X) is exactly embedded as one of its part?



Ans: C

Solution: In figure C it has been embedded as a part.

[2015]

- 20. In a group of six women Priya, Sanchi, Trishu, Parul, Shikha and Anjali, four are table tennis players, four are postgraduates in economics, one is postgraduate in commerce and three are bank employees. Priya and Shikha are among the bank employees while Anjali and Trishu are unemploye(D) Trishu and Sanchi are among the table tennis players. Anjali, Shikha, Trishu and Sanchi are postgraduates in economics of whom two are bank employees. If Parul is postgraduate in commerce who among the following is definitely both a table tennis player and a bank employee?
 - (A) Sanchi
- (B) Priya
- (C) Anjali
- (D) Trishu

Ans: A

Solution: Sanchi is a table tennis player as well as a bank employee. Option A is the right answer.

[2016]

21. At an office where an interview was conducted to select persons for clerical posts, they came to know that out of 20 persons, 12 knew only typing and 5 knew only shorthand and the rest knew both typing and shorthand Which of the following diagrams represents this fact?









Ans: C

Solution: Total number of persons U = 20Number of persons know typing A = 12Number of persons know shorthand B = 5

Number of persons Know both typing and shorthand $A \cap B = 3$

Then the suitable diagram is Option C.

[2012]

22. Choose the group which is different from the rest.

(A) MEWGN

(B) PBQTX

(C) DRYSN

(D) CGHKV

Ans: A

Solution: In all the other options having only consonant but in the first option there is one vowel E available.

[2013]

23. Which of the following options will complete the figure matrix?



Ans: A

Solution: Observing row wise we find that number of circles increasing by one and in the third column in each row the circles are placed at the same position as that of 1st column.

Also the bigger line and smaller line are changing their place. So, according to the preceding place of blank, the smaller line wills as option (A)

[2014]

24. How many such symbols are there each of which is immediately preceded by a digit and how many such digits are there each of which is immediately preceded by a symbol. What is total number of both those? AF9V@9V@S2GRA3Q£BZ7CY

T48PF6@\$5EHBJδ

- (A) 3
- (B) 1

(C) 2

(D) None of these

Ans: A

Solution: A F 9 V δ9 V @ S 2 G R a 3 Q £ B Z 7 C Y ΔT 4 8 P F 6 @ \$ 5 E H B J δ We can see the number of symbols preceded by a digit = δ before 9 and \$ before 5 = 2 Number of digits immediately preceded by a symbol = 5 is immediately preceded by \$ =1 Hence total number of those = 2 + 1 = 3.

[2015]

25. If 'P' denotes '+', 'Q' denotes 'x', 'R' denotes '÷', 'S' denotes '-' and '=' denotes 'greater than', then which of the following statements is true?

- (A) 4 P 8 R 2 S 1 Q 6 = 1
- (B) 3 S 1 Q 8 P 6 R 2 = 0
- (C) 8 R 2 S 3 Q 4 P 6 = 2
- (D) 9 P 2 Q 6 S 4 R 2 = 21

Ans: A

Solution: As per given instructions, option A is the correct one.

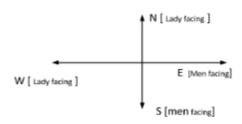
[2016]

26. Two ladies and two men are playing bridge a card game and seated at North, East, South and West of a table. No lady is facing east. Persons sitting opposite to each other are not of the same sex. One man is facing south. Which directions are the two ladies facing?

- (A) East and West
- (B) South and East (C) North and West
- (D) North and East

Ans: C

Solution: The two ladies are facing North and West directions.



[2012]

27. In a certain code, PLEADING is written as FMHCQMFB How is SHOULDER written in that code?

- (A) KCDQTIPV
- (B) QDCKVPIT
- (C) QDCKTIPV
- (D) TIPVQDCK

Ans: C

Solution: First four letters are related to the last four as shown below. Also the last four letters of the first word is related to the first four letters of the second word in reverse order.



So, SHOULDER is written as QDCKTIPV

[2013]



- 28. A dealer sold six cars M, N, O, P, Q and R– during a period of Monday to Saturday, one car on each day.
 - (i) The car O was sold at least before three cars.
 - (ii) The car R was sold on Tuesday.
 - (iii) Both the cars N and Q were sold at least before one car.
 - (iv) The car P was sold immediately after the car O.
 - (v) At least four cars were sold after the car Q.

If Mr. Jindal is purchased a car sold on Wednesday, then the car purchased by him is

(A) M

(B) N

(C) O

(D) P

Ans: C Solution:

Monday	Q (Step 5)		N or Q (Step 3)
Tuesday	R (Step 2)		N or Q (Step 3)
Wednesday	O (Step 4)		N or Q (Step 3)
Thursday	P (Step 4)	O (Step 1)	N or Q (Step 3)
Friday	N	O-(Step 1)	N or Q (Step 3)
Saturday	M	O (Step 1)	

Step1: The car O was sold at least before three cars. So it cannot come on Thursday, Friday or Saturday.

Step2: R was sold on Tuesday

Step3: Both N and Q were sold at least before one car.

Step4: P was sold immediately after O.

Step5: At least four cars were sold after Q.

So, a car purchased on Wednesday is car O.

[2014]

29. A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Step IV: 23 start 32 pour 51 now 46 house

Step V: 23 start 32 pour 46 51 now house

Step VI: 23 start 32 pour 46 now 51 houses if Step VI is the last step of the rearrangement and the same rule is followed for below input, then which of the following will be step III for the given Input? Input: nice flower 34 12 costly height 41 56

(A) 12 nice 34 height flower costly 41 56

(B) 12 nice 34 height 41 flower costly 56

(C) 12 nice 34 flower costly height 41 56

(D) 12 nice flower 34 costly height 41 56

Ans: A

Solution: Input: nice flower 34 12 costly height 41 56 as per the Rule (arrange number in ascending order and alphabets in descending order one by one)

Step I – 12 nice flower 34 costly height 41 56

Step II – 12 nice height 34 flower costly 41 56

Step III – 12 nice 34 height flower costly 41 56

[2015]

30. Kiara is standing at the center of a circular field

Her son is sitting to the East of her on the boundary of the field Kiara goes towards her son and gives him some chips, then she turns to right and walks along the boundary of the field equal to three-fourth of the length of the circular field She turns back and walk (1/8)th of the boundary of the circular field In which direction is she from the starting point?

- (A) North-East
- (B) North-West
- (C) South-East
- (D) North

Ans: B

Solution: Kiara first went towards east direction and then she turned right and walk around three fourth of the circular field She reached at the south direction and then turned back and walk one eight of the field It means she is at middle of between north and west. So, option B is the right answer.

[2016]

- 31. In a certain code language,
 - (i) 'pit na som' means 'bring me water
 - (ii) 'na jo tod' means 'water is life
 - (iii) 'tub od pit' means 'give me toy
 - (iv) 'jo lin kot' means 'life and death

Which of the following represents 'is' in that language?

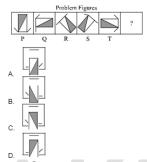
- (A) jo
- (B) na
- (C) tod
- (D) lin

Ans: B

Solution: According to code language na for water and jo for life then tod for is.

[2012]

32. The given question consists of five figures marked P, Q, R, S and T called the Problem Figures. Select a figure from the options which will continue the same series as established by the five Problem Figures.



Ans: C

Solution: $P \rightarrow Q \rightarrow R \rightarrow S \rightarrow T \rightarrow ?$

There are 90° and 45°Clock wise rotation and flip of colored portion. Therefore, answer is (C).

[2013]

- 33. In a shop, the items were arranged in a shelf consisting of six rows. Biscuits are arranged above tins of chocolates but below the rows of packets of chips, cakes are at the bottom and the bottles of peppermints are below the chocolates. The topmost row had the display of jam bottles. Where exactly are the bottles of peppermints from the top?
 - (A) 2nd
- (B) 3rd
- (C) 4th
- (D) 5th

Ans: D



Solution: The peppermints are at 5th position from the top.

Row 1	Jam
Row 2	Chips
Row 3	Biscuits
Row 4	Chocolates
Row 5	Peppermints
Row 6	Cakes

[2014]

- 34. Study the statements carefully.
 - (1) 'A Δ B' means 'A is the mother of B'.
 - (2) 'A B' means 'A is the sister of B'.
 - (3) 'A * B' means 'A is the father of B'.
 - (4) 'A β B' means 'A is the brother of B'.

Which of the following means 'N is the maternal uncle of M'?

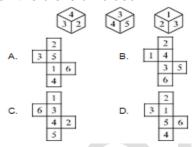
(A) N \square P L \square E M (B) N Y \square A \square M (C) M Y \square P N (D) None of these

Ans: A

Solution: Let's verify the option A , L is mother of E as well as M and as P is sister of L and N is the brother of both L and P , as M is the child of L and N is brother of L , N is maternal uncle of M. Option A is correct.

[2015]

35. Three different positions of the same die are given. Select a figure from the options which will be formed when the die is unfolded.



Ans: D

Solution: According to given positions of dice, when 1 no. is at top then 6 no. will be at the bottom. 2, 3, 4 and 5 nos. should be at the four different sides of dice. So, option D is the right option from all.

[2016]

36. Find the missing number from amongst the given options at the place of sign of interrogation?

4	5	3	2	0
7	3	4	4	21
6	4	4	5	22
9	6	5	5	?

(A) 34

(B) 42

(C) 44

(D) 45



Ans: A

Solution: From the product of column 1 and column 4, subtract the sum of column 2 and column 3. The result will be in column 5.

[2012]

37. Find the number of triangles in the given figure.



(A) 12

(B) 15

(C) 14

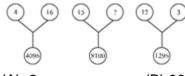
(D) None of these

Ans: D

Solution: There are 13 triangles. So Answer is (D).

[2013]

38. There is a certain rule followed in all the three figures. Identify the rule and find the missing number.



(A) 6

(B) 90

(C)540

(D) 60

Ans: A

Solution: The numbers in the above two circles and multiplied first and then final result is square

 1^{st} Figure: 4 x 16 = 64. Now, 64 x 64 = 4096 3^{rd} Figure: 12 x 3 = 36. Now, 36 x 36 = 1296

Similarly, in 2^{nd} Figure: 15 x 6 = 90 and 90 x 90 = 8100. So, 6 fill the space.

[2014]

- 39. In the given question, two rows of numbers are given. The resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered Rules:
 - (i) If an odd number is followed by another composite odd number, they are to be multiplied
 - (ii) If an even number is followed by an odd number, they are to be added
 - (iii) If an even number is followed by a number which is a perfect square, the even number is to be Subtracted from the perfect square.
 - (v) If an odd number is followed by a prime odd number, the first number is to be divided by the second number.

35	7	2
12	16	Х

If x is the resultant of the first row, then what will be the product of the resultants of the two rows?

(A) 7

(B) 10

(C) 24

(D) 21

Ans: D

Solution: 35/7 = 5 (Rule V) then 5 - 2 = 3 (Rule IV), Resultant of First row or x = 3

16 -12 = 4 (Rule III), 4+x = 4+3 = 7 (Rule II) Resultant of 2^{nd} Row = 7.

Product of resultant of both row = $7 \times 3 = 21$

[2015]



40. The following letters are coded as follows.

Letters	В	٧	М	L	D	Р	Α	Е	R
Codes	9	2	1	7	5	3	6	4	8

While coding the given letters following conditions are also to be observed.

- (i) If the first as well as the last letters are vowels, both are coded as \$.
- (ii) If the first letter is vowel and last letter is consonant, both are coded as %.
- (iii) If the first letter is a consonant and last is a vowel, their codes are to be interchange **UBMEPD**
 - (A) 91%%43
- (B) 19%43%
- (C) 914%3%
- (D) %9143%

Ans: D

Solution: According to 2nd instruction given, only D option starts with %. So, option D is the right answer.

[2016]

41. If means 'x', D means '+', means '+', means '-', means '=', means 'more' and means 'less', then which one of the options is incorrect?

Ans: D

Solution: Option A: 30 = 30

Option B: 30 < 41 Option C:-25 < 2

All the above are right, the incorrect option is D: -11 > 11, it is a wrong statement.

[2012]

- 42. Read the following information carefully and answer the question that follows:
 - (i) Five friends P, Q, R, S and T travelled to five different cities; Chennai, Kolkata, Delhi, Bangalore and Hyderabad by different modes of transport; Bus, Train, Aero plane, Car and Boat from Mumbai.
 - (ii) The person who travelled to Delhi did not travel by boat. R went to Bangalore by car and Q went to Kolkata by aero plane.
 - (iv) S travelled by boat whereas T travelled by train.
 - (v) Mumbai is not connected by bus to Delhi and Chennai. Which of the following combinations of place and mode is not correct?
 - (A) Delhi-Train
- (B) Kolkata-Aero plane (C) Hyderabad-Car
- (D) Chennai-Boat

Ans: C

Solution: Delhi is not being travelled by boat. Also Delhi and Chennai are not being travelled by bus.

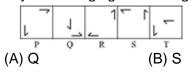
So, the combination	can	be	as	follow	s:

Р	Q	R	S	Т
Hyderabad	Kolkata	Bangalore	Del	Chennai
Bus	Aero plane	Car	Boat	Train

[2013]



43. Identify the wrong figure in the given series.



(C) R

(D) T

Ans: D

[2014]

- 44. Six lectures A, B, C, D, E and F are to be delivered from Monday to Sunday, one lecture every day.
 - (i) Lecture C cannot be delivered on Friday.
 - (ii) Lecture A is delivered immediately after lecture
 - (iii) There should be a gap of two days between the lectures B and F.
 - (iv) There is one holiday except Saturday. Lecture F is delivered on the next day of holiday.
 - (v) Lecture E is delivered on Wednesday and it is not immediately followed by lecture F.

How many lectures were delivered between lectures F and D?

- (A) None
- (B) Two
- (C) Three
- (D) Four

Ans: A

Solution: As per given information, we can make this table

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
О	В	Е	Holiday	F	D	Α

No lectures will be taken between F and (D)

[2015]

45. Select the correct mirror image of Fig. (X) along the mirror PQ.









Solution: Correct mirror image is the reflection of given Fig. (X) along with PQ. I will be shown like change in direction. So, option A is the correct option.

[2016]



- 46. A college starts from 10 A m. and continues till 1.30 p.m. In this duration there are 5 periods. If 5 minutes are provided before each period to leave the room and enter the other, then what is the duration of each period?
 - (A) 41 mins
- (B) 38 mins
- (C) 40 mins
- (D) 42 mins

Ans: B

Solution: The total working hours of college = 210 minutes.

For lapse time due to leaving and entering for each period (excluding the first period) = 5.

The duration of all period s = 210 - 20 = 190 minutes.

Therefore the duration of each period = 190/5 = 38 minutes.

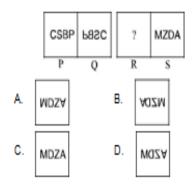
[2012]

- 47. Which of the following is the mirror image of the given word, if the mirror is placed vertically left? (NOTIFICATION)
 - NOLIFIDALION A
 - NOTIFICATION .B
 - C. NOTIFICATION
 - NOITECLEITON . I

Ans: C

[2013]

48. There is a certain relationship between figures P and Q. Identify the same relationship between figures R and S and find the missing figure from the options.



Ans: B

[2014]

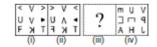
- 49. If 'P' means 'x', 'Q' means '÷', 'R' means '+' and 'S' means '-', then what is the value of 154 Q 14 S 7 P 3 R 25?
 - (A) 35
- (B) 15
- (C) 42
- (D) 25

Ans: B

Solution: $154 \text{ Q} 14 \text{ S} 7 \text{ P} 3 \text{ R} 25 = (154/14) - 7 \times 3 + 25 = 11 - 21 + 25 = 15.$

[2015]

- 50. There is a certain relationship between the figures
 - (i) and (ii). Establish the same relationship between figures (iii) and (iv) by selecting a figure from the options that would replace the question mark in fig. (iii).

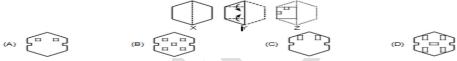


Ans: D

Solution: Relationship between (iii) and (iv) given figures only match with option D as per signs given inside them. So, Option D is the correct option.

[2016]

51. The question consists of a set of three figures X, Y and Z showing a sequence of folding of a piece of paper. Fig (Z) shows the manner in which the folded paper has been cut. These three figures are followed by options from which you have to choose a figure which would most closely resemble the unfolded form of fig. (Z).



Solution: Option C.

[2012]

52. If 'Q' denotes '+', 'J' denotes 'x', 'T' denotes '-' and 'K' denotes ' \div ', then 30 K 2 Q 3 J 6 T 5 = ?

(A) 18

(B) 28

(C) 31

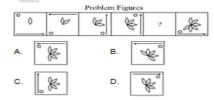
(D) 103

Ans: B

Solution: $30 \div 2 + 3 \times 6 - 5 = 28$.

[2013]

53. Find the missing figure from the options which will continue the series in given Problem Figures.

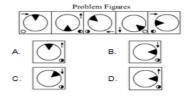


Ans: A

Solution: One leaf is increasing in clock wise succession. So we are to choose between option A and option (C) Now the circle is moving anti-clockwise, so option A becomes the answer.

[2014]

54. Select a figure from the options which will continue the same series as established by the Problem Figures



Ans: D

Solution: The triangle inside the circumference of the circle should be exactly opposite of the 5th figure and the arrow outside circle should be heading upward the correct option is (D).

[2015]

55. Find the missing number.



(A) 5

(B) 6

(C) 8

(D) 12

Ans: A

Solution: In given figure, outer part is multiplication and inner part is addition of two numbers. So, 0uter part $5 \times 10 = 50$ and inner part 5+45=50. Option A is the right answer.

[2016]

56. If in each of the following groups of numbers, last two digits are interchanged and after that they are arranged in descending order, then what will be the first digit of the middle group? 257, 491, 623, 846, 738

(A) 7

(B) 4

(C) 8

(D) 6

Ans: D

Solution: Descending order after interchanging the last two digits is 864, 783, 632, 419, and 275. Therefore the first digit of middle group = 6.

[2012]

57. Find out how many such pairs of letters are there in the given word each of which has as many letters between them in the word as in the English alphabet.

ADVERTISEMENT

(A) Three

(B) Four

(C) Five

(D) More than five

Ans: A

Solution: The letters between d and v is 18, v and e is 17, e and r is 13, t and I is 11, I and s is 10, s And e is 14. so more than 5 pairs are in such a way mentioned in question.

[2013]



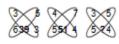
58. Select the figure from the options in which Fig. (X) Is exactly embedded as one of its part.



Ans: D

[2014]

59. Find the missing number, if same rule is followed in all the three figures.



(A) 47

(B) 45

(C) 37

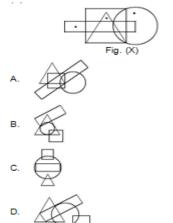
(D) 35

Ans: C

Solution: Diagonally opposite numbers are getting multiplied and their products are getting added and hence $5 \times 5 + 3 \times 4 = 25 + 12 = 37$.

[2015]

60. Which of the following figures represents the same condition of placement of dots as in Fig.? (X)?



Ans: A

Solution: Observing carefully we find that figure of option (A) represents the same placement of dots.

[2016]

61. K is brother of N and X, Y is the mother of N, and Z is the father of K. Which of the following A statement is not definitely true?

(A) K is the son of Z (B) Y is the wife of Z (C) X is the son of Y (D) Z is the father of X

Ans: C

Solution: K is the brother of N and X, Y is the mother of N, and Z is the father of K then the statement which is not definitely true is X is the son of Y that is not mentioned properly.

[2012]



- 62. Q's mother is sister of P and daughter of M. S is daughter of P and sister of T. How is M related to T?
 - (A) Aunt
- (B) Father
- (C) Sister
- (D) Maternal Grandfather or Maternal Grandmother

Ans: D

[2013]

63. The given square grid shows the plan of a playground the bench is north of the toy car.

Bench		R	
	Q	Slide	
Toy-car	Р		
S	Swing		See-saw

The town council wants to plant a tree in the playground the location of the tree is to be north of the swing and South-West of the slide. Identify the position where the tree will be planted

- (A) P
- (B) Q

(C) R

(D) S

Ans: A

Solution: North of Swing and South west of Slide is position P.

[2014]

- 64. If it is possible to make only one meaningful word from the second, the sixth, the seventh, the eighth and the tenth letters of the word PERFORMANCE using each letter only once, then first letter of the word is your answer. If no such word can be formed your answer is X and if more than one such word can be formed your answer is Y.
 - (A) C

(B) R

- (C) Y
- (D) X

Ans: C

Solution: 13: PERFORMANCE

 $2^{nd} = E$, $6^{th} = R$, $7^{th} = M$, $8^{th} = A$, $10^{th} = C$

CREAM and MACER, we can see two meaningful words hence the answer should be Y.

[2015]

65. Count the number of triangles formed in the given figure.



- (A) 11
- (B) 18
- (C) 17
- (D) None of these

Ans: D

Solution: 15 triangles can be formed in the given figure. So, option D is the right answer.

[2016]

66. Which of the following options does not have the same relationship between them as is there between DH: EG?

- (A) VZ: XY
- (B) LP: MO
- (C) BG: CF
- (D) QT: RS

Ans: B

Solution: In Question it is given as DH: EG that can be seen as D EFG H now from EFG, EG is taken to right leaving the middle F. Same is followed in option (B).

[2012]

67. Choose the correct option that will continue the same pattern and replace the question mark in the given series. 3, 12, 27, 48, 75, 108,?

- (A) 147
- (B) 162
- (C) 183
- (D) 192

Ans: A

Solution: Starting from addition of 9, each time 6 more than the previous add on is being done.

	<u> </u>			,		
+	9 +1	5 +2	21	+27	+ 33	+39
3	12	27	48	75	108	147

[2013]

68. Count the number of circles used to draw the given figure.



- (A) 20
- (B) 21
- (C) 25
- (D) 17

Ans: B

Solution: Total numbers of circles are 21.

[2014]

69. If in a certain code language, MANGO is coded as 31–1–41–7–51, then how will LEAF be coded in that language?

- (A) 21–10–8–9
- (B) 21–10–9–8
- (C) 21-5-6-1
- (D) 21-5-1-6

Ans: D

Solution: A is common in both MANGO and LEAF; the corresponding code for A is 1. It matches with the option (D) Hence correct answer is 21-5-1-6.

[2015]

70. If 'A \triangle B' means 'A is the brother of B', 'A # B' means 'A is the father of B' and 'A \times B' means 'A is the mother of B'. Then, which of the following means 'R is the son of M'?

- (A) $M \Delta R \# S$
- (B) M # S \times R
- (C) M # S # R
- (D) $M \times R # S$

Ans: D

Solution: A \times B means A is the mother of (B) M \times R means M is the mother and R is the son of M. So, option D is the right answer.

[2016]

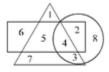
- 71. Some of the letters are missing which are given in that order as one of the options below it. Choose the correct option. a __ n __ b __ _ ncb __ _ ncb
 - (A) abbbcc
- (B) abcbcb
- (C) abcaba
- (D) bcabab

Ans: D

Solution: a _ n _ b _ _ ncb _ _ ncb, then the missing letters are bcabab.

[2012]

72. The triangle represents females, rectangle represents housewife and circle represents school teachers, then the number representing females who are school teachers but unmarried is?



(A) 2

(B) 4

(C)3

(D) 8

Ans: C

Solution: From the figure number 3 is inside the circle and triangle not in rectangle.

[2013]

73. Two rows of numbers are given. The resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered The operations of numbers progress from left to right.

Rules:

- (i) If an even number is followed by another even number, they are to be added
- (ii) If an even number is followed by a prime number, they are to be multiplied
- (iii) If an odd number is followed by an even number, the even number is to be subtracted from the odd number.
- (iv) If an odd number is followed by another odd number, the first number is to be added to the square of The second number.
- (v) If an even number is followed by a composite odd number, the even number is to be divided by the odd number.

36	13	39
77	30	7

Which will be the outcome if the resultant of the second row is divided by the resultant of the first row?

- (A) 12
- (B) 16
- (C) 8

(D) 6

Ans: C

Solution: According to the question we can form the following table

1 st Number	2 nd Number	Operation/Process to be done
Even 1	Even 2	Add
Even	Prime	Multiply
Odd	Even	Subtract as Odd - Even
Odd 1	Odd 2	Odd 1 + Square of Odd 2
Even	Composite Odd	Even/Composite Odd

Applying the above rule for the given rows, we get

Row 1: $(36 \times 13 = 468) / 39 = 12$

Row 2: (77 - 30 = 47) + square of 7 = 47 + 49 = 96

Now, Row 2/Row 1 = 96/12 = 8

[2014]

74. A cube of side 10 cm is colored red with a 2 cm wide green strip along all the sides on all the faces. The cube is cut into 125 smallest cubes of equal size. How many cubes have at least two green faces?

(A) 8

(B) 27

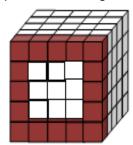
(C) 44

(D) 63

Ans: C

Solution: 125 equal cubes can be cut from a 10cm big cube if the edge of one cube is 2cm.

A depiction of the figure:



[2015]

75. Select the correct water image of Fig. (X) from the given options.







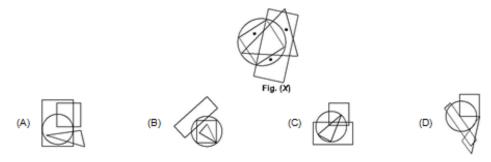


Ans: B

Solution: Figure B is vertically symmetric and hence that is an answer.

[2016]

76. Select a figure from the options which satisfies the same conditions of placement of the dots as in figure (X)?



Ans: D

Solution: The figure which satisfies the same conditions of the placement of the dots is option D.

[2012]

77. If the third, fourth, fifth, seventh and tenth letters of the word PERSONALITY forms a meaningful word then first letter of the word is the answer. If no word is possible, then 'X' is the answer and if more than one such word is formed, then 'M' is the answer.

- (A) R
- (B) X

(C) O

(D) M

Ans: D

[2013]

78. Which of the following Venn diagrams best describes the relationship amongst, 'Milk, Apple and Fruit'?

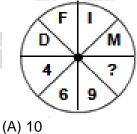


Ans: C

Solution: Apple is a Fruit and Milk is different one. So, option C is the correct one.

[2016]

79. Find the missing term.



(B) 13

- (C) 12
- (D) 14

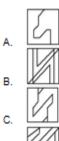
Ans: B

Solution: M is the 13th term in alphabet so the missing term is 13.

[2012]

80. Select the figure from the options which is embedded in the given Fig. (X).

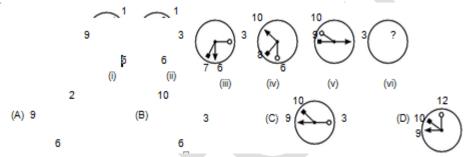




Ans: C

[2013]

81. On a peculiar clock shown here, the hands move in an unusual way. Discover the system as revealed from the five positions, (i to v) shown below, and find the next position to be formed in fig (VI) from the options given below.



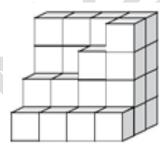
Ans: D

Solution: The next position for figure (VI) is option (D).

[2012]

82. The number of cubes required to make the given

Figure is _____



(A) 31 **Ans**: A

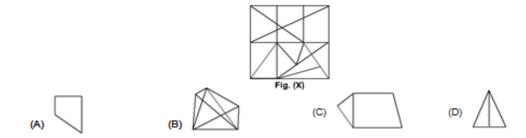
(B) 32

(C) 33

(D) 34



83. Select a figure from the options, which is not embedded in the given figure (X).



Ans: B

Solution: The figure which is not embedded is option (B)

[2012]

84. How many 8's are there in the following number series each of which is exactly divisible by it's immediately preceding and also divisible by its immediately succeeding number?

824517284842282698454832843183

- (A) 1
- (B) 4

(C) 3

(D) 2

Ans: B

Solution: There are 4, 8 s surrounded by 2 and 4.

[2013]

85. How many triangles are there in the figure below?



(A) 5

(B)6

(C) 8

(D) 10

Ans: B

Solution: Number of triangles = 5 outside + one inside = 5 + 1 = 6.

[2012]