## Section 1 - Analytical Reasoning Skills Part A

No. of Questions: 30

1) Select one of the following four options that will make the 2 nd pair analogous to the 1 st pair given

Easy : Simple :: Hard :?
A) Horrible
B) Scary
C) Difficult
D) Impossible
2) Select one of the following four options that will make the 2 nd pair analogous to the 1 st pair given BOOK:OBKO :: MARINE: ?
A) AMIREN
B) MIRENA
C) AIMREN
D) MRINEA
3) Harish is taller than Ramesh, but shorter than Mihir. Mihir is shorter than Puneet. Who among these four is shortest?
A) Harish
B) Ramesh
C) Mihir
D) Puneet
4) Six books are placed from left to right on a shelf. History book is neither on extreme left nor on extreme right. English book is to the immediate left of Science book. Geography book has three books to its right side. Between Science and Sociology books, there are exactly two books. Remaining one book is of Arts. How many books are there to the right of History book?
A) 1
B) 2
C) 3
D) 4
5) Six books are placed from left to right on a shelf. History book is neither on extreme left nor on extreme right. English book is to the immediate left of Science book. Geography book has three books to its right side. Between Science and Sociology books, there are exactly two books. Remaining one book is of Arts. Which book is on leftmost side?
A) English
B) Geography
C) Sociology
D) Science
6) Hema has two sons, Rajiv and Sanjeev. What is the relation of Rajiv's son with Hema's husband?
A) Son
B) Nephew
C) Grandson
D) Son in Law
7) Kiran is the mother of Harish and Pooja. Pooja has two daughters, Drishti and Shrishti. Harish is the husband of Mamta. What is the relation of Mamta with Drishti ?
A) Mother
B) Sister in Law
C) Grandmother
D) Aunt
8) If GREAT is coded as HSFBU, and SUM is coded as TVN, then the word PARODY will be coded as
A) QBSEPZ
B) QCRPEZ
C) QBSPCX
D) QBSPEZ
9) If TREE is coded as 9000, and JAR is coded 180, then the word JOKER will be coded as
A) 137800
B) 148500
C) 124000
D) 153890
10) In a coding language, COMMON is coded as DQPQTT and PAST is coded as QCVX. What will be the code for the word TIGER ?
A) UKJIW
B) UKIJV
C) UKJIV
D) UJKVI
11) Here are given a set of statements
A) Manish runs faster than Suresh.
B) Both Vibha and Lata run faster than Manish.

Which of the statements given in options can be deduced from these two statements?
A) Vibha runs faster than Lata
B) Lata runs faster than Suresh
C) Suresh runs faster than Manish
D) Lata runs faster than Vibha
12) Four patterns are given and one among them is different. Which of these is different from the others?
a) BAAABCCDDFE
b) BAAABCCDDFE
c) BAAABCCCDFE
d) BAAABCCDDFE
A) a
B) b
C) c
D) d
13) Four patterns are given and one among them is different. Which of these is different from the others?
a) $U \& \wedge R T 89 \#$
b) U\&\%RT89\#
c) U\&\%RT89\#
d) U\&\%RT89\#
A) a
B) b
C) c
D) d
14) Here are given four expressions, and three of them evaluate to give same result, while one gives a different result. Which of these gives a different result?
a) $13+12 \times 7$
b) $450 / 5+7$
c) $3 \times 3 \times 3+4 \times 4 \times 4+6$
d) $4 x 4+5 \times 5+6 x 6+22$
A) a
B) b
C) c
D) d
15) Below is given a pair of statements and a question. Choose the statement(s) required to answer the question by selecting a relevant option.

Statements:
A) Today is NOT Thursday.
B) Tomorrow is NOT Saturday.

Question : Is it Friday today?
A) Statement $A$ alone is sufficient
B) Statement $B$ alone is sufficient
C) Both statements $A$ and $B$ together are sufficient
D) Question cannot be answered even by using both the statements
16) Using the given statement, which of the options can be inferred to be true?

Statement: Anjali is a girl and has three sisters and four brothers.
A) Each of Anjali's brothers has three sisters
B) Each of Anjali's brothers has four sisters
C) Each of Anjali's sisters has two brothers
D) Each of Anjali's sisters has five brothers
17) Using the given statement, which of the options can be inferred to be false?

Statement: Ratna is the sister of the father of Hema's brother.
A) Ratna is a female
B) Ratna has at least one brother
C) Ratna is the mother of Hema
D) Hema has at least one brother
18) Using the given statements, which of the options can be inferred to be true?

Statement A : P is standing at the 5th position from the front in a row and R is standing at the last position in the row.

Statement $\mathrm{B}: \mathrm{Q}$ is standing exactly between P and R .
A) Position of $P$ is 17 th from last
B) Position of $Q$ is 9th from front
C) There are at least 7 persons in the row
D) There are at most 21 persons in row
19) Which of these inferences can be made from the given statement?

Statement: In my neighbourhood area in city London, there is a supermarket in almost every lane.
A) London is a big city
B) Weather in London is usually humid
C) In London city, finding a supermarket in nearby vicinity is easy
D) Supermarkets in London have all the items one requires
20) Which of these inferences can be made from the given statements?

Statements:
i) The sea water is NOT consumable directly for humans
ii) More than three fourth of water on earth is sea water
A) There is not enough water for humans on earth
B) Animals and fishes also require fresh water for consumption
C) Earth is the only planet with fresh water
D) Less than $25 \%$ of water on earth is directly fit for human consumption
21) Which of these figures is odd one out?

A) 1
B) 2
C) 3
D) 4
22) A rope takes one hour to burn when it is ignited from one end. If this rope is folded into half and then ignited from both the ends, then how much time will it take to burn?
A) 10 minutes
B) 30 minutes
C) 15 minutes
D) 20 minutes
23) Two concentric circles are drawn. One point is taken inside the inner circle, two points are taken between inner and outer circle, and one point is taken outside the outer circle, such that no three of these points are collinear. Joining these points, a quadrilateral is drawn. How many sides of this quadrilateral will intersect one or more of the circles?
A) Exactly 1 side
B) Exactly 2 sides
C) Either 2 or 3 sides
D) Either 3 or 4 sides
24) Which is the missing letter in the series given below?

C, E, H, $\qquad$ , Q, W.
A) $L$
B) M
C) N
D) K
25) What will be the next term in the series given below?
$\mathrm{Z}, \mathrm{YX}, \mathrm{WVU}, \ldots .$. ?
A) TSRP
B) PQRS
C) $T S R Q$
D) QRST
26) A series is written as $4,1,9,8,16,27,25,64,36,125,49,216, \ldots$. .How many terms of this series will have exactly 4 digits?
A) 68
B) 72
C) 76
D) 80
27) Which three of the given four figures are similar in a particular way?

A) 1, 2 and 3
B) 1, 2 and 4
C) 1, 3 and 4
D) 2, 3 and 4
28) Which three of the given four figures are similar in a particular way?

|  |  |  |  |  |  | 0 x 0 |  |  | $\bigcirc$ | x \| x |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| x | 0 | $\bigcirc$ | x | X | x | - | X | O | o | 0 | x |
| - | $\bigcirc$ | x | x | - | - |  | O | x |  | $\bigcirc$ | - |

A) 1, 2 and 3
B) 1, 2 and 4
C) 1, 3 and 4
D) 2, 3 and 4
29) In which of the four images on the right, we can find the pattern given on the left?

A) 1
B) 2
C) 3
D) 4
30) In which of the four images on the right, we can find the pattern given on the left?

A) 1
B) 2
C) 3
D) 4

## Section 2 - Analytical Reasoning Skills Part B

No. of Questions: 30
31) Select one of the following four options that will make the 2nd pair analogous to the 1st pair given

Fall : Gravity :: Skid : ?
A) Electricity
B) Fly
C) Scary
D) Slippery
32) Select one of the following four options that will make the 2nd pair analogous to the 1st pair given

345 : 144 :: 238 :?
A) 256
B) 225
C) 196
D) 169
33) Around a round table with six chairs, $P, Q, R, S, T$ and $U$ are sitting. $Q$ and $R$ are sitting opposite to each other. $U$ is sitting to the immediate left of $S$. $R$ and $U$ are NOT sitting next to each other. Between $T$ and R , one person is sitting. Which of these pairs is sitting opposite to each other?
A) $P$ and $T$
B) $P$ and $S$
C) $S$ and $T$
D) $U$ and $R$
34) Around a round table with six chairs, P, Q, R, S, T and U are sitting. $Q$ and $R$ are sitting opposite to each other. $U$ is sitting to the immediate left of $S$. $R$ and $U$ are NOT sitting next to each other. Between $T$ and $R$, one person is sitting. Who is sitting to the immediate left of $T$ ?
A) $P$
B) $Q$
C) $R$
D) $\cup$
35) Pointing at Ramesh, Shruti said, "He is the brother of my son's father". What is the relation of father of Ramesh with Shruti ?
A) Son
B) Father in Law
C) Nephew
D) Uncle
36) Kiran is the mother of Harish and Pooja. Pooja has two daughters, Drishti and Shrishti. Harish is husband of Mamta. Ramesh is the husband of Kiran. What is the ralation of Harish with brother of Ramesh?
A) Son
B) Son in Law
C) Nephew
D) Brother
37) In a coding language, a word is coded as product of number of unique vowels and number of unique consonants in it. What will be the code for the word SITUATIONAL?
A) 12
B) 16
C) 20
D) 24
38) If SLATED is coded as TKBSFC and RIDE is coded as SHED, then which of these words would be coded as MDWDMR?
A) LIVELY
B) LEMURS
C) LEVELS
D) LEVIED
39) Here are given a set of statements
A) All boards are woods.
B) Some boards are metal.

Which of the statements given in options can be deduced from these two statements?
A) All metals are boards
B) No wood is metal
C) All metal are woods
D) Some woods are metal
40) Here are given a set of statements
A) Number $P$ is prime.
B) P is 1 more than a perfect square of 3 digits and is lesser than 200.
C) Unit digit of P is 2 less than the ten's digit and 6 more than the hundred's digit.

Which of the statements given in the options can be deduced from these statements?
A) P-2 is also prime
B) $P<120$
C) Sum of the digits of $P$ is 17
D) Sum of the digits of $P$ is 15
41) Four patterns are given and one among them is different. Which of these is different from the others?
a) QWERTY\&^\%\$\#
b) QWERTY^\&\%\$\#
c) QWERTY\&^\%\$\#
d) QWERTY\&^\%\$\#
A) a
B) b
C) c
D) d
42) Here are given four expressions, and three of them evaluate to give same result, while one gives a different result. Which of these gives a different result?
a) $10 \times 10 \times 10+9 \times 9 \times 9$
b) $8 \times 8 \times 8+10 \times 10 \times 10+5 \times 5 \times 5$
c) $12 \times 12 \times 10+17 \times 17$
d) $12 \times 12 \times 12+$ 1x1x1
A) a
B) b
C) c
D) d
43) Below is given a pair of statements and a question. Choose the statement(s) required to answer the question by selecting a relevant option.

Statements:
A) $J$ is the brother of $K$
B) H is the son of K

Question : How is K related to H ?
A) Statement A alone is sufficient
B) Statement $B$ alone is sufficient
C) Both statements $A$ and $B$ together are sufficient
D) Question cannot be answered even by using both the statements
44) Below is given a pair of statements and a question. Choose the statement(s) required to answer the question by selecting a relevant option.

Statements:
A) The time is $8: 30$ PM now.
B) Today is Sunday.

Question :What is the angle between the minute hand and hour hand of clock at present?
A) Statement $A$ alone is sufficient
B) Statement $B$ alone is sufficient
C) Both statements $A$ and $B$ together are sufficient
D) Question cannot be answered even by using both the statements
45) Below is given a pair of statements and a question. Choose the statement(s) required to answer the question by selecting a relevant option.

Statements:
A) In a row, 17 persons are standing in between $P$ and $Q$.
B) $P$ is standing at 15 th position from the front.

Question : What is the position of $Q$ from the front?
A) Statement $A$ alone is sufficient
B) Statement $B$ alone is sufficient
C) Both statements $A$ and $B$ together are sufficient
D) Question cannot be answered even by using both the statements
46) Using the given statements, which of the options can be inferred to be true?

Statement A: Madhu is the mother of the daughter of the brother of Ramesh.
Statement B: Lata is the mother of Ramesh.
A) Lata is the aunt of Madhu
B) Madhu is the daughter in law of Lata
C) Ramesh is the brother of Madhu's daughter
D) Ramesh is husband of Madhu
47) Which of these inferences can be made from the given statement?

Statement: It rains almost daily in the state of Nebraska.
A) Most commuters in Nebraska always carry an umbrella with them.
B) Nebraska is close to sea.
C) It does not rain in Nebraska in the month of June.
D) Rainfall makes commutation difficult.
48) Which of these inferences can be made from the given statement?

Statement: I have travelled in 7 trains till now in Germany, and none of them has an average speed below 200 kmph
A) I travel often to Germany
B) The number of trains that run in Germany is in thousands
C) Almost every train in Germany runs at an average speed above 180kmph
D) Some trains in Germany also go to neighouring countries
49) Which of these inferences can be made from the given statements?

Statements:
i) Packed juices have a high sugar content
ii) Fresh juice have a low sugar content
A) Sugar intake can lead to major health problems
B) There is scarcity of hospitals that deal with diabetic patients
C) For a person controlling sugar intake, fresh juice is a better option than packed juice
D) Watermelon juice is better than Orange juice
50) Which of these figures is odd one out?

A) 1
B) 2
C) 3
D) 4
51) Which of these figures is odd one out?

| 8 | 2 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | 5 | 4 |
| 1 | 7 | 9 | | 6 | 1 |
| :--- | :--- |

A) 1
B) 2
C) 3
D) 4
52) A car has a four digit number, which is a perfect cube as well as a palindrome. The sum of its digits is 8 . What is the product of digits of the car number?
A) 4
B) 9
C) 16
D) 144
53) A pen costs 10 rupees. Returning a used pen and buying a new pen in exchange costs 6 rupees. What is the maximum number of pens that he can buy in 46 rupees?
A) 3
B) 4
C) 6
D) 7
54) What will be the next term in the series given below?

D24F, E35G, F48H, $\qquad$ ?
A) G36I
B) G54I
C) G 60 H
D) G63I
55) Select the figure which will continue the figural series given below:

A)

B)

C)

D)

56) Which three of the given four figures are similar in a particular way?

A) 1, 2 and 3
B) 1, 2 and 4
C) 1, 3 and 4
D) 2, 3 and 4
57) Which three of the given four figures are similar in a particular way?

A) 1, 2 and 3
B) 1,2 and 4
C) 1, 3 and 4
D) 2, 3 and 4
58) In which of the four images on the right, we can find the pattern given on the left?

A) 1
B) 2
C) 3
D) 4
59) By rotating the figure given on the left, which of the four figures given on the right can be formed?

A) 1
B) 2
C) 3
D) 4
60) By rotating the figure given on the left, which of the four figures given on the right can be formed?

A) 1
B) 2
C) 3
D) 4

## Section 3 - Quantitative Skills Part A

No. of Questions: 30
61) What will be the last digit of the average of the first five consecutive natural numbers of two digits?
A) 1
B) 2
C) 3
D) 4
62) The price of rock salt is ₹ 100 per kg. The price of pink salt is ₹ 120 per kg . The price of white salt is ₹ 20 per kg .3 kg of each are taken and mixed together. What will be the average price per kg of the mixture?
A) ₹ 72
B) ₹ 75
C) ₹ 80
D) ₹ 90
63) A sum of ₹ 30,000 is invested at compound interest of $10 \%$ per annum for 3 years. How much interest will be earned?
A) ₹ 9,930
B) ₹ 9,730
C) ₹ 9,530
D) ₹ 9,370
64) If a sum of money is invested at compound interest instead of simple interest for 2 years at a rate of interest of $20 \%$ per annum, ₹ 320 more interest is earned. What is the sum of money?
A) ₹ 8,000
B) ₹ 9,600
C) ₹ 10,800
D) ₹ 12,000
65) How many digits would be there after decimal point in the term $6.7 \times 8.34 \times 2.9$ ?
A) 4
B) 5
C) 6
D) 1
66) What will be the value of $0.7 \times 0.0007 \times 3000000 \times 0.003 ?$
A) 2.1
B) 4.41
C) 44.1
D) 1.21
67) A triangle $A B C$ is formed by joining the points $A, B$ and $C$ lying on a circle. The centre of circle is point $P$. If angle ABC measure 40 degrees, then what will be the measure of angle APC?
A) 40 degrees
B) 80 degrees
C) 60 degrees
D) 75 degrees
68) A square $P Q R S$ has a side length of 20 cm . Mid points of adjacent sides $P Q$ and $Q R$ are $C$ and $D$, respectively. What will be the area of triangle CDS?
A) $100 \mathrm{sq} . \mathrm{cm}$
B) $120 \mathrm{sq} . \mathrm{cm}$
C) $137.5 \mathrm{sq} . \mathrm{cm}$
D) $150 \mathrm{sq} . \mathrm{cm}$

Directions for Questions 69-70:
Read the following information and answer the questions that follow:
69) In which match Rohit scored same number of runs as the number of balls faced?

|  | Kohli |  | Rohit |  | Rahane |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Runs scored | Balls faced | Runs scored | Balls faced | Runs scored | Balls faced |
| Match1 | 32 | 50 | 17 | 12 | 112 | 98 |
| Match2 | 0 | 3 | 97 | 78 | 12 | 27 |
| Match 3 | 43 | 41 | 28 | 28 | 90 | 91 |
| Match4 | 2 | 8 | 19 | 12 | 47 | 52 |

A) Match 1
B) Match 2
C) Match 3
D) Match 4
70) For which of them, the ratio of total runs scored to total balls faced is highest?

|  | Kohli |  | Rohit |  | Rahane |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Runs scored | Balls faced | Runs scored | Balls faced | Runs scored | Balls faced |
| Match1 | 32 | 50 | 17 | 12 | 112 | 98 |
| Match2 | 0 | 3 | 97 | 78 | 12 | 27 |
| Match 3 | 43 | 41 | 28 | 28 | 90 | 91 |
| Match4 | 2 | 8 | 19 | 12 | 47 | 52 |

A) Kohli
B) Rohit
C) Rahane
D) Equal for all three of them
71) If + means $x$, - means $/, /$ means + and $x$ means - , then what will be the value of $(67 \times 13)-18 / 65+2$ ?
A) 133
B) 139
C) 145
D) 151
72) What will be the last digit of the expansion of $347 \times 781 \times 639+723 \times 782 \times 436$ ?
A) 4
B) 5
C) 7
D) 9
73) Which of these could be the divisibilty test of 24 for a number?
A) It should be divisible by both 6 and 4
B) It should be divisible by both 2 and 12
C) It should be divisible by both 3 and 8
D) Cannot be determined
74) How many digits would there be in the expansion of $443 \times 401 \times 427 \times 409$ ?
A) 10
B) 11
C) 12
D) 13
75) A 4-digit number has three different digits. The sum of first and last digits is 7 . None of the digits is 5 . Three of its digits are even. First and third digits are the same. The product of second and third digits is 8 . What is the remainder left when this number is divided by 8 ?
A) 1
B) 3
C) 5
D) 7
76) By how much percentage 75 must be decreased so that it becomes 63.75 ?
A) 10
B) 15
C) 20
D) 17.5
77) In a library, $12 \%$ of total books are of literature. Out of remaining, $40 \%$ are science books and remaining 1056 are biographies. How many books are there in total in library?
A) 1800
B) 2400
C) 2000
D) 1600
78) The number of flowers in a graden is 1200 . The number grew by $10 \%$ in a week. Then, in next week, the number reduced by $20 \%$. Then, in next week, the number grew by $50 \%$. How many flowers would be there in total now?
A) 1584
B) 1612
C) 1728
D) 1894
79) In a class, $40 \%$ of students are boys. After 6 girls and 14 boys left the class, $75 \%$ students are girls. What will be the percentage of boys in the class, if 10 boys join?
A) 20
B) 40
C) 50
D) 25
80) A book is sold at a selling price of $₹ 400$. If the cost price is ₹ 50 more than half the selling price, then what is the profit percentage?
A) 20
B) 36
C) 40
D) 60
81) Ram sold a shirt to Neeraj at 20\% profit. Neeraj further sold this shirt to Rahul at ₹ 432 and thereby incurred $10 \%$ loss. At what price did Ram bought the shirt?
A) ₹ 360
B) ₹ 392
C) ₹ 400
D) ₹ 500
82) The ratio of the angles in a quadrilateral is $4: 7: 5: 2$. What is the measure of the largest of these angles?
A) 120 degrees
B) 130 degrees
C) 140 degrees
D) 154 degrees
83) In an office with 60 staff, the ratio of male to female staff is $7: 8$. How many male employees to be recruited so that the ratio of male to female staff becomes 2:1?
A) 12
B) 24
C) 36
D) 42
84) What will be the third proportion to 368 and 552 ?
A) 718
B) 803
C) 746
D) 828
85) In an alloy of Zinc and Copper, the ratio of Zinc and Copper is $3: 2.70 \mathrm{~kg}$ of this alloy is taken. Through a chemical process, 30 kg of this mixture is taken out such that the removed mixture has Zinc and Copper in the ratio $2: 1$. What will be the ratio of Zinc and Copper in the remaining mixture?
A) $5: 4$
B) $11: 9$
C) $11: 7$
D) $9: 7$
86) A train of length 300 metres runs at a speed of $72 \mathrm{~km} / \mathrm{hr}$. In how much time it will cross a platform of length 200 metres?
A) 20 seconds
B) 25 seconds
C) 30 seconds
D) 36 seconds
87) Mohan and Sohan are running around a circular track. They decide to run a race such that one who finishes 6 rounds of the track first wins the race. They are running in opposite directions. The ratio of speeds of Mohan and Sohan is $1: 2$. How many times will they cross each other during the race (excluding the beginning and end of race)?
A) 0
B) 4
C) 6
D) 8
88) A boy eats 12 burgers in an hour. How many burgers will 8 boys eat in 20 minutes?
A) 24
B) 30
C) 32
D) 36
89) A water tank gets filled in 2 hours when it is filled at 2 litres per minute. If there is a leakage at the bottom of tank that drains water at 1 litre every 2 minutes, then how much time will it take to fill the tank?
A) 2 hours and 30 minutes
B) 2 hours and 40 minutes
C) 3 hours
D) 3 hours and 20 minutes
90) If + means $x$, - means + and $x$ means - , then what will be the value of $22+7-12 \times 60$ ?
A) 68
B) 87
C) 101
D) 106

## Section 4 - Quantitative Skills Part B

No. of Questions: 30
91) In a group of 5 persons, the average height is 150 cm . The average height increases to 155 cm when a new person is added to the group. What is the height of the new person?
A) 165 cm
B) 180 cm
C) 174 cm
D) 159 cm
92) What will be the average of the squares of first five prime numbers of two digits?
A) 293.8
B) 299.1
C) 297.4
D) 295.6
93) The average of three natural numbers $X, Y$ and $Z$ is 27. The average of $X$ and $Y$ is 22. $X$ is a multiple of both 4 and 5 and is less than 30 . What is the value of average of $X Y$ and $Y Z$ ?
A) 512
B) 632
C) 684
D) 708
94) ₹ $2,00,000$ is invested for 4 years at yearly compounded interest such that the rate of interest is $10 \%$ per annum for first 2 years and $30 \%$ per annum for last 2 years. What will be the sum of money after 4 years?
A) ₹ $3,47,810$
B) ₹ $3,78,280$
C) ₹ $3,99,990$
D) ₹ $4,08,980$
95) In a scheme, the interest is compounded half yearly. The rate of interest is $20 \%$ per annum. If ₹ $4,00,000$ is invested in this scheme, then how much interest will be earned in two years?
A) ₹ $1,67,320$
B) ₹ $1,73,920$
C) ₹ $1,85,640$
D) ₹ $1,91,430$
96) A sum of money is divided into two parts in the ratio 3:2. Larger part is invested at compound interest at $10 \%$ per annum for 3 years. Smaller part is invested at compound interest at $20 \%$ per annum for 2 years. Total interest earned is ₹ 9,365 . What was the sum of money?
A) ₹ 20,000
B) ₹ 24,000
C) ₹ 25,000
D) ₹ 30,000
97) One-third of a cake is eaten. Then, one-fourth of the remaining cake is eaten. Then, three-fifth of the remaining cake is eaten. What fraction of the total cake is left now?
A) 0
B) $1 / 7$
C) $1 / 5$
D) $2 / 5$
98) In a fraction, the numerator is 2 less than the denominator. If their squares are added together, we get 290. What is the sum of the numerator and the denominator?
A) 16
B) 18
C) 22
D) 24
99) In a fraction, both the numerator and denominator are perfect squares. The sum of numerator and denominator is also a perfect square. If numerator is subtracted from denominator, we get 527. The last digit of numerator is 9 . What is the value of product of numerator and denominator?
A) 4824
B) 28224
C) 117624
D) 235824
100) The length of each side of a rhombus is 26 cm . If the length of one of its diagonals is 20 cm , then what will be the length of its other diagonal?
A) 36 cm
B) 48 cm
C) 54 cm
D) 24 cm
101) A spherical ball of radius 42 cm has a cubical cavity of side length 6 cm inside it. Inside the cubical cavity, there is a spherical ball of radius 2.1 cm . Both these balls are made of a metal having a density of 0.1 grams per cubic cm . What amount of metal has been used approximately? (use $\Pi=22 / 7$ )
A) 27 kg
B) 29 kg
C) 31 kg
D) 33 kg
102) A circle of radius 20 cm with centre $P$ lies completely inside another circle of radius 50 cm with centre $Q$, such that they touch at excatly one point. The centres of these circles are joined to form a line segment $P Q$. From $P$ and $Q$, perpendiculars are drawn on the same side such that perpendicular from $P$ intersects small circle at $S$ and perpendicular from $Q$ intersects large circle at $R$. What will be the area of quadrilateral PQRS?
A) $1050 \mathrm{sq} . \mathrm{cm}$
B) $1200 \mathrm{sq} . \mathrm{cm}$
C) $1440 \mathrm{sq} . \mathrm{cm}$
D) $1600 \mathrm{sq} . \mathrm{cm}$
103) If + means $x$, - means /, / means + and $x$ means - , then what will be the value of $600-20+4 \times 13$ ?
A) 103
B) 107
C) 111
D) 119
104) If + means $x$, - means $/, /$ means + and $x$ means - , then what will be the value of $(17+17+17 \times 13)-$ $(10+10)$ ?
A) 41
B) 43
C) 37
D) 49
105) If + means $x$, - means /, / means + and $x$ means - , then what will be the value of $((77 / 13)-18)-2 / 21$ ?
A) 23.5
B) 24.5
C) 25.75
D) 26.75
106) What will be the remainder left when $6782^{5623}$ is divided by 5 ?
A) 1
B) 2
C) 3
D) 4
107) A number $P$ is 3 more than $10 \%$ of the smallest 4-digit natural number. By how much $P$ should be increased, so that $10 \%$ of it, is the smallest prime number of two digits?
A) 3
B) 5
C) 7
D) 9
108) An item marked at ₹ 300 is sold after a $10 \%$ discount. Still it earns a profit of $8 \%$. What should be the discount percentage so as to earn a profit of $14 \%$ ?
A) 10
B) 5
C) 12.5
D) 7.5
109) Two mobile phones with the same cost price are sold for $₹ 4,800$ and $₹ 7,500$, such that one earns a profit of $25 \%$, while other results in a loss. What is the total profit percentage earned by the seller?
A) No profit no loss
B) 2.5
C) 5
D) 7.5
110) The cost price of an item is ₹ 4,000 . What should be the marked price (approximately) of item so that even after giving successive discounts of $20 \%$ and $30 \%$, a profit of 25 percent is earned?
A) ₹ 8,157
B) ₹ 8,391
C) $₹ 8,719$
D) ₹ 8,929

## Directions for Questions 111-113:

Read the following information carefully and answer the question that follows.
111) Which batsmen never faced more balls than the runs he scored?

|  | Kohli |  | Rohit |  | Rahane |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Runs scored | Balls faced | Runs scored | Balls faced | Runs scored | Balls faced |
| Match 1 | 32 | 50 | 17 | 12 | 112 | 98 |
| Match 2 | 0 | 3 | 97 | 78 | 12 | 27 |
| Match 3 | 43 | 41 | 28 | 28 | 90 | 91 |
| Match 4 | 2 | 8 | 19 | 12 | 47 | 52 |

A) Kohli
B) Rohit
C) Rahane
D) Cannot be determined
112) In how many matches Rahane scored more runs than the balls he faced?

|  | Kohli |  | Rohit |  | Rahane |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Runs scored | Balls faced | Runs scored | Balls faced | Runs scored | Balls faced |
| Match1 | 32 | 50 | 17 | 12 | 112 | 98 |
| Match2 | 0 | 3 | 97 | 78 | 12 | 27 |
| Match 3 | 43 | 41 | 28 | 28 | 90 | 91 |
| Match4 | 2 | 8 | 19 | 12 | 47 | 52 |

A) 1
B) 2
C) 3
D) 0
113) In match 3 , if these three scored $50 \%$ of the total runs scored by the team, then how many runs did the team score?

|  | Kohli |  | Rohit |  | Rahane |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Runs scored | Balls faced | Runs scored | Balls faced | Runs scored | Balls faced |
| Match 1 | 32 | 50 | 17 | 12 | 112 | 98 |
| Match 2 | 0 | 3 | 97 | 78 | 12 | 27 |
| Match 3 | 43 | 41 | 28 | 28 | 90 | 91 |
| Match 4 | 2 | 8 | 19 | 12 | 47 | 52 |

A) 288
B) 306
C) 318
D) 322
114) A man has to run a distance of 9 km in an hour. He ran at a speed of $2 \mathrm{~m} / \mathrm{sec}$ for 20 minutes. At what speed should he run for the remaining time so as to complete the distance in the given time?
A) $2.25 \mathrm{~m} / \mathrm{sec}$
B) $2.5 \mathrm{~m} / \mathrm{sec}$
C) $2.75 \mathrm{~m} / \mathrm{sec}$
D) $3 \mathrm{~m} / \mathrm{sec}$
115) Two trains of lengths 300 metres and 500 metres are running at speeds of $90 \mathrm{~km} / \mathrm{hr}$ and $54 \mathrm{~km} / \mathrm{hr}$, respectively. They are running in same direction and the smaller train is 400 metres behind larger train. In how much time will smaller train overtake the larger train?
A) 30 seconds
B) 45 seconds
C) 2 minutes
D) 3 minutes
116) A river of width 400 metres is flowing at a speed of $5 \mathrm{~m} / \mathrm{sec}$. The total time taken by a boat to go 200 metres upstream and then 300 metres downstream is 1 minute. What is the speed of the boat in still water?
A) $10 \mathrm{~m} / \mathrm{sec}$
B) $12.5 \mathrm{~m} / \mathrm{sec}$
C) $15 \mathrm{~m} / \mathrm{sec}$
D) $7.5 \mathrm{~m} / \mathrm{sec}$
117) Karim can finish a work alone in $T$ days. Manu can do so in $2 T$ days. If they work together, they finish the work in 6 days. What is the value of $T$ ?
A) 8
B) 9
C) 10
D) 12
118) 6 men can build a wall in 2 days. 8 women can build this wall in 3 days. In how many days the wall gets build if 3 men and 6 women work together?
A) 1
B) 2
C) 3
D) 4
119) Ram can finish the work alone in 10 days, while Shyam alone can do so in 20 days. They start a work on Sunday. Ram works on Sunday, Monday, Wednesday and Friday. Shyam works on Sunday, Tuesday, Thursday and Saturday. On which day of the week the work gets finished?
A) Monday
B) Tuesday
C) Wednesday
D) Thursday
120) In a mixture of oil and water, there is 12 litres more oil than water. The ratio of oil and water is $5: 3$, when volume is measured. The density of oil is three times that of water. If 4 litres of oil is removed from this mixture, then what will be the ratio of weights of oil and water in the resultant mixture?
A) $7: 2$
B) $9: 2$
C) $13: 3$
D) $15: 4$

## Section 5 - Verbal Skills Part A

No. of Questions: 30
121) Fill in the blanks with the correct Article:

He's got $\qquad$ good reading knowledge of Spanish.
A) an
B) the
C) a
D) No Article
122) Fill in the blanks with the correct Article:

I will pay you double, if you get $\qquad$ work finished by Friday.
A) an
B) a
C) the
D) No Article
123) Fill in the blanks with the correct Article:

They had to trek for $\qquad$ miles through inhospitable countyrside.
A) No Article
B) an
C) a
D) the
124) Fill in the blanks with the correct Article:

She demanded $\qquad$ explanation.
A) an
B) a
C) No Article
D) the
125) Fill in the blanks with the correct Article:

It is time this issue was brought out in $\qquad$ open.
A) a
B) No Article
C) an
D) the
126) Fill in the blanks with the correct Article:
$\qquad$ coastal resorts are deserted in winter.
A) No Article
B) The
C) An
D) A
127) Fill in the blanks with the correct Article:

Her attitude has definitely changed for $\qquad$ better since she started this new job.
A) an
B) a
C) No Article
D) the
128) Fill in the blanks with the correct Preposition:

Her performance $\qquad$ the game impressed everyone.
A) at
B) on
C) in
D) by
129) Fill in the blanks with correct Preposition:

We turned $\qquad$ the gateway $\qquad$ the left.
A) with...on
B) till...at
C) through...on
D) within...by
130) Choose the correct option:

He just lacks $\qquad$ confidence.
A) few
B) a few
C) small
D) a little
131) Choose the correct option:
$\qquad$ of the flowers has its own colour and smell.
A) Each
B) Most
C) All
D) Loads of
132) Choose the correct option:

There's $\qquad$ cake if you'd like another piece.
A) much
B) more
C) most
D) many
133) Choose the correct option:

We saw $\qquad$ birds and animals in the zoo.
A) none
B) much
C) many
D) plenty
134) Choose the correct option:
$\qquad$ them have done their homework.
A) All of
B) Less
C) A few
D) Fewer
135) Choose the correct option:

She is bringing $\qquad$ her colleagues to dinner.
A) enough
B) much
C) any
D) both

Read the passage and answer the questions (136-141):
Astronomers on April 10 unveiled the first photo of a black hole, one of the star-devouring monsters scattered throughout the Universe and obscured by impenetrable shields of gravity. The image of a dark core encircled by a flame-orange halo of white-hot gas and plasma looks like any number of artists' renderings over the last 30 years. But this time, it's the real deal - the first ever image of a black hole was revealed.

Scientists have been puzzling over invisible 'dark stars' since the 18th century, but never has one been spied by a telescope, much less photographed. The super-massive black hole, now immortalised by a farflung network of radio telescopes, is 50 million light-years away in a galaxy known as M87.

Most speculation had centred on the other candidate targeted by the Event Horizon Telescope - Sagittarius A(Sag A), the black hole at the centre of our own galaxy, the Milky Way. Locking down an image of M87's super-massive black hole at such distance is comparable to photographing a pebble on the Moon. European Space Agency astrophysicist Paul McNamara called it an 'outstanding technical achievement'. It was also a team effort. 'Instead of constructing a giant telescope that would collapse under its own weight, we combined many observatories,' said Michael Bremer, an astronomer at the Institute for Millimetric Radio Astronomy.

Over several days in April 2017, eight radio telescopes in Hawaii, Arizona, Spain, Mexico, Chile, and the South Pole zeroed in on Sag A and M87.Knit together 'like fragments of a giant mirror', in Mr. Bremer's words, they formed a virtual observatory some $12,000 \mathrm{~km}$ across - roughly the diameter of Earth. In the end, M87 was more photogenic. Like a fidgety child, Sag A was too 'active' to capture a clear picture, the researchers said.
136) What was revealed by astronomers on April 10?
A) A flame-orange halo
B) White-hot gas and plasma
C) The first ever photo of a black hole
D) One of the star-devouring monsters
137) Choose the synonym of 'impenetrable':
A) Noticeable
B) Impassable
C) Sustainable
D) Flammable
138) What has been puzzling the scientists since the $18^{\text {th }}$ century?
A) Invisible 'dark stars'
B) Light-years
C) The Universe
D) The Milky Way
139) Pick out the antonym of 'fidgety':
A) Happy
B) Sad
C) Restless
D) Calm
140) Locking down an image of M87's super-massive black hole at such distance can be compared to
A) constructing a giant telescope
B) an outstanding team effort
C) photographing a pebble on the Moon
D) forming a virtual observatory
141) Choose the most suitable title for the passage:
A) Fragments of a giant mirror
B) First ever image of a black hole revealed
C) M87 is more photogenic than Sagittarius A
D) Artists' renderings over the last 30 years
142) Identify the correct sentence:
A) She ran her fingers within the keyboard.
B) She ran her fingers above the keyboard.
C) She ran her fingers over the keyboard.
D) She ran her fingers beneath the keyboard.
143) Identify the correct sentence:.
A) You are a doctor, are you?
B) You are a doctor, isn't it?
C) You are a doctor, aren't you?
D) You are a doctor, is it?
144) Identify the correct sentence:-
A) I will talk to the myself manager.
B) I myself will talk to the manager.
C) Myself I will talk to the manager.
D) I will talk to myself the manager.
145) Fill in the blanks with the correct form of the verb:

Naveen $\qquad$ the map and put it in his pocket.
A) folded
B) has been folded
C) fold
D) folding
146) Fill in the blanks with correct form of verb:

He $\qquad$ to cultivate good relations with the press.
A) have tried
B) try
C) tries
D) have been trying
147) Fill in the blanks with the correct form of verb:

It $\qquad$ raining, so we left off our coats.
A) has stopped
B) had stopped
C) stops
D) stop
148) Choose the correct synonym of the underlined word:

Your handwriting is so untidy that I can't read it.
A) Neat
B) Messy
C) Legible
D) Clean
149) Choose the correct synonym of the underlined word:

Her voice dropped to a whisper.
A) Tone
B) Volume
C) Murmur
D) Pitch
150) Choose the correct synonym of the underlined word : He emanates power and confidence.
A) Shows
B) Expects
C) Follows
D) Radiates

## Section 6 - Verbal Skills Part B

No. of Questions: 30
151) Fill in the blanks with correct Article:

It was very depressing watching $\qquad$ news on $\qquad$ television tonight.
A) a...the
B) the...No Article
C) No Article...a
D) an...a
152) Fill in the blanks with correct Article:

He put on $\qquad$ pair of shorts and $\qquad$ T-shirt.
A) the...an
B) an...a
C) a...a
D) No Article...a
153) Fill in the blank with correct Preposition:

The nuts weren't properly tightened and the wheel came $\qquad$ .
A) off
B) of
C) through
D) along
154) Fill in the blanks with the correct Preposition:

The pilot jumped $\qquad$ the burning plane.
A) with
B) for
C) beside
D) from
155) Fill in the blanks with the correct Preposition:

She was delighted $\qquad$ the news.
A) at
B) besides
C) to
D) among
156) Fill in the blanks with the correct Preposition:

He climbed $\qquad$ the truck and drove away.
A) out
B) into
C) underneath
D) round
157) Fill in the blank with correct Preposition:

Try not to eat $\qquad$ meals.
A) between
B) up
C) down
D) below
158) Fill in the blanks with the correct Preposition:

They are building a new bridge $\qquad$ the river.
A) upon
B) under
C) down
D) over
159) Choose the correct option:

Would you like to have $\qquad$ tea?
A) some
B) a load of
C) several
D) neither
160) Choose the correct option:

He lost $\qquad$ his property.
A) either
B) all
C) both
D) a few

Read the passage and answer the questions (161-162):
The French Riviera is of course known for its opulence, and it is only fitting that such a novel museum has been established in this region. Launched by British artist Jason deCaires Taylor, the new museum in the Mediterranean Sea has sculptures of faces. The sculptures depict portraits of locals who live in this region, and took four years to complete. The sculptures are that of all age groups, from children, to older people. Each of these sculptures weigh 12 tons, and are installed at a depth of 3 meters. The aim of such a museum is to draw the attention of the world to the declining state of the ocean, the Mediterranean in this case.
161) Choose the synonym of 'opulence':
A) Spaciousness
B) Brightness
C) Dullness
D) Lavishness
162) Choose the false statement:
A) The museum is started by Jason deCaires, who is a British artist
B) In order to complete the museum, it took four years
C) The museum showcases sculptures of only children
D) The weight of each sculpture is twelve tons
163) Identify the correct sentence:....
A) We had to stop every few miles.
B) We had to stop each few miles.
C) We had to stop any few miles
D) We had to stop all few miles.
164) Identify the correct sentence: $\qquad$
A) Sheela is not so intelligent like her sister.
B) Sheela is not too intelligent as her sister.
C) Sheela is not as intelligent like her sister.
D) Sheela is not as intelligent as her sister.
165) Identify the correct sentence:...
A) A pond was covered in a ice all winter.
B) The pond was covered in ice all the winter.
C) A pond was covered in an ice all winter.
D) The pond was covered in ice all winter.
166) Identify the correct sentence:..
A) Rahul is senior by me by two years.
B) Rahul is senior to me by two years.
C) Rahul is senior than me by two years.
D) Rahul is senior from me by two years.
167) Identify the correct sentence: ----
A) He have been pointing to something on the opposite bank.
B) He have pointed to something on the opposite bank.
C) He point to something on the opposite bank.
D) He pointed to something on the opposite bank.
168) Identify the correct sentence:--
A) His son turned four just.
B) Turned four just his son.
C) His son has just turned four.
D) Son his just turned four.
169) Fill in the blanks with the correct form of verb:

I need a job that really $\qquad$ me.
A) was fulfilling
B) fulfil
C) fulfils
D) have fulfilled
170) Fill in the blanks with correct form of verb: She always $\qquad$ on her promises.
A) have been delivering
B) delivers
C) deliver
D) had delivered
171) Fill in the blanks with correct form of verb: Prakash just $\qquad$ to be left in peace.
A) have wanted
B) had wanted
C) wanting
D) want
172) Fill in the blank with correct form of verb:

Shalini $\qquad$ the important passages in yellow.
A) highlight
B) had been highlighted
C) is being highlighted
D) has highlighted
173) Fill in the blanks with the correct form of verb:

Her success $\qquad$ the faith her teachers had put in her.
A) justified
B) justifies
C) justify
D) have justified
174) Fill in the blank with correct form of verb:

The dry summer $\qquad$ the problem of water shortages.
A) magnify
B) have magnified
C) has magnified
D) have been magnifying
175) Choose the correct synonym of the underlined word:

There was an air of expectation and great curiosity.
A) Focus
B) Vividness
C) Silence
D) Inquisitiveness
176) Choose the correct synonym of the underlined word :

I thanked them for their munificence.
A) Greatness
B) Malevolence
C) Humbleness
D) Generosity
177) Choose the correct synonym of the underlined word:

He is determined to take whatever action is necessary to rectify the situation.
A) Ensure
B) Adjust
C) Correct
D) Postpone
178) Choose the correct synonym of the underlined word:

His tone was curt and unfriendly.
A) Mild
B) Rude
C) Soft
D) Nervous
179) Choose the correct synonym of the underlined word:

The whole plot of the film is ridiculously implausible.
A) Unlikely
B) Ideal
C) Imaginative
D) Likely
180) Choose the correct synonym of the underlined word :

They worked diligently on the task they had been given.
A) Hastily
B) Independently
C) Assiduously
D) Shabbily

| Question Paper No: | 71289_4 |
| :---: | :---: |
| Answer Key |  |


| 1 | C | 31 | D | 61 | B | 91 | B | 121 | C | 151 | B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | A | 32 | D | 62 | C | 92 | A | 122 | C | 152 | C |
| 3 | B | 33 | C | 63 | A | 93 | C | 123 | A | 153 | A |
| 4 | B | 34 | A | 64 | A | 94 | D | 124 | A | 154 | D |
| 5 | A | 35 | B | 65 | A | 95 | C | 125 | D | 155 | A |
| 6 | C | 36 | C | 66 | B | 96 | C | 126 | B | 156 | B |
| 7 | D | 37 | B | 67 | B | 97 | C | 127 | D | 157 | A |
| 8 | D | 38 | C | 68 | D | 98 | D | 128 | C | 158 | D |
| 9 | B | 39 | D | 69 | C | 99 | B | 129 | C | 159 | A |
| 10 | A | 40 | C | 70 | B | 100 | B | 130 | D | 160 | B |
| 11 | B | 41 | B | 71 | A | 101 | C | 131 | A | 161 | D |
| 12 | C | 42 | B | 72 | D | 102 | A | 132 | B | 162 | C |
| 13 | A | 43 | D | 73 | C | 103 | B | 133 | C | 163 | A |
| 14 | D | 44 | A | 74 | B | 104 | D | 134 | A | 164 | D |
| 15 | B | 45 | C | 75 | B | 105 | A | 135 | D | 165 | D |
| 16 | B | 46 | B | 76 | B | 106 | C | 136 | C | 166 | B |
| 17 | C | 47 | A | 77 | C | 107 | C | 137 | B | 167 | D |
| 18 | C | 48 | C | 78 | A | 108 | B | 138 | A | 168 | C |
| 19 | C | 49 | C | 79 | B | 109 | B | 139 | D | 169 | C |
| 20 | D | 50 | C | 80 | D | 110 | D | 140 | C | 170 | B |
| 21 | C | 51 | A | 81 | C | 111 | B | 141 | B | 171 | B |
| 22 | C | 52 | B | 82 | C | 112 | A | 142 | C | 172 | D |
| 23 | D | 53 | D | 83 | C | 113 | D | 143 | C | 173 | A |
| 24 | A | 54 | D | 84 | D | 114 | C | 144 | B | 174 | C |
| 25 | C | 55 | C | 85 | B | 115 | C | 145 | A | 175 | D |
| 26 | D | 56 | C | 86 | B | 116 | A | 146 | C | 176 | D |
| 27 | D | 57 | A | 87 | D | 117 | B | 147 | B | 177 | C |
| 28 | C | 58 | A | 88 | C | 118 | B | 148 | B | 178 | B |
| 29 | A | 59 | D | 89 | B | 119 | C | 149 | C | 179 | A |
| 30 | B | 60 | D | 90 | D | 120 | C | 150 | D | 180 | C |

