

Section 1 - Analytical Reasoning Skills Part ANo. of Questions: 30  
Duration in Minutes: 180

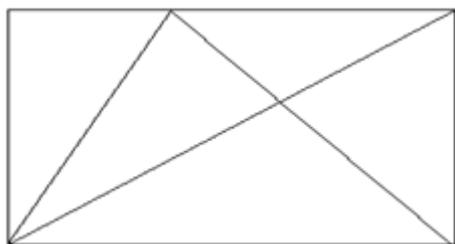
1) Shazo solves 5 questions per minute and starts solving at 2 pm. Razo solves 6 questions per minute and starts solving at 2.15 pm, the same day. When would they have solved same number of questions?

- A) 3.40 pm
  - B) 3.35 pm
  - C) 3.45 pm
  - D) 3.30 pm
- 

2) A container has 75% milk and 25% water. If I add 2 litres of water, then there will be equal amount of milk and water in the container. What is the amount of milk present in the container?

- A) 5 litres
  - B) 3 litres
  - C) 6 litres
  - D) 4 litres
- 

3) How many triangles are there in the given figure?



- A) 7
- B) 9
- C) 6
- D) 5

4) Read the information given below and answer the question that follows:

4 exams to be conducted on four days from Monday till Thursday. The exams to be conducted are English, Mathematics, Physics and Biology. Neither English nor Physics to be conducted on Thursday. Neither Physics nor Mathematics to be conducted on Tuesday. There are 3 exams conducted after Biology.

Physics exam is conducted on

- A) Monday
  - B) Wednesday
  - C) Thursday
  - D) Tuesday
- 

5) Which is the next letter in the given alphanumeric series?

B, 25, D, 23, G, 19, K, 13, ?

- A) L
  - B) P
  - C) N
  - D) Q
- 

6) How many people are there in the group, if it is known that while standing in a straight line A and E are at the ends and there are 3 people in between them?

- A) 4
- B) 7
- C) 2
- D) 5

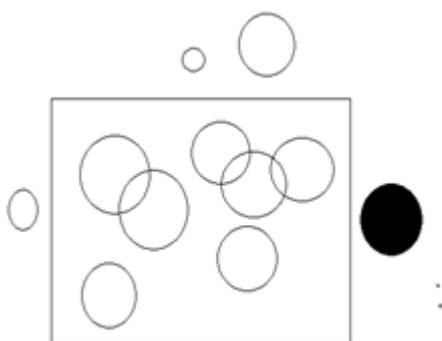
7) Assuming the given statement to be true, select inference as one of the options.

Statement: Arun will go to the park on even dates.

Inference: Arun will go to the park on last day of February.

- A) Uncertain
  - B) FALSE
  - C) Irrelevant
  - D) TRUE
- 

8) What is the difference between the number of circles that are outside the rectangle to the number of circles which are inside the rectangle?



- A) Two
  - B) Three
  - C) Five
  - D) Four
- 

9) Given below a statement followed by 2 inferences. Choose the inference that can be inferred from the given statement by selecting the right option.

Statement: Due to the rapid increase in the pandemic most of the states are locked down

Inferences:

- I. The pandemic is dangerous
- II. The pandemic will spread rapidly

- A) Both inferences I and II follow
  - B) Neither inference I nor inference II follows
  - C) Only inference I follows
  - D) Only inference II follows
- 

10) Given below a statement followed by 2 inferences. Choose the inference that can be inferred from the given statement by selecting the right option.

Statement : Out of 20 students in a class, 15 passed in English and 18 passed in mathematics.

Inferences:

- I. There are few students who passed in both the subjects
- II. No student failed in both the subjects

- A) Both inferences I and II follow
  - B) Only inference I follows
  - C) Only inference II follows
  - D) Neither inference I nor inference II follows
- 

11) Johnny introduced Selvia as the mother of his sister's brother. How is Selvia related to Johnny?

- A) Aunt
- B) Niece
- C) Mother
- D) Sister

12) Given below are 2 statements followed by 2 conclusions. Choose the conclusion/conclusions that follow(s) the given statements by selecting the right option.

Statements:

- I. All A is B
- II. Some C is A

Conclusions:

- I. Some C is B
- II. All C is B

- A) Neither conclusion I nor conclusion II follows
  - B) Both conclusions I and II follow
  - C) Only conclusion II follows
  - D) Only conclusion I follows
- 

13) Select one of the following four options that will make the 2<sup>nd</sup> pair analogous to the 1<sup>st</sup> pair given:

BAR : RAB :: CAR : ?

- A) ARC
  - B) CAR
  - C) RAC
  - D) RCA
- 

14) Which is the next number in the series given below?

2, 4, 10, 30, 105, 420, ?

- A) 1260
- B) 1470
- C) 1890
- D) 1680

15) I am looking at the photo of my mother's mother in law. How is my father related to the person in the photo?

- A) Father
  - B) Daughter
  - C) Son
  - D) Husband
- 

16) Given below a question followed by 2 statements. Choose the statement/statements required to answer the question by selecting a right option.

Question: How many days are there in the month X?

Statements:

- I. Month X has more than 28 days
- II. Number of days in the month X is a prime number

- A) The question can't be answered even by using both the statements
  - B) Statement I alone is sufficient but statement II alone is insufficient
  - C) Statement II alone is sufficient but statement I alone is insufficient
  - D) Both statements I and II together are sufficient
- 

17) There are 4 words given below. 3 of them are similar and can be classified into a group. Which of these words form a group?

- 1) Mobile phones
- 2) Laptops
- 3) Television
- 4) Transformer

- A) 1, 2 and 3
- B) 1, 2 and 4
- C) 1, 3 and 4
- D) 2, 3 and 4

18) In a row of students, Stephen is sitting 3<sup>rd</sup> to the left of Robert. If Robert is 10<sup>th</sup> from the leftmost end and 6<sup>th</sup> from the rightmost end, then what is the position of Stephen from the rightmost end?

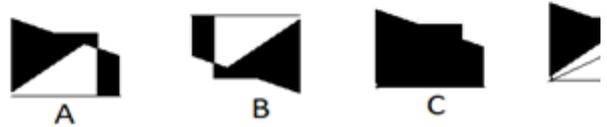
- A) 8<sup>th</sup>
- B) 9<sup>th</sup>
- C) 7<sup>th</sup>
- D) 6<sup>th</sup>

19) Which figure replaces the question mark in the given figure series?



- A)
- B)
- C)
- D)

20) Given below an image followed by 4 options. Which of these options fit in the blank part of the image?



- A) D
- B) B
- C) A
- D) C

21) Assuming the statement given in the question to be true, point out the inference as one of the following.

- (a)- True
- (b) – False
- (c) – Uncertain
- (d) – Irrelevant

Statement: Most of the students who have cleared the final exam have cleared the entrance exam too.

Inference: The entrance exam is easier than the final exam.

- A) d
- B) a
- C) c
- D) b

22) In three of the options, the 2<sup>nd</sup> number is related to the 1<sup>st</sup> number in a similar logical way. Which is the odd one out?

- A) 36 - 9
- B) 24 - 6
- C) 42 - 8
- D) 27 - 9

23) Assuming the statement given in the question to be true, point out the inference as one of the following.

- (a)- True
- (b) – False
- (c) – Uncertain
- (d) – Irrelevant

Statement: Out of 120 students in a class 40% are females and 50% of them have passed the exam.

Inference: More boys have passed the exam.

- A) d
- B) a
- C) c
- D) b

24) In a certain code language, TYNOP is coded as !@#\$\$% . How is PONTY coded in that language?

- A) \$&@!%
- B) %\$#!@
- C) #\$\$%@@
- D) !!@#\$

25) In a certain code language, the word "PENCIL" is coded as " CEILNP". How is the word "MOBILE" coded in that language?

- A) OBELIM
- B) BEILMO
- C) LOBMEI
- D) BOMLEI

26) There are 4 words given below. 3 of them are similar and can be classified into a group. Which of these words form a group?

- 1) Sector
- 2) Chord
- 3) Diagonal
- 4) Diameter

- A) 1,2 and 3
- B) 1,2 and 4
- C) 1, 3 and 4
- D) 2,3 and 4

27) Select one of the following four options that will make the 2<sup>nd</sup> pair analogous to the 1<sup>st</sup> pair given.

West : North-West : South-West : ?

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

28) What is the next number in the series given below?

3, 5, 5, 3, 7, 1, ?

- A) 6
  - B) 12
  - C) 9
  - D) 8
- 

29) How many triangles are there in the given figure?



- A) 3
  - B) 6
  - C) 4
  - D) 5
- 

30) In a certain code language TOY is coded as !@#, BOY is coded as @\$# and BOT is coded as @\$!. What is the code of BOTY?

- A) !@\$%
- B) \$@!#
- C) !@#&
- D) %^&\*

Section 2 - Analytical Reasoning Skills Part BNo. of Questions: 30  
Duration in Minutes: 180

31) What is the approximate distance traveled by Max if he moves at 5 kmph for 120 minutes with two halts of 10 minutes each in between?

- A) 9.16 kms
  - B) 12.25 kms
  - C) 10.25 kms
  - D) 8.33 kms
- 

32) What is the maximum number of common points a square and a rectangle can have when they intersect each other?

- A) 4
  - B) 10
  - C) 6
  - D) 8
- 

33) Given below a question followed by 2 statements. Choose the statement/statements required to answer the question by selecting the right option.

Question: How many chocolates does Rohan have?

Statements:

I. Rohan has 30% of the number of chocolates that Vishal has.

II. The total number of chocolates with Rohan and Vishal is 65.

- A) Statement II alone is sufficient
- B) Statement I alone is sufficient
- C) Neither statement I nor statement II are sufficient
- D) Both statements I and II together are sufficient

34) Ram's mother's sister is Vikram's father's wife. How is Vikram related to Ram?

- A) Brother
  - B) Cousin
  - C) Father
  - D) Uncle
- 

35) What would be the first term of the following number series that will have four different digits: 77, 80, 85, 88, 93, 96, 101, .....?

- A) 1042
  - B) 1032
  - C) 1024
  - D) 1034
- 

36) In a class of 120 students, 40% are females and rest are males. 50% of the female students passed an entrance exam. If the total number of students who passed the exam is 72, then what percentage of the male students passed the exam?

- A) 33.33%
- B) 66.66%
- C) 16.66%
- D) 52.25%

37) Given below a statement followed by 2 inferences. Choose the inference that can be inferred from the given statement by selecting the right option.

Statement: The market share of the mobile company "X" has increased from 3% to 9% from the year 2018 to 2019 and more mobiles are sold overall in the year 2019.

Inferences:

I. Mobile company X has sold more mobiles in the year 2019 as compared to 2018.

II. The sales of mobile company X is tripled from the year 2018 to 2019.

- A) Neither inference I nor inference II follows
- B) Both inferences I and II follow
- C) Only inference I follows
- D) Only inference II follows

38) Given below a question followed by 2 statements. Choose the statement/statements required to answer the question by selecting the right option.

Question: Is X an even number?

Statements:

I. X is the smallest prime number

II. X is less than 5

- A) The question can't be answered even by using both the statements
- B) Statement II alone is sufficient but statement I alone is insufficient
- C) Both statements I and II together are sufficient
- D) Statement I alone is sufficient but statement II alone is insufficient

39) Given below a statement followed by 2 inferences. Choose the inference that can be inferred from the given statement by selecting the right option.

Statement : A mango farm has 100 trees and the average mango production from each tree is 1200.

Inferences:

I. There is no mango tree whose mango production is less than 1200

II. Mango farming is more beneficial than any other kind of farming

- A) Neither inference I nor inference II follows
- B) Both inferences I and II follow
- C) Only inference II follows
- D) Only inference I follows

40) In three of the options, the 2<sup>nd</sup> word is related to the 1<sup>st</sup> word in a similar logical way. Which is the odd one out?

- A) GATE - AEGT
- B) BAT - ABT
- C) CATCH - ACCTH
- D) BALL - ABLL

41) R's only brother's only sister's husband is father of M. If R has only 1 sibling, then what could be the relation of M with R?

- A) Son
- B) Aunt
- C) Mother
- D) Sister

42) How many more rectangles are there in the 1<sup>st</sup> figure as compared to the 2<sup>nd</sup> figure?

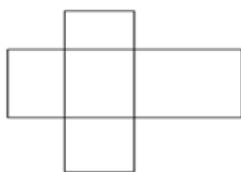


Fig 1



Fig 2

- A) Five
- B) Four
- C) Six
- D) Three

43) Select one of the following four options that will make the 2<sup>nd</sup> pair analogous to the 1<sup>st</sup> pair given:

BART : ABTR :: CART : ?

- A) TCRA
- B) CRTA
- C) TRCA
- D) ACTR

44) There are 4 words given below. 3 of them are similar and can be classified into a group. Which of these words form a group?

- 1) Acceleration
- 2) Deceleration
- 3) Speed
- 4) Velocity

- A) 1,2 and 3
- B) 1,3 and 4
- C) 2,3 and 4
- D) 1,2 and 4

45) In a certain code language, POETRY is coded as FPQZSU. How is MAGLEV coded in that language?

- A) WFMHNB
- B) HBNWFM
- C) WFMHBN
- D) NBHMFV

46) How many rectangles are there in the given figure?



- A) 4
- B) 5
- C) 7
- D) 3

47) There are 4 blood relations given below. 3 of them are similar and can be classified into a group. Which of these blood relations form a group?

- 1) Father's mother
- 2) Sister's father's wife
- 3) Paternal grandfather's only daughter in law
- 4) Brother's wife's mother in law

- A) 1, 3 and 4
- B) 2, 3 and 4
- C) 1, 2 and 3
- D) 1, 2 and 4

48) Based on the information given, answer the question given below.

There are 7 people standing in a row. Their arrangement is as follows.

- 1) Andrew is at the leftmost end.
- 2) There are 3 people in between Carry and Garry.
- 3) Boom is between Andrew and Carry.

Who is standing at the rightmost end?

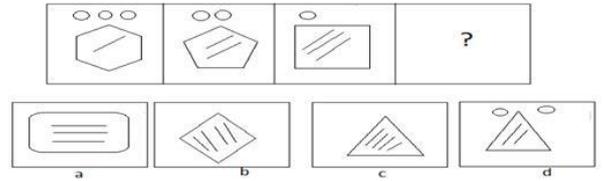
- A) Boom
- B) Carry
- C) Andrew
- D) Garry

49) Which figure replaces the question mark in the given figure series?



- A)
- B)
- C)
- D)

50) Which figure replaces the question mark in the given figure series?



- A) b
- B) a
- C) c
- D) d

51) Assuming the given statement to be true, select inference as one of the options.

Statement: Alexa goes to the market every alternate day and she went to the market yesterday.

Inference: She goes to the market 4 times a week.

- A) Irrelevant
- B) Uncertain
- C) TRUE
- D) FALSE

52) In three of the options, the 2<sup>nd</sup> number is related to the 1<sup>st</sup> number in a similar logical way. Which is the odd one out?..

- A) 4, 125
- B) 3, 27
- C) 6, 216
- D) 2, 8

53) Given below a statement followed by 2 inferences. Choose the inference that can be inferred from the given statement by selecting the right option.

Statement : More than 95% of the people working in "Tel Aviv" know martial art.

Inferences:

I. 5% of the people working in "Tel Aviv" know something other than martial art.

II. Less than 5% of the people working in "Tel Aviv" don't know martial art.

- A) Only inference II follows  
 B) Only inference I follows  
 C) Neither inference I nor inference II follows  
 D) Both inferences I and II follow

54) Read the information given below and answer the question that follows.

In a certain code language some of the sentences are coded as below

" we had fun" is coded as " lak mak nak".

" we have brain" is coded as " mak chak sake".

"have some fun" is coded as " chak tek nak".

What is the code for the word " some"?

- A) chak  
 B) tek  
 C) mak  
 D) nak

55) Given below are 2 statements followed by 2 conclusions. Choose the conclusion/conclusions that follow(s) the given statements by selecting the right option.

Statements:

I. Some bottles are bags.

II. All bags are pencils.

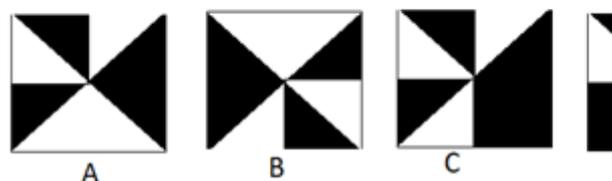
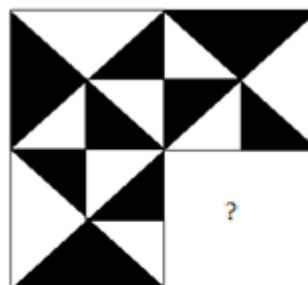
Conclusions:

I. No bottle is a pencil.

II. Some bottles are pencils.

- A) Both the conclusions I and II follow  
 B) Neither conclusion I nor conclusion II follows  
 C) Only conclusion I follows  
 D) Only conclusion II follows

56) Given below an image followed by 4 options. Which of these options fit in the blank part of the image?



- A) D  
 B) B  
 C) C  
 D) A

57) Select one of the following four options that will make the 2<sup>nd</sup> pair analogous to the 1<sup>st</sup> pair given.

BIOLOGY : ZJPMPHC :: CHEMISTRY : ?

- A) ZIFNJTUSD
- B) ZFINTUJSD
- C) ZEMHIJDSU
- D) ZFDSUITNM

58) Which is the next number in the series given below?

12, 98, 24, 49, 48, 24.5, ?

- A) 96
- B) 86
- C) 24
- D) 49

59) Given below a question followed by 2 statements. Choose the statement/statements required to answer the question by selecting the right option.

Question: How many child/children is/are there in the park?

Statements:

- I. Park has less than 3 children.
- II. Number of children in the park is odd.

- A) Both statements I and II together are sufficient
- B) Statement I alone is sufficient but statement II alone is insufficient
- C) The question can't be answered even by using both the statements
- D) Statement II alone is sufficient but statement I alone is insufficient

60) Given below are 2 statements followed by 2 conclusions. Choose the conclusion/conclusions that follow(s) the given statements by selecting the right option.

Statements:

- I. All cakes are ice cream.
- II. No ice cream is chocolate.

Conclusions:

- I. Some cakes are chocolates.
- II. No cake is chocolate.

- A) Neither conclusion I nor conclusion II follows
- B) Only conclusion II follows
- C) Only conclusion I follows
- D) Both conclusions I and II follow

Section 3 - Quantitative Skills Part ANo. of Questions: 30  
Duration in Minutes: 180

61) The price of high grade milk is ₹ 40 per litre and that of low grade milk is ₹ 30 per litre. In what ratio they should be mixed so that the resultant mixture has a price of ₹ 36 per litre?

- A) 3:2
- B) 5:4
- C) 4:3
- D) 2:1

62) The cost price of an item is ₹ 150. If Harish gives a discount of 20% on the marked price of the item, then there is no profit and no loss. What is the marked price of the item?

- A) ₹ 187.5
- B) ₹ 175
- C) ₹ 200
- D) ₹ 192.5

63) What will be the last digit of the expansion of  $237^{937}$ ?

- A) 1
- B) 9
- C) 3
- D) 7

64) The ratio of length and breadth of a rectangle is 3:2. If its area is 2400 square cm, then what is its perimeter (in cms)?

- A) 180
- B) 220
- C) 200
- D) 240

65) If the interest earned on a sum of money invested for 3 years at the annual interest rate of 10% compounded annually is ₹ 14,895, then what is the sum of money invested?

- A) ₹ 45,000
- B) ₹ 42,500
- C) ₹ 36,000
- D) ₹ 48,000

66) What will be the value of 12% of 18% of 1,90,000 ?

- A) 4,053
- B) 4,155
- C) 4,002
- D) 4,104

67) What will be the remainder left when  $10368^{23}$  is divided by 5?

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

68) Fifty percent of a number P is 12 more than 60 percent of a number Q. If  $P + Q = 156$ , then what would be the value of 75 percent of P?

- A) 48
- B) 72
- C) 42
- D) 96

69) The salary of Manu is half of that of Tanu. If Manu's salary increases by ₹ 3,000 and Tanu's salary decreases by 20%, then Manu's salary would be 68.75% of Tanu's salary. What is the salary of Tanu?

- A) ₹ 1,20,000
  - B) ₹ 45,000
  - C) ₹ 90,000
  - D) ₹ 60,000
- 

70) If '+' means '÷', '-' means '+', '÷' means 'x' and 'x' means '-', then what will be the value of  $(78 \times 45) + 3 - 45 \div 68 \times 13$  ?

- A) 3548
  - B) 2568
  - C) 4038
  - D) 3058
- 

71) What is the average of first five perfect squares ending in 6?

- A) 368
  - B) 332
  - C) 216
  - D) 426
- 

72) The cost of a rectangular glass piece is directly proportional to its length and inversely proportional to its width. If its length is increased by 40%, then by what percentage should its width be decreased so that its cost becomes twice?

- A) 25
- B) 30
- C) 24
- D) 20

73) What is the value of  $0.6 \times 0.06 \times 6 \times 60$ ?

- A) 129.96
  - B) 0.1296
  - C) 1.296
  - D) 12.96
- 

74) If '+' means 'x' and '-' means '+', then what will be the value of  $56 + 20 - 19$  ?

- A) 930
  - B) 491
  - C) 1139
  - D) 728
- 

75) Rohan covered a distance of 30 km at a speed of 40 km/hr. He further traveled 60 km in 1 hour and 15 minutes. For how much time did he travel in total?

- A) 120 minutes
  - B) 105 minutes
  - C) 155 minutes
  - D) 100 minutes
- 

76) If a sum of ₹ 40,000 is invested at compound interest for 2 years at the annual interest rate of 20%, then what is the interest earned?

- A) ₹ 15,200
  - B) ₹ 17,600
  - C) ₹ 16,400
  - D) ₹ 18,800
- 

77) Ginny works twice as fast as Sunny. If Ginny takes 3 hours to finish a work, then how much time will Sunny and Ginny together take to finish a work twice as large?

- A) 2 hours
- B) 4 hours
- C) 2.5 hours
- D) 3.5 hours

78) If P, Q and R work together, they take 12 days to complete the work. However, if only P and R work, they take 20 days to complete the work. A schedule is made such that P and R work every day, while Q joins them only on alternate days i.e. on 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, 7<sup>th</sup>, ... days. On which day will the work be completed?

- A) 15<sup>th</sup>
- B) 14<sup>th</sup>
- C) 13<sup>th</sup>
- D) 17<sup>th</sup>

79) What will be the remainder left when  $2^{68} + 3^{68}$  is divided by 97?

- A) 0
- B) 96
- C) 42
- D) 1

80) The marked price of an item is ₹ 120. If it is sold at 10% discount, the profit earned is 20%. What is the cost price of the item?

- A) ₹ 84
- B) ₹ 90
- C) ₹ 78
- D) ₹ 96

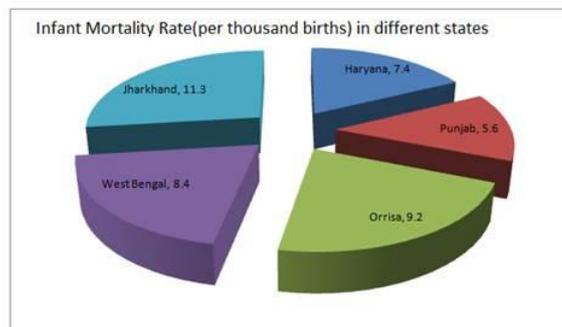
Directions for Questions 81 - 82:

English

Read the following information carefully and answer the question that follows.

81)

Below is given a pie chart showing infant mortality rate (per thousand births) in some states of India. Based on this information, answer the questions that follow.

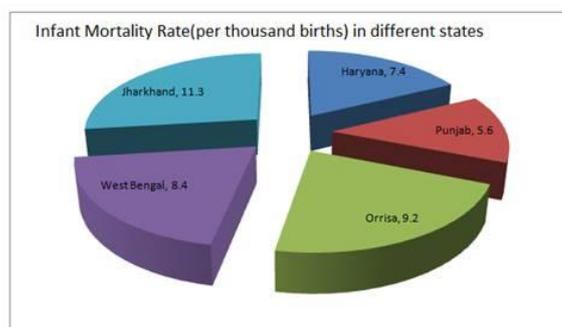


In Haryana, 5,60,000 children were born in a certain period of time. How many of these children died?

- A) 3,627
- B) 3,972
- C) 4,144
- D) 4,013

82)

Below is given a pie chart showing infant mortality rate (per thousand births) in some states of India. Based on this information, answer the questions that follow.



If 452 infants died in Jharkhand in a period of time, then how many births took place in this period?

- A) 45,000
- B) 60,000
- C) 36,000
- D) 40,000

83) What will be the sum of numerator and denominator when 0.48 is written in simplest fraction form?

- A) 32
  - B) 64
  - C) 74
  - D) 37
- 

84) If the perimeter of a square is the same as that of an equilateral triangle of side length 24 cm, then what is the area of the square?

- A)  $324 \text{ cm}^2$
  - B)  $225 \text{ cm}^2$
  - C)  $289 \text{ cm}^2$
  - D)  $400 \text{ cm}^2$
- 

85) Radha travelled for 60 minutes. This travel of 60 minutes can be divided into 6 equal intervals of 10 minutes each. In these 6 intervals, she travelled 10 km, 12 km, 14 km, 9 km, 5 km and 15 km. What is the average speed of Radha if only those intervals are considered when her speed was between 50 km/hr and 80 km/hr?

- A) 62 km/hr
  - B) 66 km/hr
  - C) 58 km/hr
  - D) 64.5 km/hr
- 

86) A candle of height 10 cm burns at the rate of 2 cm/hr initially. After it has burnt 20%, the rate increases to 3 cm/hr. Then, after it has burnt 50%, the rate of burning changes again such that it takes 2 hours for the remaining candle to burn up completely, then what is the overall average rate at which candle gets burnt?

- A) 2.6 cm/hr
- B) 2.7 cm/hr
- C) 2.4 cm/hr

D) 2.5 cm/hr

87) In an alloy, iron, copper and silver are present in ratio 7:3:1. 660 kg of this alloy is taken, and 30 kg each of copper and silver is added to it. What will be the ratio of iron, copper and silver in the alloy after these additions?

- A) 7:4:2
  - B) 14:7:1
  - C) 14:7:3
  - D) 7:3:3
- 

88) Which of these numbers is divisible by 132?

- A) 1,17,085
  - B) 1,91,044
  - C) 2,11,804
  - D) 1,03,620
- 

89) In a square of edge length 10 cm, mid points of 3 sides are joined together to form a triangle, and a circle is drawn such that all the vertices of the square lie on this circle. What is the area of region that lies inside the circle but outside the triangle? (Take  $\pi = 3.14$ )

- A) 100 sq. cm
  - B) 114 sq. cm
  - C) 132 sq. cm
  - D) 126 sq. cm
- 

90) In a zoo, 40% of the total animals are reptiles. Out of the remaining, 60% are mammals. If there are 456 animals that are neither reptiles nor mammals, then how many animals are there in the zoo?

- A) 1,900
- B) 1,800
- C) 2,100
- D) 2,300

Section 4 - Quantitative Skills Part BNo. of Questions: 30  
Duration in Minutes: 180

91) The cost price of a TV is ₹ 7,272. The seller wants to sell it at 30% profit, and at the same time he wants to offer consecutive discounts of 20% and 10%. What should be the marked price of the TV so that he is able to earn 30% profit even after offering the discounts?

- A) ₹ 11,110
- B) ₹ 10,000
- C) ₹ 13,130
- D) ₹ 12,120

92) John bought an item for ₹ 200 and sold it to Mahesh for a profit of 20%. Mahesh further sold it to Ramesh for a profit of 10%. If Ramesh further sold this item to Virat for ₹ 280, then what was the profit percentage of Ramesh approximately?

- A) 8%
- B) 6%
- C) 4%
- D) 5%

93) All the vertices of a right-angled triangle lie on the circumference of a circle. The length of the two perpendicular sides of the triangle are 14 cm and 48 cm. What is the area of the circle?

- A)  $2304 \pi \text{ cm}^2$
- B)  $576 \pi \text{ cm}^2$
- C)  $625 \pi \text{ cm}^2$
- D)  $2500 \pi \text{ cm}^2$

94) A sum of money was divided into 2 parts in the ratio 2:5. First part was invested for 2 years at the annual interest rate of 20% compounded annually. At what rate of simple interest per annum the second part must be invested for 2 years, so that the interest earned in both cases is the same?

- A) 8.8%
- B) Cannot be determined
- C) 10.2%
- D) 9.6%

95) A train running at the speed of 72 km/hr can cross a stationary pole in 10 seconds. How much time will it take to overtake a train of length 500 metres running at 54 km/hr in the same direction?

- A) 130 seconds
- B) 110 seconds
- C) 120 seconds
- D) 140 seconds

96) A group of 11 natural numbers is arranged in ascending order. The average of the first six numbers is 18 and the average of the last six numbers is 28. If the 7<sup>th</sup> number is the smallest prime number greater than 20, then what is the sum of all these numbers?

- A) 253
- B) 276
- C) 299
- D) 241

97) If '+' means '÷', '-' means '+', '÷' means 'x' and 'x' means '-', then what will be the value of  $13 \div 15 - 1670 + 5 \times 21$  ?

- A) 438
- B) 508
- C) 732
- D) 672

98) A cuboid of dimension 12 cm x 16 cm x 20 cm is cut into small cubes of edge length 4 cm. What is the difference between the total surface area of the original cuboid and the sum of the surface area of all the small cubes?

- A) 5008 cm<sup>2</sup>
  - B) 4256 cm<sup>2</sup>
  - C) 1408 cm<sup>2</sup>
  - D) 0 cm<sup>2</sup>
- 

99) How many prime numbers are there that are less than 30 and can be represented both as a sum and a difference of two primes?

- A) 4
  - B) 1
  - C) 10
  - D) 0
- 

100) 40% of 70% of P is same as 35% of R% of Q. Also, P% of P% of 400 is 16. What is the product of P, Q and R?

- A) 32000
  - B) 1600
  - C) 16000
  - D) 320
- 

101) A sum of ₹ 2,00,000 is invested for 2 years at an annual interest rate of 20% per annum compounded half yearly. After 2 years, the amount is invested again at 30% simple interest per annum for 1 year. What will be the final amount after 3 years?

- A) ₹ 3,61,808
- B) ₹ 3,80,666
- C) ₹ 2,92,820
- D) ₹ 3,28,914

102) The numerator of a fraction is 5 more than twice the denominator. Also, when 2 is added to the fraction, the numerator increases by 12. If the given fraction is squared and the numerator is divided by the denominator, then what will be the remainder?

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

103) In a class with 20 students, the average score in a test is 15. Out of the 20 students, 5 students scored 0 mark. What is the average marks of the remaining student if the students who scored 0 mark are excluded?

- A) 18
  - B) 22
  - C) 20
  - D) 16
- 

104) The total distance covered by a train in a journey is 600 km and the total stoppage time of the train during the journey is 1 hour. The difference between the speed of the train when stoppage time is excluded and when stoppage time is included is 30 km/hr. What is the average speed of the train when stoppage time is included?

- A) 150 km/hr
  - B) 90 km/hr
  - C) 180 km/hr
  - D) 120 km/hr
- 

105) In a fraction, the numerator is 12 less than the denominator. If the numerator is decreased by 2, the fraction becomes  $\frac{5}{7}$ . What is the value of the sum of numerator and denominator in the original fraction?

- A) 73
- B) 91
- C) 86
- D) 39

106) When Mohan started chasing a thief, the thief was 200 metres ahead of Mohan. Mohan was running at the speed of 18 km/hr while thief was running at 9 km/hr. After 20 seconds, Mohan increased his speed to 27 km/hr. How much time did Mohan take in total to chase the thief?

- A) 50 seconds
- B) 30 seconds
- C) 45 seconds
- D) 55 seconds

107) A sum of money is invested at compound interest for 3 years. However, the rate of interest is 10% for first year, 15% for second year and 20% for third year. If the total interest earned is ₹ 15,540, then what was the sum of money invested?

- A) ₹ 25,000
- B) ₹ 40,000
- C) ₹ 30,000
- D) ₹ 36,000

108) Harry and Sharry together take 8 days to dig a cubical well of depth, length and width 5 metres each. If Harry is twice as fast as Sharry, then how much time would Sharry alone take to dig up a cubical well of depth, length and width 10 metres each?

- A) 216 days
- B) 192 days
- C) 144 days
- D) 208 days

109) A cylindrical water tank having a height of 6 metres has a capacity of 5,000 litres. Two pipes are filling this tank at the rate of 30 litres per second and 20 litres per second. There are two leaks in the tank. One is at a height of 3 metres and it drains water at the rate of 10 litres per second. Other is at a height of 4.5 metres and it drains water at the rate of 5 litres per second. How much time will it take to fill the empty tank?

- A) 120.24 seconds
- B) 108.62 seconds
- C) 116.96 seconds
- D) 112.48 seconds

110) If '+' means 'x', '-' means '+' and 'x' means '-', then what will be the value of  $(122 \times 32) + 20 - 13$  ?

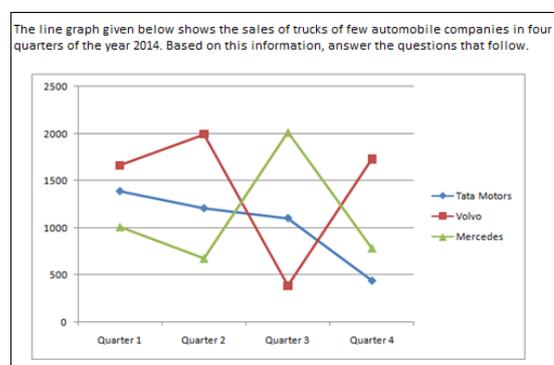
- A) 1513
- B) 2039
- C) 1739
- D) 1813

Directions for Questions 111 - 113:

English

Read the following information carefully and answer the question that follows.

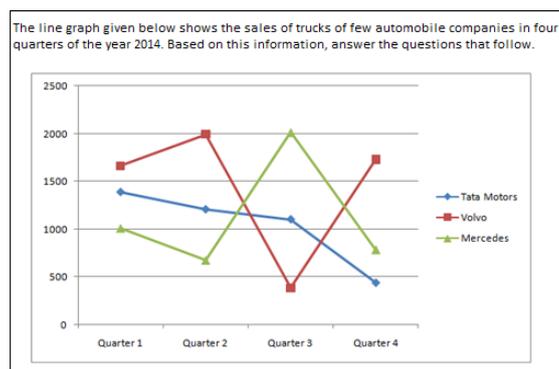
111)



In which quarter the sale of Mercedes was the lowest?

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

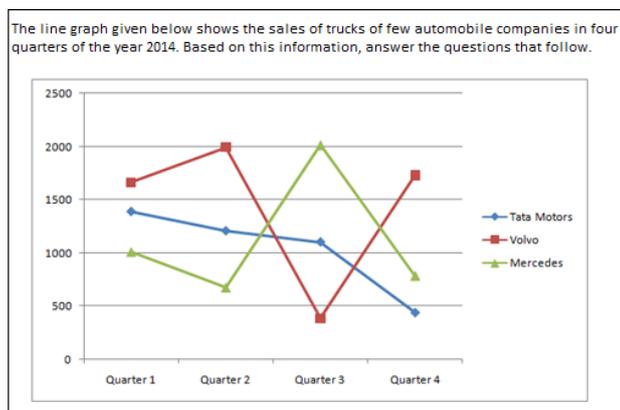
112)



What is the ratio of sales in second quarter by Volvo to sales in first quarter by Mercedes?

- A) 5:4
- B) 3:2
- C) 4:3
- D) 2:1

113)



How many trucks did Tata Motors sell in the complete year approximately?

- A) 4100
- B) 4500
- C) 3600
- D) 4900

114) If '+' means ' $\div$ ', '-' means '+', ' $\div$ ' means 'x' and 'x' means '-', then what will be the value of  $((1200 + 24 - 55) + 5) \times 12$  ?

- A) 9
- B) 7
- C) 6
- D) 8

115) 12 men and 6 women can complete a work in 10 days. 3 men and 6 women can complete this work in 25 days. How many men are required to complete this work in 5 days?

- A) 30
- B) 20
- C) 24
- D) 36

116) In a basketball team with 12 players, the average height of the players is 170 cm. Out of these players, the average height of 7 players is 166 cm. What is the average height of the remaining 5 players?

- A) 173.8 cm
- B) 175.6 cm
- C) 174.4 cm
- D) 175.2 cm

117) The price of a diamond is directly proportional to square its weight. A trader bought a piece of diamond weighing 10 grams for ₹ 2,00,000. He broke it into three pieces of weights 5 grams, 3 grams and 2 grams, and sold them individually. What was the total loss incurred by the trader?

- A) No loss
- B) ₹ 1,24,000
- C) ₹ 1,00,000
- D) ₹ 76,000

118) Point M is the point of intersection of all the 3 medians of a triangle  $\triangle ABC$ . The median drawn from vertex A intersects the side BC at point D and the lengths of AD and BC are 21 cm and 24 cm respectively. What is the sum of the lengths of BD and MD ?

- A) 21 cm
  - B) 22 cm
  - C) 20 cm
  - D) 19 cm
- 

119) From a bucket full of water,  $\frac{3}{10}$  of water is taken out. Now, 4 litres of water is added to the bucket. Then,  $\frac{1}{5}$  of water is taken out leaving only  $\frac{2}{3}$  of the bucket full. What is the capacity of the bucket?

- A) 25 litres
  - B) 30 litres
  - C) 27.5 litres
  - D) 20 litres
- 

120) An item with a marked price of ₹ 400 is sold at successive discounts of 30%, 20%, 20% and 10%. What will be the actual selling price of the item?

- A) ₹ 165.34
- B) ₹ 159.72
- C) ₹ 161.28
- D) ₹ 163.16

Section 5 - Verbal Skills Part A

No. of Questions: 30  
Duration in Minutes: 180

121) Fill in the blanks with the correct Preposition:

He found it hard \_\_\_\_\_ contain his anger.

- A) for
- B) in
- C) with
- D) to

\_\_\_\_\_

122) Fill in the blanks with the correct option:

\_\_\_\_\_ children love to watch animated films.

- A) Less
- B) Every
- C) Most
- D) Lot

\_\_\_\_\_

123) Fill in the blanks with the correct option:

The petals of \_\_\_\_\_ flowers expand in the sunshine.

- A) whole
- B) many
- C) enough
- D) much

124) Fill in the blanks with the correct option:

I'll get you \_\_\_\_\_ coffee.

- A) some
- B) few
- C) all
- D) each

\_\_\_\_\_

125) Fill in the blanks with the correct option:

We saw a \_\_\_\_\_ animals at the zoo.

- A) bit of
- B) lot of
- C) good deal of
- D) great deal of

\_\_\_\_\_

126) Fill in the blanks with the correct Article:

\_\_\_\_\_ price must be more realistic, if you want to sell this item.

- A) A
- B) The
- C) An
- D) No Article

127) Fill in the blanks with the correct Article:

\_\_\_\_\_ Mary was wearing \_\_\_\_\_ beautiful silver chain around her neck.

- A) The...a
  - B) No Article ... a
  - C) The...an
  - D) No Article...an
- 

128) Identify the correct synonym of the underlined word:

We searched the surrounding neighbourhood for the missing boy.

- A) cellar
  - B) vicinity
  - C) garden
  - D) terrace
- 

129) Identify the CORRECT sentence:.

- A) China have always fascinated me.
  - B) China has always fascinates me.
  - C) China always fascinate me.
  - D) China has always fascinated me.
- 

130) Fill in the blanks with the correct Article:

If we hurry, there's still \_\_\_\_\_ outside chance of catching the plane.

- A) an
- B) the
- C) a
- D) No Article

131) Fill in the blanks with the correct Article:

Maths is \_\_\_\_\_ intrinsic part of \_\_\_\_\_ school curriculum.

- A) No Article...an
  - B) a...the
  - C) a...an
  - D) an...the
- 

132) Identify the CORRECT sentence:--

- A) Brazil earns none of millions of pounds a year from coffee exports.
  - B) Brazil earns much millions of pounds a year from coffee exports.
  - C) Brazil earns any millions of pounds a year from coffee exports.
  - D) Brazil earns many millions of pounds a year from coffee exports.
- 

133) Identify the CORRECT sentence:

- A) The interview is lasted half an hour.
  - B) The interview have lasted for half an hour.
  - C) The interview last half an hour.
  - D) The interview lasted for half an hour.
- 

134) Fill in the blanks with the appropriate verb form:

The brook \_\_\_\_\_ the river here.

- A) have joined
- B) have been joining
- C) join
- D) joins

135) Fill in the blanks with the appropriate verb form:

The game \_\_\_\_\_ with the national anthem.

- A) open
  - B) had open
  - C) opened
  - D) have opened
- 

136) Fill in the blanks with the correct option:

She has \_\_\_\_\_ friends.

- A) either
  - B) a little
  - C) few
  - D) any
- 

Read the passage and answer the questions:

Thanks to the blockbuster animated film Finding Nemo, clownfish are a perennial favourite among aquarium enthusiasts. Now a collaborative effort by the Maharashtra Mangrove Cell and Lucknow's National Bureau of Fish Genetic Resources (NBFGR) will help villagers in Maharashtra's mangrove belt make a living by cashing in on the fish's popularity. A team from the NBFGR is at Mumbai's Coastal and Marine Biodiversity Centre, nursing hundreds of eggs laid by seven pairs of clownfish. This clownfish hatchery, the first of its kind, will help the villagers set up a clownfish trade business. Marine aquarium trade is a booming business. The Mangrove Cell has helped them build storage tanks, in checking water quality, in understanding the behaviour of the fish, and in the tricks of aquarium trade.

Around 200 clownfish were brought from Tamil Nadu, Andaman Islands, and Lakshadweep. They were paired, and 57 pairs survived. The NBFGR team stated that the fish have laid several hundred eggs that hatch in a week. After the larva is born, it takes two weeks for metamorphosis, when they become miniature adults. The baby fish will be reared in the hatchery for 30 days, after which they will be handed over to the villagers for aquarium trade.

137) Identify the antonym of 'perennial'.

- A) Permanent
  - B) Temporary
  - C) Stable
  - D) Constant
- 

138) Choose the synonym of 'metamorphosis'.

- A) Translocation
  - B) Transformation
  - C) Translation
  - D) Transfusion
- 

139) 'Finding Nemo' is

- A) Lucknow's National Bureau of Fish Genetic Resources
  - B) A blockbuster animated film
  - C) Maharashtra Mangrove Cell
  - D) Mumbai's Coastal and Marine Biodiversity Centre
- 

140) Pick out the one-word substitute of 'a place to brood eggs of hens and fish.'

- A) Miniature
  - B) Aquarium
  - C) Hatchery
  - D) Mangrove
- 

141) Out of 200 clownfish, which were brought from Tamil Nadu, Andaman Islands, and Lakshadweep, how many pairs survived?

- A) 30
- B) 10
- C) 16
- D) 57

142) NBFGR helps villagers in Maharashtra's mangrove belt make a living by

- A) cashing in on the popularity of clownfish
  - B) checking water quality
  - C) understanding the behaviour of the fish
  - D) building storage tanks
- 

143) Fill in the blanks with the correct option:

Krishna secured \_\_\_\_\_ marks than Shilpa.

- A) more
  - B) every
  - C) several
  - D) many
- 

144) Fill in the blanks with the correct Article:

She was born in \_\_\_\_\_ Italy but speaks English fluently .

- A) an
  - B) the
  - C) a
  - D) No Article
- 

145) Fill in the blanks with the correct Article:

She is famous in \_\_\_\_\_ office for her caustic wit.

- A) the
  - B) No Article
  - C) an
  - D) a
- 

146) Fill in the blanks with the appropriate verb form:

She \_\_\_\_\_ an ambiguous answer.

- A) have given
  - B) have been giving
  - C) give
  - D) gave
- 

147) Identify the correct synonym of the underlined word:

The possibilities are endless.

- A) events
  - B) ideas
  - C) prospects
  - D) deals
- 

148) Identify the correct synonym of the underlined word:

She always looks immaculate.

- A) spotless
  - B) dull
  - C) healthy
  - D) modern
- 

149) Fill in the blank with correct Preposition:

The money was all ploughed back \_\_\_\_\_ the company.

- A) beside
  - B) above
  - C) into
  - D) through
- 

150) Fill in the blanks with the correct Article:

He has \_\_\_\_\_ really intriguing behaviour.

- A) the
- B) an
- C) a
- D) No Article

Section 6 - Verbal Skills Part B

No. of Questions: 30  
Duration in Minutes: 180

151) Identify the CORRECT sentence:..

- A) She is passionate about her work.
  - B) She is passionate to her work.
  - C) She is passionate into her work.
  - D) She is passionate on her work.
- 

152) Identify the correct synonym of the underlined word:

She's got an incisive mind.

- A) keen
  - B) curious
  - C) perfect
  - D) diligent
- 

153) Fill in the blank with correct Preposition:

Do not pull so hard or the handle will come\_\_\_\_\_.

- A) of
  - B) off
  - C) towards
  - D) by
- 

154) Fill in the blanks with the appropriate verb form:

Kishore \_\_\_\_\_ himself to be a genius.

- A) boast
- B) boasts
- C) boasting
- D) have boasted

155) Fill in the blanks with the correct Article:

Our lawn is \_\_\_\_\_ carpet of \_\_\_\_\_ daisies.

- A) an...a
  - B) No Article...the
  - C) an...an
  - D) a...No Article
- 

156) Identify the correct synonym of the underlined word:

He always deprecates my achievements.

- A) criticizes
  - B) commends
  - C) praises
  - D) admires
- 

157) Identify the correct synonym of the underlined word:

His hold on her arm tightened.

- A) pat
  - B) grip
  - C) access
  - D) touch
- 

158) Identify the CORRECT sentence:\*....

- A) Though he was ill, he was cheerful.
- B) He was ill,he was cheerful though
- C) He was ill though cheerful was he
- D) He was ill, he was though cheerful.

159) Identify the CORRECT sentence:.....\*\*

- A) Even though she's very hard working, but not very imaginative.
  - B) As she's very hard working, but not very imaginative.
  - C) She's very hard working but not very imaginative.
  - D) She's very hard working still, but not very imaginative.
- 

160) Fill in the blanks with the correct Preposition:

He hung his coat on a nail protruding \_\_\_\_\_ the wall.

- A) below
  - B) from
  - C) about
  - D) underneath
- 

Read the passage and answer the questions:

The ancient Indian scriptures are a window to the national soul of India, and most of the scriptures are in Sanskrit. English translations are available, but no translation can ever do justice to the spirit and elegance of the original. Learning both Sanskrit and English well enough to get into the spirit of the literature in both these languages will be great. Education should give the child both roots and wings. While English gives wings, it is Sanskrit that can truly give roots to the Indian students. One may do without wings, but the roots are indispensable.

---

161) Choose the antonym of 'ancient'

- A) New
- B) Latest
- C) Recent
- D) Old

162) Choose the False statement:

- A) Most of the Indian scriptures are in Sanskrit
  - B) English translations can do justice to the spirit of the original Sanskrit texts
  - C) Sanskrit provides roots to the Indian students
  - D) The author says that learning both English and Sanskrit is equally important
- 

163) Identify the CORRECT sentence:----

- A) Both she felt unappreciated by her colleagues and her seniors.
  - B) She felt unappreciated both by her colleagues and by her seniors.
  - C) She both felt unappreciated by her colleagues and her seniors.
  - D) She felt both unappreciated by her colleagues and her seniors.
- 

164) Fill in the blanks with the appropriate verb form:

He \_\_\_\_\_ the child's hand in his.

- A) was held
  - B) were holding
  - C) hold
  - D) held
- 

165) Fill in the blanks with the correct Preposition:

They were all sitting \_\_\_\_\_ the table.

- A) round
- B) with
- C) after
- D) till

166) Fill in the blanks with correct option:

Clean water is a precious commodity in \_\_\_\_\_ parts of the world.

- A) little
  - B) neither
  - C) each
  - D) many
- 

167) Fill in the blanks with the appropriate verb form:

The car \_\_\_\_\_ the tree.

- A) has been hitting
  - B) have hit
  - C) have been hit
  - D) hit
- 

168) Fill in the blanks with the correct Preposition:

I sat down \_\_\_\_\_ Hari and Prakash.

- A) besides
  - B) among
  - C) beyond
  - D) between
- 

169) Fill in the blanks with the appropriate verb form:

The rain \_\_\_\_\_ , so we left off our coats.

- A) has stopped
- B) had stopped
- C) stop
- D) stops

170) Fill in the blanks with the appropriate verb form:

She \_\_\_\_\_ the report in order to clear the essential points.

- A) rephrase
  - B) have rephrased
  - C) rephrased
  - D) rephrasing
- 

171) Identify the correct synonym of the underlined word:

Her handwriting is barely legible.

- A) genuine
  - B) formal
  - C) impressive
  - D) readable
- 

172) Identify the CORRECT sentence:...

- A) Lata is not as tall as Sudha.
  - B) Lata is not tall as Sudha.
  - C) Lata is not too tall as Sudha.
  - D) Lata is not so tall than Sudha.
- 

173) Identify the correct synonym of the underlined word:

Pavan spurned my offers of help.

- A) accepted
- B) decided
- C) rejected
- D) preferred

174) Fill in the blanks with the correct Preposition:

The election was a straight fight \_\_\_\_\_ the four parties.

- A) among
  - B) around
  - C) along
  - D) across
- 

175) Fill in the blanks with the correct Preposition:

The door closed \_\_\_\_\_ him.

- A) beneath
  - B) between
  - C) amidst
  - D) on
- 

176) Fill in the blank with the appropriate verb form:

Raghu \_\_\_\_\_ just under his eye.

- A) is hits
  - B) are hit
  - C) was hit
  - D) were hit
- 

177) Fill in the blanks with the correct Article:

She is \_\_\_\_\_ world champion for \_\_\_\_\_ third year in succession.

- A) No Article...an
- B) the ... the
- C) an...a
- D) the...an

178) Identify the CORRECT sentence:-

- A) We enjoyed yourselves every minute of our stay.
  - B) We enjoyed ourselves every minute of our stay.
  - C) We enjoyed oneself every minute of our stay.
  - D) We enjoyed themselves every minute of our stay.
- 

179) Identify the correct synonym of the underlined word:

He's not very optimistic about the outcome of the interview.

- A) nervous
  - B) quiet
  - C) lively
  - D) hopeful
- 

180) Fill in the blanks with the correct option:

\_\_\_\_\_ employees have been closely associated with the organisation for some time.

- A) Both
- B) Much
- C) Each
- D) Enough

## Answer Keys

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