1) The work done by (x - 1) men in (x + 1) days and the work done by (x + 1) men in (x + 2) days are in the ratio 5 : 6. The value of x is:
A) 16 B) 10 C) 8 D) 6

2) A man has to travel 50 km in two hours. He could 20 km in one hour, and then had to stop for 10 minutes for refuelling. By what factor should he increase his speed with reference to that of the first hour so as to be able to complete the journey as per schedule?
A) 1.2 B) 1.8 C) 2.4 D) 1.5

3) If (x + 10)% of 240 is 60% more than x% of 180, then 15% of (x + 20) is what percent less than 25% of x?
A) 16 B) 15 C) 15 (1/2) D) 19 (1/21)

4) Five consecutive positive even numbers are arranged in ascending order. The sum of squares of 3rd number and 5th number is equal to 400. Then the average of the five numbers is
A) 8 B) 10 C) 12 D) 14

5) A fruit seller purchased 32 kg grapes for Rs. 960. He dried them to make raisins and would be able to sell raisins for Rs. 65 per kg. He can get 800 gm raisins from 1 kg grapes. Find profit %.
A) Profit 73.33% B) Loss 73.33%
C) Profit 26.67% D) Loss 26.67%

6) What is the sum (in RS) which divided among X Y Z in the proportion 3 : 5 : 7 provides rupees 8000 more to Z than what it would have done to him when the proportion is 11 : 15 : 19?
A) 180000 B) 120000 C) 175000 D) 135000

7) Elan, Jeff and Bill together started the business where Elan invested $ 2500 for 8 months, Jeff invested $ 2000 for 12 months and Bill invested $ 6000 for 4 months. If the profit earned from the business is $ 1360, then find the share of Jeff.
A) $ 360 B) $ 420 C) $ 400 D) $ 480

8) In a class of 25 students, 12 have taken mathematics, 8 have taken mathematics and computer science. The number of students who have taken computer science but NOT mathematics is:
A) 13 B) 8 C) 4 D) 17

9) What is the mean proportional (MP) between the MPs of (2/7 & 32/343) and (2 & 1/5000)?
A) 3/35 B) 4/35 C) 2/35 D) 2/175

10) Three bells ring simultaneously at 11 a.m. They ring at regular intervals of 20 min., 30 min., 40 min. respectively. The time when all the three bells ring together next is
A) 2 PM B) 1 PM C) 1:15 PM D) 1:30 PM

11) When a number is divided by 12, 16, 18 and 21 it will leave a remainder of 7 in each case find the third smallest number of this type.
A) 1015 B) 2023 C) 3031 D) 4039

12) If $5^x 3^y = 225 \times 405$, find the value of $x^{2y - 3x}$
A) 27 B) 81 C) 125 D) 25

13) If six digits number 25a64b is divisible by 11. Find the value of (a – b).
A) 5 B) 4 C) 3 D) 7

14) The collection numbers below is in ascending order (3, 7, 9, N-1, 15, 18, 19, 20) if the median of data 12.5, what is the value of n?
A) 11 B) 11.5 C) 12 D) 10.5

15) A work can be completed by A, B and C in 12 days,15 days and 24 days respectively. A started the work and worked for 2 days then B joined A and together they worked for 5 days. C completed the remaining work alone. Find the time taken by C to complete remaining work.
A) 1 day B) 2 days C) 5 days D) 3 days

16) Pipe X, Y and Z can fill a cistern 8 hrs, 12 hrs and 24 hrs respectively. All three began to fill the cistern together but X and Y left 4 hrs and 3 hrs respectively before filling the cistern. What is the total time taken by all of them to fill the cistern?
A) 10 hrs B) 7 hrs C) 3 hrs D) 14 hrs

17) What is the mean deviation of the data 8, 9, 12, 15, 16, 20, 24, 30, 32, 34?
A) 10.2 B) 9.6 C) 8 D) 0

18) How much percentage is (0.025% of 240% of 1.5%) of 0.9?
A) 0.01 B) 10 C) 0.1 D) 1

19) Dalip can row 42 km downstream in 2 hours and the same distance upstream in 2 hours and 48 minutes. How much time will he take to row 31.5 km downstream and 22.5 km upstream?
A) 3 h 15 m B) 3 h C) 2 h 50 m D) 4. 3 h 5 m

20) A student goes to college at the rate of 5 km/h and reaches 12 minutes late. If he travels at the speed of 8 km/h he is 15 minutes early. Find the distance between his college and his starting point?
A) 7 km B) 9 km C) 5 km D) 6 km

21) If the positive square root of (√90 + √80) is multiplied by (√2 - 1) and the product is raised to the power of four, the result would be
A) 100 B) 1600 C) 115200 D) 10

22) The average of 41 numbers is 62. The average of the first 21 numbers is 56 and that of the last 21 numbers is 70. If the 21st number is removed, then what will be the average of the remaining numbers?
A) 64.25 B) 66.75 C) 68.85 D) 60.95

23) In a competitive exam, 5 marks are awarded for every correct answer and for every wrong answer 2 marks are duducted. Sathwik scored 32 marks in this examination. If the 4 marks had been awarded for each correct answer and 1 marks are deducted for each incorrect answer,

sathwik should have scored 34 marks. If sathwik attempted all the question, how many question were there in test?

A) 12 B) 26 C) 14 D) 20

24) Calculate the ratio in which Jeff Bezos mix two varieties of flour costing Rs. 70 per kg and Rs. 75 per kg so that he may gain of 10%. When the selling price of the mixture is Rs. 79.20 per kg.

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

25) A sum invested on simple interest grows to Rs. 22500 and Rs. 25500 in seven and nine years respectively. What is the rate percentage of the interest?

A) 9.6 B) 13.5 C) 12.5 D) 7.5

REASONING:

1) Five friends A, B, C, D and E are sitting in a line facing North. Who is sitting exactly in the middle.

1. C is sitting between A and B. E is at the fourth Place to the left of B.

2. E is sitting to the immediate left of D. C is to the immediate left of B.

A) First statement alone.

B) Second statement alone.

C) Both statements together.

D) cannot be answered using both statements together

2) A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

TONY, WTGP, ZYZG, ?, FILO

A) CESY B) CDSX C) CDSY D) CESX

3) Consider the following arrangement that has some missing letters:

a b _ b b _ a b a _ b a _ b a b_a

Which one set of letters when subsequently placed at the gaps in the above letter series shall complete it?

A) aabab B) bbabb C) abbab D) aaaab

4) Five teachers P, Q, R, S and T teach a group of students in a sequence between 9:00 am to 2:00 pm. Each teacher teaches for one hour. Q takes the first class. S teaches just after the T. R teaches before P and T. Who takes the second class from 10:00 am to 11:00 am?

A) P B) T C) S D) R

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

Statements:

1. No apple is a banana. 2. No banana is a mango.

Conclusions:

I. Some apples are mangoes.

II. Some mangoes can be bananas.

III. No mango is an apple.

A) Only II follows B) Only I follows

C) Both I and II follows D) Either I or III follow.

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

Statements:

1. Some insects are animals. 2.Some animals are frogs.

3. All frogs are cats.

Conclusions:

I. Some cats are frogs. II. Some frogs are animals.

III. Some animals are insects.

A) All conclusions follow

B) Only conclusions I and III follow

C) Only conclusions I and II follow

D) Only conclusions II and III follow

7) You are given a question and two statements. Identify which of the statements is/are sufficient to answer the question.

Question: When is Yuvi's wedding anniversary?

Statements: 1: On 7th day of a month.

2. The month has 29 days only in a leap year.

A) Only statement 1 is sufficient

B) Both statement 1 and statement 2 are sufficient independently.

C) Only statement 2 is sufficient

D) Both statement 1 and statement 2 are sufficient together.

8) In each of the 5 pairs of the letter clusters the letter in the second term is arranged / transformed form of the letters in the first term in a particular pattern. Which two pairs has the transformation in same way.

1. MASON : AMNOS 2. PARTY : APRYT 3. FAULT : AFTLU

4. LODGE : DOLEG 5. CARGO : ACOGS

A) A and C B) C and D C) B and C D) D and E

9) 'A + B' means 'A is the husband of B'.

'A % B' means 'A is the father of B'.

'A $ B' means 'A is the mother of B'.

If 'Y + Z $ H % C $ D + S', then which of the following statements is INCORRECT?

A) C is the mother-in-law of S. B) Z is the maternal grandmother of C. C) H is the son of Y.

D) H is the maternal grandfather of D.

10) How many Rs. Would Shalini need to spend to buy 11 pencils and 14 pens.

1. Shalini spent an amount of Rs. 201 to buy 15 pencils and 12 pens.

2. Shalini spent an amount of Rs. 121 to buy 7 pencils and 9 pens.

A) Answered by using one of the statements.

B) Answered by using either statement alone.

C) Answered by using both statements together.

D) if the question cannot be answered even by using both statements together

11) A = B means B is the father of A; A * B means A is the sister of B; A ? B means B is the mother of A; A $ B means A is the brother of B; A @ B means B is the son of A; and A × B means A is the daughter of B. Then which of the following is not correct?

A) E $ F * G means G is the sister of E

B) P × R ? Q means P is the granddaughter of Q

C) G * H @ I = J means J and H are the husband and wife

D) X = Y ? Z means Z is the grandmother of X