SECTION 1 : QUANTITATIVE APTITUDE

1. Simplify the expression using BODMAS rule \( \frac{5}{7} \) of \( \frac{4}{5} \) of 56 \((352-332)\)
   A. 336
   B. 620
   C. 832
   D. None of these
   Ans: D

2. What is the L.C.M and H.C.F of the fractions \( \frac{4}{5} \), \( \frac{3}{7} \)?
   A. \(12/1, 1/35\)
   B. \(15/2, 7/35\)
   C. \(1/30, 6/47\)
   D. \(30/1, 55/3\)
   Ans: A

3. Divide the amount of Rs.400 between M, N, O, and P such that M and N together get six times as much as O and P together. N gets four times of what O gets and O gets 1.5 times as much as P. Now the value that N gets will be
   A. 1252
   B. 1200
   C. 2500
   D. 3000
   Ans: B

4. If \(M = a\% \) of \(b\) and \(N = b\% \) of \(a\), then which of the following must be true?
   A. \(M\) is lesser than \(N\).
   B. \(M\) is equal to \(N\)
   C. Relation between \(M\) and \(N\) cannot be determined.
   D. None of these
   Ans: B
5. What percentage of numbers from 10 to 80 have 2 or 6 in the unit's digit?

A. 1
B. 14
C. 20
D. 21

Ans: C

6. When a student weighing 45 kgs left a class, the average weight of the remaining 49 students increased by 300 g. What is the average weight of the remaining 59 students?

A. 57
B. 59.7
C. 60
D. 52.2

Ans: C

7. The cost price of 8 pens is the same as the selling price of 6 pens. What is the profit percentage?

A. 33.33%
B. 25%
C. 30%
D. 35%

Ans: A

8. By selling an article for Rs 400 more, Kiran would have made 8% profit on his sale instead of a 12% loss. What was his cost price?

A. Rs. 3750
B. Rs. 2000
C. Rs. 2250
D. Rs. 6,000

Ans: B
9. Ajay is as much younger than Balu as he is older than Chandu. If the sum of the ages of Balu and Chandu is 50 years, what is definitely the difference between Balu and Ajay’s age?

A) 1 year
B) 2 years
C) 25 years
D) Cannot be determined
Ans: D

10. P and Q enter into partnership with capital as 6:7. At the end of 5 months, P withdraws. If they receive the profits in the ratio of 5:14 find how long Q's capital was used?

A. 6 months
B. 8 months
C. 10 months
D. 12 months
Ans: D

11. A man complete a journey in 15 hours. He travels first half of the journey at the rate of 12 km/hr and second half at the rate of 18 km/hr. Find the total journey in km.

A. 216 km
B. 242 km
C. 224 km
D. 212 km
Ans: A

12. A man rides his bicycle 5 km at an average speed of 6 km/hr and again travels 6 km at an average speed of 5 km/hr. What is his average speed for the entire trip approximately?

A. 5.4 kmph
B. 5 kmph
C. 5.2 kmph
D. 5.8 kmph
Ans: A
13. A train 480 m long is running at a speed of 50 km/hr. In what time will it pass a bridge 520 m long?
   A) 5.55 s
   B) 8.5 s
   C) 7.3 s
   D) 10 s
   Ans: A

14. A boatman rowing against the stream goes 4 km in 1 hour and goes 2 km along the current in 10 minutes. How long does it take him to go 12 km in stationary water?
   A) 40 minutes
   B) 1 hour
   C) 1 hr 15 minutes
   D) 1 hr 30 minutes
   Ans: D

15. A man can do a piece of work in 7 days, but with the help of his son, he can do it in 3 days. In what time can the son do it alone?
   A) 6(1/2) days
   B) 21/4 days
   C) 7(1/2) days
   D) 8 days
   Ans: B

16. A is thrice as efficient as B and is, therefore, able to finish a piece of work 50 days earlier than B. In how many days A and B will finish it together?
   A. 18 1/2 days
   B. 18 3/4 days
   C. 15 1/2 days
   D. 15 3/4 days
   Ans: B
17. Two taps can separately fill a cistern 12 minutes and 16 minutes respectively and when the waste pipe is open, they can together fill it in 8 minutes. The waste pipe can empty the full cistern in?

A. 37 min
B. 48 min
C. 43 min
D. 29 min
Ans: B

18. In how many different ways can the letters of the word 'BANKER' be arranged such that the vowels must occupy only the odd positions?

A. 72
B. 64
C. 120
D. 36
Ans: A

19. Find out the number of ways in which 5 rings of different types can be worn in 4 fingers?

A. 1024
B. 1720
C. 1250
D. 1225
Ans: A

20. A speaks truth in 65% of cases and B in 70% of cases. In what percent of cases are they likely to contradict each other in narrating the same event?

A. 35%
B. 44%
C. 45%
D. 22.5%
Ans: B
21. A basket contains 20 apples and 30 oranges out of which 5 apples and 8 oranges are defective. If we choose two fruits at random, what is the probability that either both are oranges or both are non-defective?

A) $\frac{2202}{2450}$  
B) $\frac{2500}{2343}$  
C) $\frac{2020}{2450}$  
D) $\frac{2340}{2540}$  

Ans: A

22. A man took a loan from a bank at the rate of 15% p.a. simple interest. After three years he had to pay Rs. 6300 interest only for the period. The principal amount borrowed by him was:

A) Rs. 12000  
B) Rs. 11000  
C) Rs. 14000  
D) Rs. 15000  

Ans: C

23. If the simple interest on a sum of money for 2 years at 6% per annum is Rs. 60, what is the compound interest on the same at the same rate and for the same time?

A. Rs. 63.5  
B. Rs. 62  
C. Rs. 61.8  
D. Rs. 64  

Ans: C

24. How many litres of water should be added to a 40 litre mixture of milk and water containing milk and water in the ratio of 5 : 3 such that the resultant mixture has 50% water in it?

A. 5 litres  
B. 7 litres  
C. 10 litres  
D. None of these  

Ans: C
25. A cone and sphere have the same radius of 11 cm. Find the height of the cone if the cone and sphere have the same volume.

A. 38 cm
B. 44 cm
C. 36 cm
D. 48 cm

Ans: B

SECTION 2 : LOGICAL REASONING

1. Given following sequence, find the next term in the series:
3, 6, 13, 26, 53, 106, ___

A. 182
B. 213
C. 212
D. 174
E. None of these

Ans: B

2. A man shows his friend a woman sitting in a room and says that she is the daughter of my grandmother's only son. What is the relation between the two?

A. Daughter
B. Sister
C. Cousin
D. Either 2 or 3
E. None of these

Ans: D

3. If A + B means A is the brother of B; A % B means A is the father of B and A × B means A is the sister of B. Which of the following means M is the uncle of P?

A. M + S % T × P
B. $M \% S \times T + P$

C. $M \times S + T \% P$

D. $M \% S \% T + P$

E. None of these

Ans: A

4. In a certain code language if “TRAIN” is coded as UTDMS, then how will you code “GRASS”?

A. HTCWW
B. HTDWW
C. HTDXX
D. HTDWX
E. HTCWX

Ans: D

5. Study the following information carefully and answer the given questions.

In a certain code language,

(A) ‘dt sa re to oh’ means ‘College time are very awesome’.

(B) ‘ma sa re to lu’ means ‘school time are very busy’.

(C) ‘dt dn ma’ means ‘college and school’.

(D) ‘ma sa re oh’ means ‘school time are awesome’.

(E) ‘dt gt re lu’ means ‘college life are busy’.

Which of the following means ‘awesome’ in that code language?

A. to
B. oh
C. lu
D. dn

None of the above
6. Study the following information carefully and answer the given questions.

In a certain code language,

(A) ‘dt sa re to oh’ means ‘College time are very awesome’.

(B) ‘ma sa re to lu’ means ‘school time are very busy’.

(C) ‘dt dn ma’ means 'college and school’.

(D) ‘ma sa re oh’ means ‘school time are awesome’.

(E) ‘dt gt re lu’ means ‘college life are busy’.

Code ‘dn’ is for which word in the given language?

A. busy
B. awesome
C. and
D. are
E. None of the above

Ans: C

7. Jaffar starting from a fixed point goes 15 km towards North and then after turning to his right he goes 15 km. Then he goes 10, 15 and 15 km after turning to his left each time. How far is he from his starting point?

A. 20 km
B. 15 km
C. 10km
D. 12 km
E. 15 km

Ans: C

8. Aashima says to Sohan that she is going northward. But she goes 2 kms towards East, then 3 kms towards South and again 2 kms towards West and then she goes 2 kms towards the initial point from where she had started. In which direction is she from her initial position?

A. South
B. North
C. East
D. West
E. South – East

Ans: A

9. 10, 25, 45, 54, 60, 75, 80
A. 45
B. 75
C. 25
D. 54
E. 60

Ans: D

10. A clock is started at noon. By 10 minutes past 5, the hour hand has turned through:
A. 122 degrees
B. 155 degrees
C. 140 degrees
D. 135 degrees
E. 160 degrees

Ans: B

11. What will be the day of the week 15th August, 2010?
A. Sunday
B. Monday
C. Tuesday
D. Thursday
E. Friday

Ans: A

12. January 1, 2008 is Tuesday. What day of the week lies on Jan 1, 2009?
A. Thursday
13. If the alphabets A to Z represent each other in the reverse order i.e A = Z, B = Y, C = X etc., then how TOUR would be written?

A. GLIF
B. GLFI
C. GILF
D. None of these

Ans: B

14. If CHINA can be coded as BFFJV. How would you code INDIA?

A. HMJXV
B. HLAEV
C. HJMTV
D. HLEVA

Ans: B

15. Directions: Study the following information carefully and answer the questions given below:

Eight family members L, M, N, O, P, Q, R and S are sitting in a row facing north, but not necessarily in the same order. Four of them are males. There are three couples in the family.

P is a male and sits second to the right of R, who is wife of N. O is second to left of M, who is a female. O is wife of S and sits adjacent to her husband. Q is daughter of S and is not a neighbor of R. M is on the immediate left of R and second to the left of her father-in-law. L is brother of S, where S is on the immediate right of L. P and Q are siblings.

How many female members are there between N and S?

A. 1
B. 2
C. 3
D. 4
16. Who among the following sits second to left of R?
A. Grand daughter
B. Daughter
C. Son
D. Father
E. Grand son
Ans: A

17. Who among the following sits third to right of O’s daughter?
A. R
B. N
C. K
D. L
E. M
Ans: B

18. Four of the following five are similar in a certain way based on the given seating arrangement, hence form a group. Which among the following does not belong to that group?
A. RM
B. RN
C. RP
D. RL
E. NR
Ans: A

19. What is the position of O with respect to her mother-in-law?
A. Third to the left
B. Second to the left
C. Third to the right
D. Second to the right
E. Fourth to the right
Ans: A

20. Statements:
Some pens are erasers.
No eraser is a pencil.
Conclusions:
I. All pencils can be pens.
II. Some pens are neither erasers nor pencils.
   A. Only I follow
   B. Only II follow
   C. Either of I or II follow
   D. Neither of I or II follow
Ans: A

21. Find the missing number in the series: 2, 5, __ , 19 , 37, 75.
A. 9  
B. 10  
C. 12  
D. 15  
E. 16  
Ans: A

22. Fill in the blank spaces in the series with appropriate choices:
48, 45, 40, 33, 24 ……, ……
   A. 13, 0  
   B. 12, 0
23. In the following question assuming the given statements to be True, find which of the conclusion among given conclusions is/are definitely true and then give your answers accordingly

Statements: D = A < C; C > B; B > D

Conclusions:
I. C ≠ A
II. C > A
III. A < B

A. Only I is correct
B. Only 2 is correct
C. Only 3 is correct
D. All are correct

Ans: D

24. Direction: In the following question, a given question is followed by information in three statements. You have to decide the data in which statement(s) is/are sufficient to answer the question and mark your answer accordingly.

Six people A, B, C, D, E and F sit in a circular arrangement. Where did B sit in respect to A?

I) C sits fifth to the left of A.
II) B sits third to the left of C.
III) E sits fifth to the left of C.

A. Only I is sufficient
B. Only I and II are sufficient
C. Only III is sufficient
25. Direction: In the following question, a given question is followed by information in three statements. You have to decide the data in which statement(s) is/are sufficient to answer the question and mark your answer accordingly.

How many people sit between A and B?
I) B is 6\textsuperscript{th} from the left.
II) A is 7\textsuperscript{th} from the right.
III) There are 10 people in the line.

A. All the statements are required
B. Only I and II are sufficient
C. Only II and III are sufficient
D. Only I and III are sufficient
E. Insufficient data

Ans: A