Sections	Number of questions	Marks	Duration of Exam
1. English Language	30	30	60 minutes
2. Reasoning	35	35	
3. Quantitative Aptitude	35	35	
	Total = 100 Qs.	Total marks = 100	

1. English Language

Direction (Q. 1 - 5): Read the following passage carefully and answer the questions given below it.

Progress in life depends a good deal on crossing one threshold after another. Sometime a man watched his little nephew trying to write his name. It was hard work, very hard work. The little boy had arrived at a threshold. Today, he writes his name with comparative ease. Now a new threshold confronts him. This is the way with all of us. As soon as we cross one threshold, as soon as we conquer one difficulty, a new difficulty appears, or should appear. Some people make the mistake of steering clear of thresholds. Anything that requires genuine thinking and use of energy, they avoid. They prefer to stay in a rut where thresholds are not met. Probably, they have been at their job for a number of years. Things are easy for them. They make no effort to seek out new obstacles to overcome. Real progress stops under such circumstances.

Some middle-aged and elderly people greatly enrich their thresholds. One went into an entirely new business when he was past middle life and made a success of it. De Morgan didn't start to write novels until he was past sixty. Psychologists have discovered that man can continue to learn throughout his life. And it is undoubtedly better to try and fail than not to try at all. Then one can be placed in the category of the Swiss mountaineer for whom it was said, "He died climbing." When a new difficulty rises to obstruct your path, do not complain. Accept the challenge. Determine to cross this threshold as you have crossed numerous other thresholds in your past life. In the words of the poet, "Do not rest, strive to pass from dream to dream".

1. Which of the following statements is true?

1) One can learn new things only upto the age of 3 5 years.

2) University is the best place for learning.

3) A person can continue to learn throughout his life.

4) One should cease to learn new things after a certain age.

5) None of these

2. Which of the following statements is true?

1) One should use technology in learning new things.

2) One should not waste his energy in crossing one threshold after another.

3) One should always seek guidance from elders.

4) One should continue to face obstacles which confront him.

5) None of these

3. Which of the following statements is true?

1) A person can be successful only if he doesn't cross many thresholds.

2) De Morgan was a renowned mountaineer.

3) A reference has been made of a Dutch mountaineer.

4) One should not lament if he faces new obstacles.

5) None of these

4. According to the passage, progress in life depends on which of the following factors?

1) Energy conservation

2) Human resource development

3) Showing perseverance in crossing obstacles one after another

4) Remaining contented with one's job

5) None of these

5. When does real progress stop?

1) When there is poor governance

2) When the economy of the country is in a bad shape

3) When people refrain from finding new obstacles to overcome

4) When the percentage of illiteracy increases

5) None of these

Direction (Q. 6 - 10): Rearrange the following Ave sentences (A), (B), (C), (D), and (E) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

A. I want the concentration of wealth not in the hands of a few, but in the hands of all.

B. I want to save time and labour not for a fraction of mankind but for all.

C. Man goes on 'saving labour' till thousands are without work and thrown on the open streets to die of starvation.

D. The craze is for what they call labour-saving machinery.

E. What I object to is the craze for machinery, not machinery as such.

6. Which of the following would be the FIRST sentence?

1) A 2) B 3) C 4) D 5) E

7. Which of the following would be the SECOND sentence?

1) E 2) D 3) C 4) B 5) A

8. Which of the following would be the THIRD sentence?

1) A 2) B 3) C 4) D 5) E

9. Which of the following would be the FOURTH sentence?

1) A 2) B 3) C 4) D 5) E

10. Which of the following would be the FIFTH sentence?

1) A 2) B 3) C 4) D 5) E

Direction (Q. 11 - 20): In each sentence below, a word/group of words has been printed in bold. From the five answer choices given below each sentence, pick out the one which can substitute the bold word/group of words correctly, without changing the meaning of the sentence.

11. They have bought a new car, is n' t it ?

1) haven't they 2) don't they 3) have they 4) hasn't they 5) No correction required

12. Only a few persons can stand on entreaties.

1) against 2) with 3) in 4) at 5) No correction required

13. I had my ears bored so that I could wear my diamond earrings.

1) holed 2) pierced 3) pricked 4) pinned 5) No correction required

14. It is interesting to correspond the history of the 19th century with its literature.

1) corroborate 2) correlate 3) command 4) relate 5) No correction required

15. Didn't Mr Sharma come to the office yet?

1) Hadn't 2) Hasn't 3) Isn't 4) Wasn't 5) No correction required

16. He can't read this, nor can I.

1) no, I never can 2) no, I can't 3) no, I don't 4) not I can 5) No correction required

17. I bought four dozen of mangoes.

1) dozen of mango 2) dozens mangoes 3) dozens mangoes 4) dozen mangoes 5) No correction required

18. He does not like me coming so late.

1) my coming so late

2) I coming so late

3) me come so late

4) me so late coming

5) No correction required

19. I have to cut down my expenses due to my falling income.

1)1 have to cut off 2) I have to cut out 3) I have to cut of 4) I have to cut in 5) No correction required

20. Of the two candidates, I think he is the best suited.

1) he is suited best

2) he is better suited

3) he is best suited

4) he is good suited

5) No correction required

Direction (Q. 21 - 30): In each of the following sentences there are two blank spaces. Below each sentence there are five pairs of words denoted by the numbers 1,2,3,4 and 5. Find out which pair of words can be filled up in the blanks in the sentence in the same sequence to make it meaningfully complete.

21. If we do not keep_____ care in our industry, we will have to_____ a grave problem.

1) adequate, catch 2) normal, experience 3) proper, face 4) intensive, grave 5) None of these

22. Ambition is one of those_____ which are_____ satisfied.

1) ideas, ever 2) passions, never 3) needs, always 4) energies, all the time 5) None of these

23. The cloud of_____ appears to have blown_____.

1) bad luck, up 2) luck, off 3) misfortunes, out 4) bad time, over 5) None of these

24. There is no glory in war_____ the blood it_____.

1) considering, sheds 2) comprising, spills 3) for, flows 4) worth, costs 5) None of these

25. The degrees were_____ in the annual_____.

1) given, convention

2) awarded, convocation

3) distributed, conference

4) rewarded, convolution

5) None of these

26. I_____ him because for all his achievements he is

1) like, hostile 2) love, quiet 3) admire, modest 4) praise, pure 5) None of these

27. Will you please_____ from_____ in my affairs?

1) avoid, interesting 2) dissent, entering 3) stop, interrupting 4) abstain, interfering 5) None of these

28. Only students_____ have studied Psychology are _____to apply for the post.

1) that, selected 2) those, elected 3) who, eligible 4) they, intended 5) None of these

29. Many areas of the city were _ _ _ _ _ into darkness for _____hours.

1) deep, few 2) spread, some 3) vacant, many 4) plunged, several 5) None of these

30. An occasional wrong_____ may be sometimes _____to indecision.

1) decision, preferable

2) action, acceptable

3) works, suitable

4) activity, useful

5) None of these

Answers:

1. (3);

2. (4);

3. (4);

4. (3);

5. (3);

6. (5);

7. (2);

8. (3);

9. (2);

10. (1);

11. (1);

12. (1);

13. (2);

14. (2);

15. (2);

16. (5);

17. (4);

18. (1);

19. (5);

20. (2);

21. (3);

22. (2);

23. (3);

24. (4);

25. (2);

26. (3);

27. (4);

28. (3);

29. (4);

30. (1);

2. Reasoning

1. How many such pairs of letters are there in the word 'CORPORATE' each of which has as many letters between them in the word as they have in the English alphabet?

1) None 2) One 3) Two 4) Three 5) More than three

2. If sky is called sea, sea is called water, water is called air, air is called cloud, and cloud is called river, then what do we drink when thirsty?

1) Sky 2) Air 3) Water 4) Sea 5) Cloud

3. In ascertain code, GARIMA is written as 725432 and TINA as 6482. How is MARTINA written in that code?

1) 3256482 2) 3265842 3) 3645862 4) 3658426 5) None of these

4. If PEOPLE is coded as PLPOEE, how would TREND be coded?

1) TREDN 2) DNERT 3) NDETR 4) TRDNE 5) TNERD

5. Which of the following will come in place of question mark (?) in the following sequence?

BF, CH, ?, HO, LT

1) DN 2) EL 3) EK 4) EM 5) FJ

6. Choose the group of letters which is different from the others.

1) BEH 2) CFI 3) DGJ 4) EHL 5) FIL

7. Arrange the given words in alphabetical order and tick the one that comes in the middle.

1) plane 2) plain 3) plenty 4) player 5) place

8. How many 7s are there in the given arrangement, each of which is immediately preceded by 5 and followed by either 2 or 3?

5 7 2 6 5 7 3 8 3 7 3 2 5 7 2 7 3 4 8 2 6 7 8

1) 2 2) 3 3) 4 4) 5 5) 6

9. How many meaningful English words can be formed with the letters EPLA, using each letter only once in each word?

1) None 2) One 3) Two 4) Three 5) More than three

10. If 'A x B' means 'A is the wife of B\' A + B' means A is the father of B' and 'A ÷ B' means 'A is the sister of B', then in 'R x S + M ÷ N', how is R related to N?

1) Cannot be determined 2) Mother 3) Niece 4) Aunt 5) None of these

Direction (Q. 11 - 15): Study the following arrangement carefully and answer the questions given below:

B A 9 D % R I ⋆ H F 3 # V 5 $ 6 E 2 G 1 ÷ 7 X K M 8 U N Z W F

11. Which of the following is exactly in the middle of the eleventh element from the left and the fifteenth element from the right?

1) V 2) $ 3) 2 4) E 5) None of these

12. Four of the following five are alike in a certain way based on their position in the above arrangement and so form a group. Which is the one that does not belong to that group?

1) IH% 2) #5F 3) 6G5 4) 172 5) K87

13. How many such numbers are there in the above arrangement, each of which is immediately preceded by a consonant and not immediately followed by a symbol?

1) None 2) One 3) Two 4) Three 5) More than three

14. What should come in place of question mark (?) in the following series based on the above arrangement?

ADI H35 62- ?

1) K8Z 2) XMN 3) K8N 4) MUZ 5) None of these

15. How many such consonants are there in the above arrangement, each of the which is immediately followed by a consonant but not immediately preceded by a digit?

1) None 2) One 3) Two 4) Three 5) More than three

Direction (Q. 16 - 20): In each of the following questions, three statements are given followed by four conclusions numbered I, II, III and TV. You have to take the given statements to be true even if they

seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

16. Statements: All houses are schools.

No college is a house.

Some teachers are colleges.

Conclusions: I. Some teachers are houses.

II. Some schools are teachers.

III. All colleges are teachers.

IV. Some schools are colleges.

1) All follow 2) None follows 3) Only I and II follow 4) Only III and IV follow 5) Only I and III follow

17. Statements: No building is a window.

All toys are windows.

All windows are tigers.

Conclusions: I. No building is a tiger,

II. All toys are tigers.

III. Some tigers are not buildings.

IV. No toy is a building.

1) Only II, III and IV follow

2) Only either I or IV follows

3) Only either I or IV and II follow

4) None of these 5) All follow

18. Statements: Some boats are pictures.

Some pictures are rats.

All rats are mountains.

Conclusions: I. Some mountains are boats.

II. Some mountains are pictures.

III. Some rats are boats.

IV. Some pictures are mountains.

1) None follows 2) Only II follows 3) Only IV follows 4) Only II and IV follow 5) Only I and III follow

19. Statements: Some pens are houses.

No house is a desk.

All flowers are desks.

Conclusions: I. Some pens are flowers.

II. Some pens are desks.

III. Some flowers are pens.

IV. No house is a flower.

1) All follow 2) Only III follows 3) Only IV follows 4) Only II follows 5) None of these

20. Statements: All buildings are rain.

All papers are buildings.

All dogs are papers.

Conclusions: I. All dogs are rain.

II. Some papers are rain.

III. Some rains are buildings.

IV. Some rains are paper.

1) All follow 2) Only I, II and III follow 3) Only II and III follow 4) Only I and II follow 5) None of these

Direction (Q. 21 - 25): Each of the questions below consists of a question and two statements numbered I and II given below it You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer

1) If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question

2) If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.

3) If the data either in statement I alone or in statement II alone are sufficient to answer the question.

4) If the data given in both statements I and II together are not sufficient to answer the question.

5) If the data in both statements I and II together are necessary to answer the question.

21. P is in which direction of Q?

I. S is towards South of Q and towards East of N.

II. M is towards North of Q and towards West of R

22. P, Q, R, S and T are sitting in a circle, facing the centre of the circle. Who is second to the right of P?

I. R is on the immediate left of T and second to the right of S.

II.Q is on the immediate right of S and third to the left of P.

23. Among P, Q, R, S and T, who is the youngest?

I. R is younger than S.

II. T is younger than Q but older than P.

24. How many children are there between P and Q in a row of children?

I. P is fifteenth from the left in the row.

II. Q is exactly in the middle and there are ten children on his right.

25. What does 'ta' mean in a code language?

I. 'pa ta ja' means 'over and above' in that code language.

II. 'ho ka pa' means 'come over here' in that code language.

Direction (Q. 26 - 30): In the following questions, the symbols @, #, $, % and © are used with the following meaning as illustrated below:

'P $ Q' means 'P is not greater than Q'.

'P @ Q' means 'P is neither smaller than nor equal to Q'.

'P % Q' means 'P is neither greater than nor equal to Q\

'P © Q' means' P is not smaller than Q'.

'P # Q' means 'P is neither greater than nor smaller than Q'.

Now in each of the following questions, assuming the given statements to be true, find which of the three conclusions I, II and III given below them is/are definitely true.

26. Statements: D @ R, R © K, J % K

Conclusions: I. D @ J II. J %R III.K% D

1) None follows 2) Only I and II follow 3) Only II and III follow 4) Only I and III follow 5) All follow

27. Statements: M©N, N#V, W$V

Conclusions: I. M#W II.W%M III.V#M

1) None follows 2) Either I or II follows 3) Either II or III follows 4) Either I or III follows 5) All follow

28. Statements: M % B, H © B, K # H

Conclusions: I. K@M II.B#K III.K@B

1) All follow 2) Only I follow 3) Either II or III follows 4) Only II or III, and I follow 5) None of these

29. Statements: N © M, V % N, J @ V

Conclusions: I.J @M II.M@V III.N@J

1) None follows 2) Only I follows 3) Either I or II follows 4) Only III follows 5) All follow

30. Statements: H # R, R $ W, W % T

Conclusions: I. T @ R II.T@H III.T©H

1) Only I follow 2) Only II follows 3) Only I and II follow 4) All follow 5) None of these

Direction (Q. 31 - 35): Read the following information and answer the questions given below:

i) P, Q, R S, T, U and W are sitting in a circle facing the centre to play a game.

ii) T is a neighbor of P and S.

iii) One person is sitting between U and R and that is not W.

iv) U is on the immediate right of P.

31. Which pair given below has the second person sitting immediately on the right of the first?

1) RQ 2) SW 3) TP 4) PQ 5) None of these

32. Which of the following has the persons sitting adjacent to each other from left to right in order as given?

1) RSW 2) TSW 3) QWR 4) UQR 5) None of these

33. Who are the neighbours of Q?

1) R and S 2) U and R 3) P and U 4) Data inadequate 5) None of these

34. Which of the following pairs do not have persons sitting adjacent to each other?

1) QP 2) RQ 3) ST 4) WS 5) All are sitting adjacent to each other.

35. What is the position of U?

1) On the immediate left of P

2) On the immediate right of Q

3) Second to the right of R

4) Third to the left of S

5) None of these

Answers:

1. (5);

C O R P O R A T E

2. (2);

One drinks water when thirsty and as given, water is called air.

3. (1);

Letter	G	A	R	I	M	A	T	N
Code	7	2	5	4	3	2	6	8

$\therefore$ MARTINA $= 3256482$

4. (5);

The end letters remain in changed and the remaining ones are written in reverse order.

5. (3);

The first letter moves one, two, three……..

Steps while the second letter moves two, three,

Four…….steps forward.

6. (4);

In all other groups, there is a gap of two letters between the first and the second as well as between the second and the third letters.

7. (1);

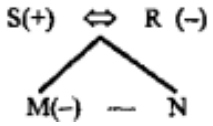
8. (2);

5 7 2 6 5 7 3 8 3 7 3 2 5 7 2 7 3 4 8 2 6 7 8

9. (5);

Required words are LEAP, PLEA, PALE, PEAL

10. (2);



11. (5);

B A 9 D % R I T * H F 3 # V F $ 6 E 2 G 1 ÷ 7 x K M 8 U N Z W F

The answer is F.

12. (3);

In all others, 1st element + 2 = 2nd element and 1st element -2 = 3rd element

13. (2); 8

14. (2);

Move seven places forwards for each corresponding element.

15. (5). HF, KM, NZ, ZW, WF

16. (2);

Some teachers are colleges + No College is a house = I + E = O = some teachers are not house. Hence I does not follow. Neither does II follows. Some teachers are teachers (I) – conversion – Some colleges are teachers (I). Hence III does not follow. No college is a house + All houses are schools = E + A = O* = Some schools are not colleges. Hence IV does not follow.

17. (1);

All toys are windows + All windows are tigers = A + A = A = All toys are tigers. Hence II follows. No building is a window = All windows. No building is a window = All windows are tigers = E + A = O* = some tigers are not building. Hence III follows but I does not. No building is a windows – conversion – No

windows is a building. Now, All toys are windows + No windows is a building = A + E = E = No toy is a building. Hence IV follows.

18. (4);

Some pictures are rats + All rats are mountains = I + A = I = Some pictures are mountains. Hence IV follows. II follows by converting this. Some boats are pictures + Some pictures are rats = I + I = No conclusion. Hence III does not follow Neither does I.

19. (3);

Some pens are houses + no house is a desk = I + E = O = some pens are not desks. Hence II does not follow. Neither do I and III consequently. No house is a desk – conversion – No desk is a house. All flowers are desks + No desk is a house = A + E = E = No flowers is a house – conversion – No house is a flower (E). Hence IV follows.

20. (1);

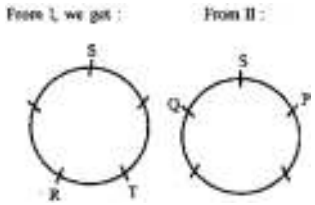
All building are rain – conversion – some rains are building (I). Hence III follows. All papers are building + All building are rains = A + A = All papers are rain – implication – Some papers are rain (I). Hence II follows, and IV follows by conversing this. All dogs are papers + All papers are rain = A + A = A = All dogs are rain. Hence I follows.

21. (2);

Statement I alone is not sufficient because the statement mentions nothing about P. Now, from II we get:

Thus, P is towards north-east of Q.

22. (2);



Hence, from II, Q is second to the right of P.

23. (4);

From I and II, we get:

S > R .....(i)

Q > T > P .....(ii)

No relation can be established between (i) and (ii). Hence, both statement I and II even together are not sufficient.

24. (5);

Statement I alone is not sufficient because it mentioned only P's position in the row. Statement II hints only the position of Q in the row, ie (10 + 1) = 11.

From I and II we get the required number of children = (15 - 1) – 11 = 3

25. (4);

26. (5);

From all the three statements, we get

D > R $\geq$ K > J. So D > J, R > J and D > K.

27. (2);

From all the three statements, we get

M $\geq$ N = V $\geq$ W, So M = W or M > W

28. (4);

M < B $\geq$ H = K

29. (1);

30. (3);

From all the three statements, we get T > R and T > H.

31. (3);

32. (4);

33. (2);

34. (1);

35. (5);

3. Quantitative Aptitude

Direction (Q. 1 - 25): What value should come in place of question mark (?) in the following equations?

1. $\frac{1089}{?} = \frac{?}{1296}$

1) 1188 2) 1192 3) 1196 4) 1204 5) 1208

2. 7.8% of 12.5 + 2.5% of 161 = ?

1) 12 2) 9.6 3) 8 4) 6.4 5) 5

3. $\frac{7.8 \; x \; 4.5 \; x \; 4.2}{0.14}$ = ?

1) 42.84 2) 47.24 3) 64.64 4) 72.8 5) None of these

4. 17580 x 1.8 – 13720 x 2.1 = ? x 2.4

1) 1120 2) 1140 3) 1160 4) 1180 5) 1200

5. 5525 ÷ 17 = $\sqrt{?}$

1) 93025 2) 99225 3) 105625 4) 112225 5) None of these

6. $\sqrt[3]{68921}$ = ?

1) 41 2) 43 3) 47 4) 49 5) 51

7. 1051.64 – 159.42 – 96.84 + 162.37 – 940.26 + 504 = ?

1) 517.49 2) 521.49 3) 527.49 4) 531.49 5) 535.49

8. $(7)^3 \div (49)^{-2} \times 343 = (7)^{?}$

1) 4 2) 7 3) 10 4) 11 5) 1

9. $\sqrt{207.36}$ = ?

1) 13.6 2) 13.8 3) 14.2 4) 14.4 5) 14.6

10. 68375 + 72848 - ? = 34346 + 49569

1) 54308 2) 55308 3) 56308 4) 57308 5) 58308

11. 148 x 3.75 x 4 = 111 x ?

1) 12 2) 18.4 3) 20 4) 21.6 5) 24

12. 732.96 + 405.38 – 604.08 – 105.44 + 222.86 = ?

13. (164 x 175) x ? = 258300

1) 5 2) 9 3) 12 4) 15 5) 20

14. $\{(174)^2 \div 36\} \div 2 = ?$

1) 420.5 2) 422.5 3) 424.5 4) 427.5 5) 428.5

15. $34\frac{3}{7}$ % of 805 + $24\frac{1}{7}$ % of 864 = ?

1) 497.27 2) 513.31 3) 522.46 4) 526.38 5) 528.32

16. $\sqrt{9216} + \sqrt{15376} = ?$

1) 216 2) 220 3) 224 4) 228 5) 230

17. 63.602 + 153.756 + 94.754 – 48.321 – 122.204 = ?

1) 141.587 2) 137.637 3) 133.987 4) 131.627 5) 129.717

18. 93296 – 45874 + 20382 – 56817 = ?

1) 10387 2) 10587 3) 10787 4) 10987 5) 11187

19. 65 x 288 ÷ 52 = 1.8 x ?

1) 200 2) 210 3) 240 4) 250 5) 280

20. 1260 x 1.45 – 888 x 1.75 = ?

1) 253 2) 263 3) 273 4) 283 5) 293

21. $(72)^2$ – 3144 = ? x 15

1) 112 2) 124 3) 136 4) 148 5) 160

22. $\frac{(18\ x\ 22)-84}{(32\ x\ 45)\div 24}$ = ?

1) 5.2 2) 5.4 3) 5.6 4) 5.8 5) 6.0

23. $(28)^{26}$ x $(21952)^{-8} \div \frac{1}{(28)-1}$ = ?

1) $(28)^{-2}$ 2) $(28)^{-1}$ 3) 28 4) $(28)^2$ 5) $(28)^0$

24. $\frac{7.14\ x\ 1.26}{0.17\ x\ 4.2\ x\ 1.8}$ = ?

1) 472 2) 474 3) 476 4) 478 5) 480

25. $\frac{8}{17}$ of 408 + $\frac{11}{13}$ of 338 = ?

1) 472 2) 474 3) 476 4) 478 5) 480

26. If an amount of Rs. 16871308 is distributed equally amongst 47 persons, how much amount would each person get?

1) Rs. 356246 2) Rs. 357812 3) Rs. 358904 4) Rs. 359612 5) None of these

27. In how many different ways can the letters of word "SENTENCE" be arranged?

1) 3360 2) 6720 3) 10080 4) 5040 5) 2240

28. What will be the value of $\frac{4}{5}$ of $\frac{3}{8}$ of 55% of 31920?

1) 5024.2 2) 5266.8 3) 5478.4 4) 5636.2 5) 5842.8

29. Which is the smallest fraction among the following?

1) $\frac{11}{13}$ 2) $\frac{13}{15}$ 3) $\frac{27}{31}$ 4) $\frac{21}{25}$ 5) $\frac{15}{19}$

30. The sum of the digits of a two-digit number is 12, and the difference between the number and the number obtained by interchanging the two digits of the number is 18. Find the number.

1) 93 2) 75 3) 84 4) 48 5) 39

31. What is the average of the following numbers?

5720175, 5819038, 4847211, 9815742, 7242158, 8432766

1) 6721575 2) 6835185 3) 6979515 4) 708445 5) 713625

32. What will be the next number in the following number series?

2, 12,30,56,90, 132,?

1) 172 2) 175 3) 178 4) 182 5) 186

33. Eight years ago the ratio of the age of A to that of B was 5:7. After 16 years the ratio of their ages will be 4:5. What is the difference between the present ages of A and B?

1) 14 years 2) 16 years 3) 18 years 4) 20 years 5) 22 years

34. A shopkeeper sold a TV at 18% discount on print rate. If the customer paid? 8856 for the TV and the printed price is 20% more than its cost price, what is the cost price of the TV?

1) Rs. 8400 2) Rs. 9000 3) Rs. 9500 4) Rs. 10500 5) None of these

35. Ram, Rakesh and Vijay invested in the ratio of 3:5:6 in business. If the amount invested by Rakesh is ?75000, what is the total amount invested in the business?

1) Rs. 1.8 lakh 2) Rs.1.96 lakh 3) Rs. 2.1 lakh 4) Rs. 2.4 lakh 5) None of these

Answers:

1. (1);

(?)2 = 1089 x 1296

= (11 x 11 x 9) x (12 x 12 9)

? = 11 x 12 x 9 = M88

2. (5);

$\frac{7.8\ x\ 12.5}{100} + \frac{2.5\ x\ 161}{100}$

= 0.975 + 4.025 = 5

3. (5);

$\frac{7.8\ x\ 4.5\ x\ 4.2}{0.14}$ = 1053

4. (4);

2.4 x ? = 31644 – 28812 = 2832

$\therefore\ ? = \frac{2832}{2.4} = 1180$

5. (3);

$\sqrt{?} = \frac{5525}{17}$ = 325

$\therefore\ ? = (352)^2 = 105625$

6. (1);

? = $\sqrt[3]{68921}$ = $\sqrt[3]{41\ x\ 41\ x\ 41}$ = 41

7. (2); ? = 1718.01 – 1196.52 = 521.49

8. (3); $(7)^3 \div (7)^{-4} \times (7)^3 = (7)^{3+4+3} = (7)^{10}$

9. (4);

$\sqrt{207.36} = \frac{\sqrt{20736}}{\sqrt{100}} = \frac{144}{10} = 14.4$

10. (4); ? = 68375 + 72848 – 34346 – 49569

= 141223 – 83915 = 57308

11. (3);

? = $\frac{148\ x\ 3.75\ x\ 4}{111}$ = 20

12. (3);

? = 1361.20 – 709.52 = 651.68

13. (2);

? = $\frac{258300}{164x175}$ = 9

14. (1);

? = $(\frac{174x174}{36}) \div 2 = \frac{841}{2}$ = 420.5

15. (2);

$\frac{241}{7}$ x $\frac{805}{100}$ + $\frac{82}{3}$ x $\frac{864}{100}$

= 277.15 + 236.16 = 513.31

16. (2);

? = $\sqrt{9216} + \sqrt{15376}$

= 96 + 124 = 220

17. (1);

? = 312.112 - 170.525 = 141.587

18. (4);

? = 113678 – 102691 = 109887

19. (1);

? = $\frac{65\ x\ 288}{52\ x\ 1.8}$ = 200

20. (3);

? = 1260 x 1.45 – 888 x 1.75

= 1827- 1554 = 273

21. (3);

? = $\frac{5184-3144}{15}$ = $\frac{2040}{15}$ = 136

22. (1);

? = $\frac{396-84}{60}$ = $\frac{312}{60}$ = 5.2

23. (3);

$(28)^{26}$ x $\{(28)^{1}\}^{-8}$ ÷ 28

= $(28)^{26-24-1}$ = 28

24. (5);

? = $\frac{7.14\ x\ 1.26}{0.17x4.2x1.8}$ = 7

25. (4);

? = $\frac{8x408}{17}$ + $\frac{11x338}{13}$

= 192 + 286 = 478

26. (5); Amount received by each person

= $\frac{16871308}{47}$ = 358964

27. (1);

Number of ways = $\frac{8!}{3!2!}$ = $\frac{40320}{12}$ = 3360

28. (2);

Value = $\frac{4\ x\ 3\ x\ 55}{5\ x\ 8\ x\ 100}$ x 31920 = 5266.8

29. (5);

$\frac{11}{13}$ = 0.8461, $\frac{13}{15}$ = 0.8666, $\frac{27}{31}$ = 0.87

$\frac{21}{25}$ = 0.84 $\frac{15}{19}$ = 0.789

30. (2);

Let the number be 10x + y.

$\therefore x + y = 12$ .....(i)

$10x + y - (10y + x) = 18$

Or $10x + y - 10y - x = 18$

Or $9x - 9y = 18$

$\therefore x - y = 2$

From (i) and (ii), $x = 7, y = 5$

$\therefore$ Number $= 75$

31. (3);

Avg = $\frac{41877090}{6}$ = 6979515

32. (4);

$1^2 + 1$, $3^2 + 3$, $5^2 + 5$, $7^2 + 7$

33. (2);

$\frac{A-8}{B-8} = \frac{5}{7}$ or 7A – 56 = 5B – 40

Or 7A – 5B = 16 .....(i)

$\frac{A+16}{B+16} = \frac{4}{5}$

Or 5A + 80 = 4B + 64

Or 5A – 4B = 16 .....(ii)

From (i) and (ii), A = 48, B = 64

$\therefore$ Diff $= 64 - 48 = 16$

34. (2);

Cost price = 8856 x $\frac{100}{82}$ x $\frac{100}{120}$

Rs. 9000

35. (3);

Let the total investment be x

$\therefore \frac{x}{(3+5+6)} \text{ x } 5 = 75000$

$\text{Or } \frac{x}{14} = \frac{75000}{5}$

$\therefore \text{x} = 14 \text{ x } 15000 = 21000$