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): Which of the phrases 1), 2), 3) and 4) given below should replace the phrase highlighted below to make the sentence meaningful and correct? If the sentence is already correct, mark 5), ie, "No correction required" as your answer.

1. We are now well to a position of sell our products in the international market.

1) at a position at

2) on a position for

3) along a position to

4) in a position to

5) No correction required

2. Congress President Sonia Gandhi and BJP leader Sushma Swaraj display an exceptional instance of responsibility during the three-day visit of US President Barack Obama.

1) displays an exceptional

2) displayed an exceptional

3) displayed an exception

4) display an exception

5) No correction required

3. A hobby teaches us skill and adds to our knowledge besides give satisfaction.

1) beside give 2) besides gave 3) beside given 4) besides giving 5) No correction required

4. How are you proceeding with your studies?

1) you are proceeding

2) you will proceeding

3) you proceed

4) you proceeded

5) No correction required

5. Man doesn't break up with overwork, but from his attitude towards work.

1) break up by 2) break in to 3) break down from 4) break with by 5) No correction required

Direction (Q. 6 - 15): Read each sentence to find out whether there is any grammatical error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error, the answer is 5), ie 'No error'. (Ignore the errors of punctuation, if any.)

6. 1) I' II be /2) there whether /3) he comes /4) or no. /5) No error

7. 1) For being a popular /2) figure she /3) is received /4) with open arms. /5) No error

8. 1) He went /2) to the basin /3) for washing /4) his hands. /5) No error

9. 1) Let us /2) be sacrifice /3) but not /4) butchers. /5) No error

10. 1) It is /2) as easy /3) like falling /4) of a log. /5) No error

11. 1) A large /2) number of /3) homes are coming /4) up around Delhi. /5) No error

12. 1) I was /2) not in /3) town during the /4) summer vacations. /5) No error

13. 1) Students have /2) been instructed to /3) finish writing the answers /4) before three hours. /5) No error

14. 1) Though he claims /2) to be an efficient /3) person, but he is /4) good for nothing. /5) No error

15. 1) It was /2) the apple /3) that fall on /4) his bare head. /5) No error

Direction (Q. 16 - 25): In each of the following sentences there are two blanks. 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.

16. It was not_____ but a search for excitement which made him steal_____ the shop.

1) money, into 2) necessary, at 3) necessity, from 4) required, in 5) encouraged, up

17. The rank and_____ of the party had turned_____ the leader.

1) file, against 2) cadre, on 3) office, for 4) rankers, to 5) class, towards

18. Before his_____ cross-examination his alibi fell_____.

1) illegal, short 2) legal, off 3) separate, down 4) shrewd, flat 5) intellectual, on

19. We thought that the Sadhu had_____ powers, but we soon found that we were_____.

1) super, fault 2) natural, wronged 3) extra, deceit 4) miracle, dark 5) miraculous, deceived

20. Salaries could not be_____ because the chairman _____not signed the cheques.

1) paid, was 2) disbursed, had 3) given, did 4) released, could 5) delivered, would

21. After_____ caught in the act, he knew that he was in _____trouble.

1) when, intense 2) been, dreaded 3) being, dire 4) become, intended 5) was, deep

22. Martin was_____ to the Police station because he was drunk and_____.

1) fetched, sleepy 2) bought, nasty 3) being, rough 4) been, absurd 5) brought, disorderly

23. At times, when she was in the right_____ , she would _____a humour which no one could match.

1) position, develop 2) mood, display 3) frame, cause 4) brain, create 5) gesture, design

24. Few could_____ her mental_____ when her husband died.

1) know, feelings 2) feel, thoughts 3) understand, anguish 4) see, health 5) realised, anxious

25. Illiteracy_____ a great_____ to progress.

1) being, recession 2) isn't, obstruct 3) now, distraction 4) is, impediment 5) was, disturbance

Direction (Q. 26 - 30): Rearrange the following five sentences (A), (B), (C), (D) and (E) in the proper sequence to form a meaningful paragraph and answer the questions given below them.

(A) China's economic rise began in the early 1980s under the visionary leadership of Deng Xiaoping.

(B) So, Yuan's peg to the US dollar has been of immense benefit for China's exporters.

(C) It was largely facilitated by pegging its currency Yuan to the US dollar.

(D) China's trade with the USA began in 1985 with a modest export figure of $4 million, but that figure has shown exponential growth since then.

(E) In 2008, US imports from China touched $337.8 billion, almost double of India's total exports and triple of China's imports from the US.

26. Which of the following would be the FIRST sentence after rearrangement?

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

27. Which of the following would be the SECOND sentence after rearrangement?

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

28. Which of the following would be the THIRD sentence after rearrangement?

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

29. Which of the following would be the FOURTH sentence after rearrangement?

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

30. Which of the following would be the LAST sentence after rearrangement?

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

Answers:

1. (4)

2. (2)

3. (4)

4. (5)

5. (3)

6. (4); 'comes or not'

7. (1); Delete 'for'.

8. (3); 'to wash'

9. (2); 'be sacrifices'

10. (3); 'as falling'

11. (3); 'houses are'

12. (4); Replace 'vacations' with 'vacation'

13. (4); 'within three hours'

14. (4); Replace 'but' with 'yet'.

15. (3); 'that fell on'

16. (3)

17. (1); 'Rank and file' means the ordinary members of an organization.

18. (4)

19. (5)

20. (2)

21. (3)

22. (5)

23. (2)

24. (3)

25. (4)

26. (1)

27. (1)

28. (3)

29. (2)

30. (3)

2. Reasoning

1. 'CE' is related to HJ in the same way as PS is related to_____""?

1) UW 2) UX 3) TW 4) TX 5) None of these

2. How many meaningful English words can be made with the letters RETU using each letter only once in each word?

1) None 2) One 3) Two 4) Three 5) None of these

3. Pointing to a boy, Seema said, "He is the son of my grandfather's only child." How is boy related to Seema?

1) Brother 2) Cousin 3) Sister 4) Data inadequate 5) None of these

4. A is older than B. C is younger than B. D is older than C but younger than B. Who among the four is the youngest?

1) B 2) D 3) A 4) C 5) Data inadequate

5. In a certain code 'come home' is written as 'ta na' and 'nice little home' is written as 'ja na pa'. How is 'come' written in that code?

1) ta 2) na 3) ja 4) na or ta 5) None of these

6. In a certain code CHRONICLE is written as 'PSIDMFMDJ'. How is 'SEPTEMBER' written in that code?

1) UQFTFSFCN 2) UQFTDSFCN 3) UQFTESFCN 4) SFCNDUQFT 5) None of these

7. If '÷' mean ' - ' , ' - ' means '+','+' means 'x' and 'x' means '÷' then the value of 17 + 5 - 75 ÷ 15 x 3 = ?

1) 145 2) 150 3) 155 4) 140 5) None of these

8. How many such pairs of letters are there in the word MARKETING each of which has as many letters between them in the word as in the English alphabet?

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

9. Four of the following five are alike in a certain way and thus form a group. Which is the one that does not belong to that group?

1) 841 2) 961 3) 121 4) 81 5) 221

10. How many such digits are there in 5321648 each of which is as far away from the beginning of the number as when the digits are arranged in descending order within the number?

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

Direction (Q. 11 - 15): In each of the questions below are given three statements followed by three conclusions numbered I, II, and III. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.

11. Statements: Some tents are buildings.

Some buildings are chairs.

Some chairs are windows.

Conclusions: L Some windows are buildings.

II. Some windows are tents.

III. Some chairs are tents.

1) None follows

2) Only I and II follow

3) Only II and III folllow

4) Only I and III follow

5) All follow

12. Statements: All books are tables.

All tables are chairs.

All chairs are papers.

Conclusions: I. Some tables are books.

II. Some papers are tables.

III. No table is a book.

1) None follows

2) Only I and III follow

3) Only I and II follow

4) All follow

5) None of these

13. Statements: All boxes are hammers.

Some hammers are wheels.

All wheels are mirrors.

Conclusions: I. Some hammers are mirrors.

II. Some wheels are boxes.

III. Some mirrors are boxes.

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

14. Statements: All jackets are trousers.

All trousers are shirts.

Some shirts are hooks.

Conclusions: I. Some shirts are jackets.

II. Some trousers are jackets.

III. Some hooks are shirts.

1) Only I and II follow

2) Only I and III follow

3) Only II and III follow

4) Only III follows

5) All follow

15. Statements: Some hotels are airports.

All airports are cameras.

Some cameras are caps.

Conclusions: I. Some caps are airports.

II. Some cameras are hotels.

III. No cap is an airports.

1) Only I or III and II follow

2) Only II follows

3) Only I or III follows

4) All follow

5) None of these

Direction (Q. 16 - 20): Study the following arrangement carefully and answer the questions given below:

W M 6 2 I # R 3 D E 8 D 9 % A 5 B $ K P I J O H 7 @ F $ 4 T N

16. How many such consonants are there in the above arrangement, each of which is immediately preceded by a symbol and immediately followed by a number?

1) One 2) Two 3) Three 4) Four 5) None of these

17. Which of the following is the sixth to the right of the twelfth from the left end?

1) $ 2) B 3) K 4) P 5) None of these

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

M2# D89 5$P ?

1) ©7@ 2) ©HF 3) ©7F 4) ©JH 5) None of these

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

1) 6IM 2) 3ER 3) D%8 4) KI$ 5) H©@

20. How many such symbols are there in the above arrangement, each of which is immediately preceded by a number and immediately followed by a letter?

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

Direction (Q. 21 - 25): Each of the questions given 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

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 even in both the statements I and II together are not sufficient to answer the question.

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

21. How is P related to Q?

I. P is the only son of Q's mother-in-law.

II. P's only daughter has only one brother, who is the son of Q.

22. Who among A, B, C and E is the heaviest?

I. B is lighter than only E among them and A is lighter than C.

II. E's weight is forty times the weight of C and fifty times the weight of A.

23. What does ' 7 ' stand for in a certain code?

I. '753' stands for ' D ⋆B' and '539' stands for 'BD#' in that code.

II. '427'stands for'JA⋆'and'214'stands for 'A@J' in the code.

24. In a row of thirty students, what is P's position from the right end?

I. P is third to the right of Q, who is twelfth from the right end?

II. R is fourteenth from the right end of the row and there are eight students between R and P.

25. On which day of the week does Khushbu's birthday fall?

I Ram correctly remembers that Khushbu's birthday falls after Wednesday but before Sunday.

II. Raj correctly remembers that Khushbu's birthday falls before Friday but after Tuesday.

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

'A#B' means 'A is not greater than B'

'A$B' means 'A is neither smaller nor equal to B'

' A%B' means 'A is neither smaller nor greater than B'

' A ⋆B' means 'A is neither greater than nor equal to B'

'A@B' means 'A is not smaller than B'

Now, in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true and give your answers accordingly.

1) if only conclusion I is true.

2) if only conclusion II is true.

3) if either conclusion I or II is true.

4) if neither conclusion I nor II is true.

5) if both conclusions I and II arc Hue.

26. Statements: P # Q, Q % R, R ⋆ S

Conclusions: I. R @ P II. P # S

27. Statements: A$B, B@C, C%D

Conclusions: I. A@D II. D$B

28. Statements: W ⋆ X, X # Y, Y$Z

Conclusions: I. W ⋆ Z II. W@Z

29. Statements: N @ M, M $ P, P%K

Conclusions: I. K ⋆ N II. P@N

30. Statements: G@H, H$P,

Conclusions: I .T#G II. P#G

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

P, Q, R, S, T, U and W are seven persons sitting around a circle facing the centre. R is fourth to the right of S, who is second to the right of T. P is third to the left of T. U is not an immediate neighbour of S. W is not an immediate neighbor of P.

31. Who is on the immediate left of W?

1) T 2) S 3) R 4) U 5) None of these

32. Who is on the immediate right of U?

1) P 2) T 3) R 4) Q 5) None of these

33. Who is third to the right of U?

1) T 2) W 3) S 4) Q 5) None of these

34. Who is third to the right of W?

1) U 2) Q 3) R 4) P

35. What is Q's position with respect to R?

1) Third to the right

2) Fourth to the left

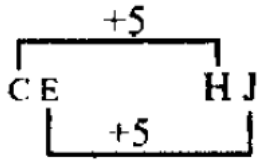
3) Second from the right

4) Second from the left

5) None of these

Answers:

1. (2);



2. (2); TRUE

3. (1);

Only child of seema's grandfather means father of seema. Therefore, the boy is brother of seema.

4. (4);

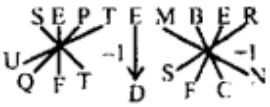
A > B > C

And B > D > C

= A > B > D > C

5. (1);

6. (2);



7. (3);

17 x 5 + 75 – 15 ÷ 3

= 85 + 75 – 5 = 155

8. (2); M A R K E T I N G

9. (5); All are perfect squares except 221.

10. (1);

5 3 2 1 6 4 8

8 6 5 4 3 2 1

11. (1); I + I = No conclusion.

12. (3);

All books are tables (A) – conversion – Some tables are books (I). Hence I follows and III does not. All tales are chairs + All chairs are papers = A + A = A = All tables are papers – conversion – some papers are tables (I). Hence II follows.

13. (3);

Some hammers are wheels + All wheels are mirrors = I + A = I = Some hammers are mirrors. Hence I follows. All boxes are hammers + Some hammers are wheels = A + I = No conclusion. Hence II does not follow. Neither does III consequently.

14. (5);

All jackets are trousers + All trousers are shirts = A + A = A = All jackets are shirts – Conversion – some shirts are jackets (I). Hence I follows. II followed by converting the first statement and III by converting the third.

15. (1);

All airports are cameras + Some cameras are caps = A + I = No Conclusion. Hence I and III do not followed by combination. But either I or III follows because the two form a complementary I-E pair. Some hotels are airports + All airports are cameras = I + A = I = Some cameras are hotels (I). Hence II follows.

16. (2); #R3, ©H7

17. (1); 6R + 12L = 181.

18. (3);

Move seven elements forward for each corresponding element of the next group.

19. (5); 1st element + 2 = 2nd element.

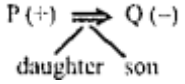
1st element – 1 = 3rd element

20. (2); 9%A, 7@F

21. (5);

From I, P is a male

From I and II



P is the husband of Q.

22. (1); From I, B is lighter than only E

= E is the heaviest.

23. (3);

From I:

D	*	B
7	5	3

B	D	#
5	3	9

BD = 53

From II: 42 is common in both so its code is JA and 7 is *.

24. (1);

From I: P = (12 – 3 =)9^{th} from the right.

From II: We don't know whether P is to the left of R or right.

25. (5);

From I: Thu, Fri, Sat

From II: Wed, Thu

$\therefore$ From I and II: Thu

26. (1);

$P \leq Q$ .....(i)

$Q = R$ .....(ii)

$R < S$ .....(iii)

Combining these statements, we get

$P \leq Q = R < S = R \geq P$

27. (4);

$A > B$ .....(i)

$B \geq C$ .....(ii)

$C = D$ .....(iii)

Combining these statements, we get

$A > B \geq C = D$

28. (3);

$W < X$ .....(i)

$X \leq Y$ .....(ii)

$Y > Z$ .....(iii)

Combining these, we get

$W < X \geq Y > Z$ Either $W < Z$ or $W \geq Z$

29. (1);

$N \geq M$ .....(i)

$M > P$ ....(ii)

$P = K$ .....(iii)

Combining these statements, we get

$N \geq M > P = K$

30. (4);

$G \geq H$ .....(i)

$H > P$ .....(ii)

$P \leq T$ .....(iii)

Combining these statements, we get

$G \geq H > P \leq T$

31. (1);

32. (3);

33. (2);

34. (4);

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 – 96.48 + 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 =?

1) 641.68 2) 647.68 3) 651.68 4) 655.68 5) 661.68

13. (164 x 175) x ? = 258300

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

14. {(174)2 ÷ 36} ÷ 2 = ?

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

15. $34\frac{3}{7}$ % of 805 + $27\frac{1}{3}$ % 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) 3 2) 4 3) 5 4) 6 5) 7

25. $\frac{8}{7}$ 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 x 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

$\therefore ? = (325)^2 = 105625$

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);

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

12. (3);

? = 1361.20 – 709.52 = 651.68

13. (2); $? = \frac{258300}{164 \times 175} = 9$

14. (1);

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

15. (2);

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

= 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); $? = \frac{65x288}{52x1.8} = 200$

20. (3); ? = 1260 x 1.45 – 888 x 1.75

= 1827 – 1554 = 273

21. (3);

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

22. (1);

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

23. (3);

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

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

24. (5);

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

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.

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

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

$\therefore$ x = 14 x 15000 = 21000