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): In each question below a sentence with four words printed in bold type is given. These are numbered as (1), (2), (3) and (4). One of these four words printed in bold may be either wrongly spelt or inappropriate in the context of the sentence. Find out the word which is wrongly spelt or inappropriate, if any. The number of that word is your answer. If all the words printed in bold are correctly spelt and also appropriate in the context of the sentence, mark (5) i.e. 'All correct' as your answer.

1. 1) It is better to seek /2) advice (2)1 from a financial consultant /3) on how to safe /4) your business. /5) All correct

2. 1) This is the list /2) of people who should be insisted /3) to participate /4) in the conference /5) All correct

3. 1) The impact /2) of those schemes /3) was visible /4) after a decade /5) All correct

4. Since this offer is available (1)/ for a limited (2)1 period alone (3)/you should register (4)/ immediately. All correct

5. 1) I patently /2) explained /3) to the customer that it was not possible /4) to fulfill his request /5) All correct

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

(A)Thus they teach us that no matter how insignificant you think you are, you can accomplish extraordinary things.

(B)During the course of its life it was struck by lightning fourteen times.

(C)But one day it was attacked by an army of beetles.

(D)The tree stood at the foot of the Himalayas for over four hundred years.

(E)The tiny insects ate their way through the tree and destroyed it.

(F) It even survived innumerable storms and avalanches.

6. Which of the following should be the FIRST sentence after rearrangement?

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

7. Which of the following should be the SECOND sentence after rearrangement?

(1) B (2) C (3) D (4) E (5) F

8. Which of the following should be the THIRD sentence after rearrangement?

(1) B (2) C (3) D (4) E (5) F

9. Which of the following should be the FIFTH sentence after rearrangement?

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

10. Which of the following should be the LAST (SEÍTH) sentence after rearrangement?

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

Direction (Q. 11 - 20): Read each sentence to find out whether there is any grammatical error or idiomatic terror 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'. (Ignore' errors of punctuation, if any).

11. 1) My cousin's wedding provided /2) me with the chance /3) to meet which relatives I /4) had not met for a long time /5) No error

12. 1) There are floods in this /2) region last year but /3) many of the victims have /4) not yet been compensated /5) No error

13. 1) We must ensure that /2) all our records /3) are computerized /4) for next year /5) No error

14. 1) In order to impart /2) training to bank employees /3) we are setting up /4) centers at various location /5) No error

15. 1) When Rahul reached /2) the office there was /3) nobody there so /4) he sat down to wait /5) No error

16. 1) I shall have to check /2) our records to find out, /3) how much cheques /4) have been collected so far /5) No error

17. 1) Our first task as /2) board members is /3) to decide-on what we /4) should spend these funds /5) No error

18. 1) She was lucky /2) to find a good paying /3) job as soon /4) as she graduated /5) No error

19. 1) For the last six months /2) Seema has been asking them /3) to refund the money but /4) there is been no action /5) No error

20. 1) He promised to get /2) in touch with myself /3) as soon as he had /4) the information I needed /5) No error

Direction (Q. 21 - 30): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the. Passage and against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

A professor was (21) the Indian Independence Movement and the idea of non-violence (22) by Mahatma Gant dela followed this idea and (23) the Nobel Prize for Peace Mahatma Gandhi did not." she said. One student spoke up, "It is good that he didn't, (24) it -was an award started by Alfred Nobel who invented dynamite, which causes (25)!"

The professor (26) "In fact the world should be (27) to Nobel because he invented dynamite. It was very useful to build tunnels (28) mountains for trains to pass. If we choose to use it for war it is not his fault. Furthermore he (29) all his wealth into instituting prizes for literature \ physics, chemistry, medicine, peace, etc. His (30) was that anything which benefits the human race deserved recognition so that the person who had started it would have no financial difficulties in achieving his goal".

21. (1) lecturing (2) talking (3) discussing (4) speaking (5) arguing

22. (1) originate (2) specialized (3) start (4) conceived (5) thought

23. (1) awarded (2) given (3) presented (4) win (5) received

24. (1) that (2) get (3) accept (4) though (5) since

25. (1) blast (2) ruins (3) destruction (4) bombs (5) damages

26. (1) disagreed (2) answers (3) shouted (4) upset (5) agreed

27. (1) dedicated (2) grateful (3) appreciated (4) thanking (5) cursing

28. (1) from (2) through (3) over (4) under (5) within

29. (1) put (2) left (3) gave (4) donated (5) contributed

30. (1) decision (2) logic (3) cause (4) excuse (5) discovery

Answers:

1. (4); The appropriate word should be - save.

2. (2); The appropriate word should be - persuaded.

3. (5); All correct

4. (3); The appropriate word should be - only.

5. (1); The correct spelling is : patiently.

6. (4); D

7. (2); C

8. (5); F

9. (5); E

10. (1); A

11. (3); Replace group of words 'to meet which relatives P by the group of words 'to meet the relatives whom F.

12. (1); The event shows past time. Hence, it is proper to use 'There were floods in this' instead of 'There are floods in this.'

13. (4); It will be proper to use Article 'the' before the word 'next'. Hence, replace group of words 'for next year' by 'for the next year/ till the next year.'

14. (4); Replace group of words 'centres at various locations' by 'centres at various locations'.

15. (5);

16. (3); Replace 'how many cheques. 'Much' is used with uncountable nouns, where as many is used with countable nouns.

17. (5); No error

18. (2); It will be proper to use 'to find a well paid'.

19. (4); It will be proper to use 'there is no action or there has been no action.'

20. (2); Replace 'in touch with myself by 'in touch with me'.

21. (3); discussing

22. (4); conceived

23. (5); received

24. (5) since

25. (3); destruction

26. (1); disagreed

27. (2); grateful

28. (4); under

29. (2); left

30. (1); decision

2. Reasoning

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

(1) 99 (2) 143 (3) 132 (4) 88 (5) 126

2. In a row of children facing North Samir is 17th from the left end of the row and second to the right of Jyoti who is fifteenth from the right end of the row. How many children are there in the row?

(1) 30 (2) 29 (3) 31 (4) 34 (5) None of these

3. Pole H is to the East of pole R and to the North of pole D. Pole D is in which direction with respect to pole R?

(1) North-East (2) South-West (3) North-West (4) South-East (5) None of these

4. In a certain code 'she is busy' is written as 'ka ta jo'; 'she has gone' is written as 'pa ta ma' and 'days are gone' is written as 'bo la pa'. How is 'has' written in that code?

(1) ma (2) ka (3) ta (4) ta or ma (5) None of these

5. How many such pairs of letters are there in the word EDUCATION, 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

6. If it is possible to form only one three digit number which is a perfect square of a two digit number from the second, the sixth and the seventh digits of the number 76483912 using each digit only once the second digit of that number is your answer. If no such number can be formed your answer is '0' and if more than one such number can be formed your answer is '5'.

(1) 5 (2) 0 (3) 1 (4) 6 (5) 9

7. In a certain code DEPTH is written as 7$%#o and POWDER is written" as %487$5. How is WORTH written in that code?

(1) 745#6 (2) 845#6 (3) 745%# (4) 854%6 (5) None of these

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

(1) Hibiscus (2) Rose (3) Sunflower (4) Mustard (5) Jasmine

9. Among five children T, Q, H, J and F each having a different height, T is taller than only J and H is shorter than only F. Who among them is the third in order of height?

(1) F (2) Q (3) H (4) J (5) T

10. How many meaningful English words can be formed from the letters ADRW using each letter only once in each word?

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

Direction (Q. 11 - 15): Study the following arrangement carefully to answer these questions.

4 D # Q H I 3 L @ R E 6 1M " % F A 7 J P U R 5 8 $ K 9 ©

11. How many such symbols are there in the above arrangement each of which is immediately preceded and also immediately followed by a consonant?

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

12. Which element is third to the right of fifteenth from the right end?

(1) 1 (2) M (3) 6 (4) E (5) None of these

13. If all the symbols are dropped from the given arrangement, which element will be ninth from the right end?

(1) A (2) 7 (3) J (4) E (5) None of these

14. How many such numbers are there in the given arrangement each of which is immediately preceded by a vowel?

(1) None (2) One (3) Two (4) Three (5) Four

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

(1) L@3 (2) I3H (3) A7F (4) PUJ (5) $8K

Direction (Q. 16 - 20): In each question below are three statements followed by two conclusions numbered I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts.

(1) if only conclusion I follows.

(2) if only conclusion II follows

(3) if either conclusion I or II follows.

(4) if neither conclusion I nor II follows.

(5) if both conclusions I and II follow.

16. Statements:

All pens are papers.

Some papers are blades.

All blades are knives.

Conclusions:

I. Some knives are papers.

II. Some blades are pens.

17. Statements:

All fans are televisions.

Some televisions are channels.

Some channels are radios.

Conclusions:

I. Some fans are channels.

II. Some radios are televisions.

18. Statements:

Some roots are stems.

All stems are branches.

All branches are leaves.

Conclusions:

I. Some leaves are roots.

II. Some branches are stems.

19. Statements:

Some computers are machines.

Some machines are boards.

All boards are chalks.

Conclusions:

I. Some chalks are computers.

II. No chalk is computer.

20. Statements:

Some locks are keys.

All keys are metals.

Some metals are cards.

Conclusions:

I. Some cards are keys.

II. Some metals are locks.

Direction (Q. 21 - 25): These questions are based on the following information. Study it carefully and answer the questions.

Ten members A, B, C, D, E, F, G, H, I and J are split into two teams X and Y of 5 members each. Members in the two teams are made to sit in two rows facing each other in such a way that one member of team X is sitting exactly opposite of a member in team Y. Members of team X are facing north. D is third to the right of A and sits exactly opposite of G. B sits to the immediate right of G and is facing south. H is third to the right of B and is exactly opposite of F. C sits between A and E and is opposite of I.

21. Who is second to the left of C ?

(1) F (2) A (3) B (4) D (5) None of these

22. Which of the following group of persons sit in the same row?

(1) HIE (2) ACB (3) CDI (4) HIG (5) None of these

23. Who is the immediate right of B?

(1) C (2) E (3) 1 (4) A (5) None of these

24. Who is to the immediate left of J?

(1) H (2) C (3) E (4) B (5) None of these

25. Who sits exactly opposite of J?

(1) H (2) A (3) F (4) C (5) None of these

Direction (Q. 26 - 30): In these questions symbols @, #, *, $ and % are used with different meanings as follows:

'A@B' means 'A is smaller than B'.

'A#B' means 'A is either smaller than or equal to B'

'A*B' means 'A is equal to B'

'A$B' means 'A is greater than B'

'A%B' means 'A is either greater than or equal to B'.

In each of the following questions assuming the given statements to be true, find out which of the two conclusions I and II given below them is/are definitely true.

(1) if only conclusion I is true.

(2) if only conclusion II is true.

(3) if either conclusion I or conclusion II is true.

(4) if neither conclusion I nor conclusion II is true.

(5) if both conclusions I and II are true.

26. Statements:

Q • H, H @ L, L @ F

Conclusions: I. Q @ F II. H@F

27. Statements:

D$E, E%I, I%K

Conclusions: I. D%I II. E%K

28. Statements:

V@W, W#U, U@R

Conclusions: I. V @ R II. W@R

29. Statements:

F@J, J#T, T%R

Conclusions: I. F$T II. F • R

30. Statements:

M$K, K * H , H%L

Conclusions: I. M $ L II. M@H

Direction (Q. 31 - 35): These questions are based on the following set of numbers.

385 496 239 891 752

31. If in each number the positions of first and the third digits are interchanged and then the numbers are arranged in descending order which number will be second?

(1) 385 (2) 496 (3) 239 (4) 891 (5) 752

32. If all the numbers are arranged in descending order, what is the second digit of the fourth number?

(1) 91 (2) 3 (3) 5 (4) 8- (5) None of these

33. What is the sum of the middle digit of the smallest number and the first digit of the largest number?

(1) 4 (2) 12 (3) 11 (4) 5 (5) None of these

34. What is the difference between the third digit of the smallest and the largest numbers?

(1) 8 (2) 6 (3) 5 (4) 4 (5) None of these

35. If in each number the first and second digits are interchanged and then the numbers are arranged in descending order, which number will be the first?

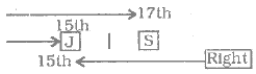
(1) 385 (2) 496 (3) 239 (4) 891 (5) 752

Answers:

1. (5);

Except 126, all others numbers are multiples of 11.

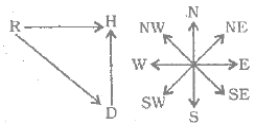
2. (2);



Total number of children in the

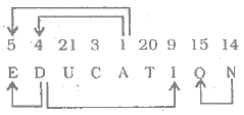
Row = 15 + 15 – 1 = 29

3. (4);



4. (1);

5. (5);



6. (1);

7 6 4 8 3 9 1 2

$196 = (14)^2$

$961 = (31)^2$

$169 = (13)^2$

7. (2);

D E P T H P O W E R

7 $ % # 6 % 4 8 7 $ 5

Therefore,

W O R T H

8 4 5 # 6

8. (4);

Except Mustard, all others are beautiful flowers. Mustard is an oilseed.

9. (2); F > H > Q > T > J

10. (3);

Meaningful words

= DRAW, WARD

11. (4);

Consonant	Symbol	Consonant

Such combinations are:

$\boxed{D\#Q}$: $\boxed{L@R}$: $\boxed{M\%F}$

12. (5);

3rd to the right of 15th from the right means 12th from the right end i.e. A

13. (2);

According to question, the new arrangement would be:

14. (4);

Vowel	Number

Such combinations are:

$\boxed{13}$: $\boxed{E6}$: $\boxed{A7}$:

15. (5);

L $\xrightarrow{+1}$ @ $\xrightarrow{-2}$ 3

I $\xrightarrow{+1}$ 3 $\xrightarrow{-2}$ H

A $\xrightarrow{+1}$ 7 $\xrightarrow{-2}$ F

P $\xrightarrow{+1}$ U $\xrightarrow{-2}$ J

$ $\xrightarrow{-1}$ 8 $\xrightarrow{+2}$ K

16. (1);

Some papers are blades.

All blades are knives.

I + A = I-type of Conclusion.

Some papers are knives

Conclusion I is Converse of it.

17. (4);

All fans are televisions.

Some televisions are channels.

A + I = No Conclusion.

18. (5);

Some roots are stems.

All stems are branches.

I + A = I-type of Conclusion

Some roots are branches

All stems are branches

All branches are leaves

A + A = A-type of Conclusion

All stems are leaves

Some roots are branches

All branches are leaves

I + A = I-type of Conclusion

Some roots are leaves

Conclusuion I is Converse of it

Conclusion II is Converse of the second Premise.

19. (3);

Some machines are boards

All boards are chalks.

I + A = I-type of Conclusion

Some machines are chalks

Conclusions I and II form Complementary Pair. Therefore, either I or II follows.

20. (2);

Some locks are keys

All keys are metals

I + A = I-type of Conclusion

Some locks are metals

Conclusion II is Converse of it.

21. (1); F is second to the left of C.

22. (4); H, I and G are in the same row:

23. (3); I is to the immediate right of B.

24. (5); I is to the immediate left of J.

25. (2); A sits exactly opposite of J.

26. (5);

Q * H = Q = H

H @ L = H < L

L @ F = L < F

Therefore,

Q = H < L < F

Conclusions:

I. Q @ F = Q < F : True

II. H @ F = H < F : True

27. (2);

D $ E = D > E

E % I = E $\geq$ I

I % L = I $\geq$ K

Therefore,

D > E $\geq$ I $\geq$ K

Conclusions:

I. D % I = D $\geq$ I : Not True

II. E % K = E $\geq$ K : True

28. (5);

V @ W = V < W

W # U = W $\leq$ U

U @ R = U < R

Therefore,

V < W $\leq$ U < R

Conclusions:

I. V @ R = V < R : True

II. W @ R = W < R : True

29. (4);

F @ J = F < J

J # T = J $\leq$ T

T % R = T $\geq$ R

Therefore,

F < J $\leq$ T $\geq$ R

Conclusions:

I. F $ T = F > T : Not True

II. F * R = F = R : Not True

30. (1);

M $ K = M > K

K * H = K = H

H % L = H $\geq$ L

Therefore,

M > K = H $\geq$ L

Conclusions:

I. M $ L = M > L : True

II. M @ H = M < H : Not True

31. (2);

385 = 583; 496 = 694

239 = 932; 891 = 198

752 = 257

932 > 694 > 583

694 = 496

32. (4); 891 > 752 > 496 > 385

33. (3); 3 + 8 = 11

34. (1); 9 – 1 = 8

35. (4);

385 = 835; 496 = 946

239 = 329; 891 = 981

752 = 572

981 > 946 > 835

981 = 891

3. Quantitative Aptitude

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

1. 7432 ÷ 32 x ? = 2787

1) 8 2) 14 3) 15 4) 12 5) None of these

2. $[(11)^3 \text{ x } (6)^2] \div (4)^3$ = ?

1) 2994.75 2) 748.6875 3) 272.25 4) 4492.125 5) None of these

3. 75% of 250 - ?% of 380 = 54.5

1) 32 2) 25 3) 35 4) 40 5) None of these

4. (4.6 x 2.8 x 5.5) – (3.2 x 4.5 x 2.8) = ?

1) 36.28 2) 30.42 3) 28.35 4) 32.52 5) None of these

5. $\sqrt{2304}$ x $\sqrt{4}$ = 2832

1) 3249 2) 3481 3) 3721 4) 3969 5) None of these

6. 74698 + 365 + 85213 + 95 = ?

1) 160281 2) 160641 3) 160371 4) 160362 5) None of these

7. $\frac{6.4 \; x \; 8.5 \; x \; 2.5}{3.2 \; x \; 12.5}$ = ?

1) 4.4 2) 3.5 3) 4.2 4) 3.4 5) None of these

8. $\sqrt[3]{103823}$ = ?

1) 49 2) 51 3) 45 4) 37 5) None of these

9. (444 x 44 x 4) ÷ 40 ?

1) 1953.6 2) 176 3) 1776 4) 1736.5 5) None of these

10. 4550 ÷ 25% of ? = 130

1) 145 2) 140 3) 125 4) 160 5) None of these

11. $8529 - (49)^2 - 125 - (9)^3$ = ?

1) 5994 2) 5274 3) 7626 4) 5922 5) None of these

12. 748 x 362 = $(520)^2$ + (?)

1) 382 2) 374 3) 365 4) 376 5) None of these

13. 1720 – 258 + 428 x 5.5 =?

1) 3431 2) 3716 3) 3816 4) 3388 5) None of these

14. 1895 – 225 ÷ 50 =?

1) 1890.5 2) 33.4 3) 1880.5 4) 34.5 5) None of these

15. 6432 ÷ 16 ÷ ? =6

1) 69 2) 57 3) 63 4) 56 5) None of these

16. 2110 ÷ 25 + 350 ÷ 50 =?

1) 91.4 2) 8.688 3) 281.33 4) 86.2 5) None of these

17. 6999 + 3555 – 2333 = ?

1) 8337 2) 8444 3) 7338 4) 8221 5) None of these

18. 49 x 64 = $(?)^2$

1) 54 2) 56 3) 52 4) 63 5) None of these

19. 6.8 x ? x 7.9 = 161.16

1) 2 2) 7 3) 5 4) 4 5) None of these

20. 16% of 380 x 5 = ?

1) 276 2) 284 3) 304 4) 312 5) None of these

21. 3604 ÷ 53 x ? = 2924

1) 61 2) 45 3) 41 4) 59 5) None of these

22. 6.4 x 0.5 x 0.2 = ?

1) 6.04 2) 0.064 3) 6.4 4) 0.64 5) None of these

23. 72345 – 64897 – 12343 = ?

1) 2575 2) 2650 3) 2600 4) 2550 5) None of these

24. 8442 ÷ $\sqrt{576}$ - ? = 351

1) 1.50 2) 0.75 3) 1.75 4) 0.55 5) None of these

25. 345 ÷ 23 ÷ 5 = ?

1) 3 2) 3.5 3) 2.5 4) 2 5) None of these

26. What least number should be added to 8602 to make it a perfect square?

1) 234 2) 47 3) 128 4) 36 5) None of these

27. The cost of 15'kgs. of rice is Rs. 720 and the cost of 16 kgs. Of wheat is Rs. 576. What is the difference between the cost of 45 kgs. of rice and 56 kgs. of wheat?

(1) Rs. 148 (2) Rs. 136 (3) Rs. 144 (4) Cannot be determined (5) None of these

28. In how many different ways can the letters of the word TEST' be arranged?

(1) 24 (2) 10 (3) 36 (4) 15 (5) None of these

29. What should come in place of the question mark (?) in the following number series?

888 444 148 ? 7.4

(1) 32 (2) 37 (3) 35 (4) 36 (5) None of these

30. Sourabhi invested an amount of Rs. 16,840 at the rate of 6 p.c.p.a. for 5 years. What total amount will she obtain with the simple interest at the said rate at the end of 5 years?

(1) Rs. 20,984 (2) Rs. 21,764 (3) Rs. 20,584 (4) Rs. 21,892 (5) None of these

31. The average age of 60 boys in a class was calculated as 12 years. It was later realized that the actual age of one of the boys in the class was 12.5 years but it was calculated as 14 years. What is the actual average age of the boys in the class?

(1) 11 years (2) 11.275 year (3) 11.50 years (4) 11.975 years (5) None of these

32. What approximate value should come in place the question mark (?) in the following question?

9685 $ 356 x 12.5 = ?

(1) 330 (2) 325 (3) 360 (4) 355 (5) 340

33. Birju, Bankim and Boney begin to jog around a circular stadium. They complete their revolutions in 36 seconds, 48 seconds and 63 seconds respectively. After how many seconds will they be together at the starting point?

(1) 1008 (2) 956 (3) 848 (4) Cannot be determined (5) None of these

34. Find the average of the following set of scores.

746 1020 321 12 63 428 226 144

(1) 367.5 (2) 370 (3) 360 (4) 368.75 (5) None of these

35. What is 846 times 323?

(1) 280872 (2) 276488 (3) 273258 (4) 272412 (5) None of these

Answers:

1. (4);

$\frac{7432}{32}$ x ? = 2787

= ? = $\frac{2787\ x\ 32}{7432}$ = 12

2. (2);

? = $\frac{11x11x11x6x6}{4x4x4}$

= 748.6875

3. (3);

$\frac{250\ x\ 75}{100}$ - $\frac{380x?}{100}$ = 54.5

= 250 x 75 – 380 x ?

= 54.5 x 100

= 18750 – 380 x ? = 5450

= 380 x ? = 18750 – 5450

= 13300

= ? = $\frac{13300}{380}$ = 35

4. (5);

? = (4.6 x 2.8 x 5.5) – (3.2 x 4.5 x 2.8) = 70.84 – 40.32 = 30.52

5. (2);

$\sqrt{2304}$ x $\sqrt{?}$ = 2832

= 48 x $\sqrt{?}$ = 2832

= $\sqrt{?} = \frac{2832}{48}$ = 59

$\therefore ? = 59 \text{ x } 59 = 3481$

6. (3);

? = 74698 + 365 + 85213 + 95 = 160371

7. (4);

? = $\frac{6.4x8.5x2.5}{3.2x12.5}$ = 3.4

8. (5);

? = $\sqrt[3]{103823} = \sqrt[3]{47x47x47}$ = 47

9. (1);

? = $\frac{444x44x4}{40}$ = 1953.6

10. (2);

4550 ÷ ? x $\frac{25}{100}$ = 130

= 4550 ÷ $\frac{?}{4}$ = 130

= 4550 x $\frac{4}{?}$ = 130

= ? x 130 = 4550 x 4

= ? = $\frac{4550x4}{130}$ = 140

11. (2);

? = 8529 – $(49)^2$ – 125 – $(9)^3$

= 8529 – 2401 – 125 – 729

= 5274

12. (4);

748 x 362 = $(520)^2$ + ?

= 270776 = 270400 + ?

= ? = 270776 – 270400 = 376

13. (3); ? = 1720 – 258 + 428 x 5.5

= 1720 – 258 + 2354 = 3816

14. (1);

? = 1895 - $\frac{225}{50}$

= 1895 – 4.5 = 1890.5

15. (5);

$\frac{6432}{16x?}$ = 6

= ? =$\frac{6432}{16x6}$ = 67

16. (1);

? = $\frac{2110}{25} + \frac{350}{50}$

= 84.4 + 7 = 91.4

17. (4); ? = 6999 + 3555 – 2333 = 8221

18. (2);

(?)2 = 49 x 64 = 7^2 x 3^2

= ? = 7 x 8 = 56

19. (5);

6.8 x ? x 7.9 = 161.16

$\therefore ? = \frac{161.16}{6.8x7.9} = 3$

20. (3);

? = 380 x $\frac{16}{100}$ x 5 = 304

21. (5);

$\frac{3604}{53}$ x ? = 2924

= ? = $\frac{2924x53}{3604}$ = 43

22. (4); ? = 6.4 x 0.5 x 0.2 = 0.64

23. (3); ? = 79845 – 64897 – 12343 = 2605

24. (2);

8442 ÷ $\sqrt{576}$ - ? = 351

= 8442 ÷ 42 - ? = 351

= $\frac{8442}{24}$ - ? = 351

= 351.75 - ? = 351

= ? = 351.75 – 351 = 0.75

25. (1); ? = $\frac{345}{23x5}$ = 3

26. (2);

92 x 92 = 8464

93 x 93 = 8649

∴ Required number

$= 8649 - 8602 = 47$

27. (3);

Cost price of 45 kg of rice

= 45 x $\frac{720}{15}$ = Rs. 2160

Cost price of 56 kg of wheat

= $\frac{576}{16}$ x 56 = Rs. 2016

Required difference

= Rs. (2160 - 2016) = Rs. 144

28. (5);

The word TEST consists of 4 letters in which T comes twice.

∴ Number of arrangements

$= \frac{4!}{2!} = \frac{4x3x2x1}{2x1} = 12$

29. (2);

888 ÷ 1 = 888

888 ÷ 2 = 444

444 ÷ 3 = 148

148 ÷ 4 = $\boxed{37}$

37 ÷ 5 = 7.4

30. (4);

SI = $\frac{Principal\ x\ Time\ x\ Rate}{100}$

= $\frac{16840\ x\ 5\ x\ 6}{100}$ = Rs. 5052

$\therefore$ Total amount received

$= \text{Rs. } (16840 + 5052) = \text{Rs. } 21892$

31. (4); 11.975 years

32. (5); ? = $\frac{9685}{356}$ x 12.5 = 340

33. (1);

Required time 36, 48 and 63 seconds

LCM of = 2 x 2 x 3 x 3 x 4 x 7 = 1008 seconds

2	36, 48, 63
2	18, 24, 63
3	9, 12, 63
3	3, 4, 21
	1, 4, 7

34. (2);

Average score

= $\frac{766+1020+321+12+63+428+226+144}{8}$

= $\frac{2960}{3}$ = 370

35. (3); 846 x 323 = 273258