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 - 10): 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 opt the appropriate word in each case.

With the (1) of Indian economy (2) various reforms initiated, banking sector (3). a pivotal role in the process of achieving (4) economic growth and also in (5) the social well being at large. The Public sector (6) in India have the twin tasks ahead of meeting the social banking (7) and at the same time generating (8) profits to meet the costs associated with growth. At present, banks have more than 76.1 per cent of their total branch (9) in rural and semi-urban (10).

1. (1) nationalization (2) expansion (3) liberalization (4) computerization (5) accommodation

2. (1) from (2) over (3) between (4) through (5) thorough

3. (1) manages (2) occupies (3) facilitates (4) naturalize (5) conquers

4. (1) fewer (2) fantastic (3) higher (4) lower (5) lesser

5. (1) increasing (2) enhancing (3) encouraging (4) improving (5) innovating

6. (1) organizations (2) companies (3) corporations (4) banks (5) institutions

7. (1) limitations (2) obligations (3) derivatives (4) facilities (5) liabilities

8. (1) beautiful (2) lump sum (3) adequate (4) wonderful (5) everlasting

9. (1) map (2) scenario (3) network (4) system (5) graph

10. (1) households (2) residences (3) areas (4) locals (5) suburbs

Direction (Q. 11 - 20): In each question below, four words which are numbered (1),(2), (3) and (4) have been printed of which one may be wrongly spelt. The number of that word is answer. If all the four words are correctly spelt, mark (5) i.e. 'All correct' as the answer.

11. (1) Profession (2) Justice (3) Riot (4) Assembly (5) All correct

12. (1) Shoddy (2) Affair (3) Parade (4) Beard (5) All correct

13. (1) Matchstick (2) Death (3) Birth (4) Spark (5) All correct

14. (1) Suspect (2) Rope (3) Religious (4) Escalade (5) All correct

15. (1) Confident (2) Strach (3) Road (4) Hire (5) All correct

16. (1) Village (2) Pattrol (3) Parole (4) Enough (5) All correct

17. (1) Partition (2) Independence (3) Foreigner (4) Tricolor (5) All correct

18. (1) Appointment (2) Broad (3) Commissioner (4) Arrival (5) All Correct

19. (1) Welcome (2) Urgent (3) Introduce (4) Smile (5) All correct

20. (1) Incarnation (2) Adoration (3) Administration (4) Authorization (5) All correct

Direction (Q. 21 - 25): Pick out the most effective word from the given words to make the sentence meaningfully complete.

21. I will_____ them for saving me from the agonies of old age.

(1) fire (2) beat (3) thank (4) admonish (5) shout

22. I have not done things which anyone else may feel Eire_____ recording.

(1) useless (2) worth (3) good (4) historic (5) bad

23. I was handed_____ to Bhai Hari Singh.

(1) back (2) over (3) through (4) upon (5) again

24. We were_____ with the names of notorious criminals.

(1) constantly (2) convenient (3) familiar (4) obvious (5) ignorant

25. I do not know what_____ my father choose that particular school.

(1) happened (2) controlled (3) made (4) asked (5) thrilled

Direction (Q. 26 - 30): Read each sentence to find out whether there is any grammatical/idiomatic/spelling mistake/error in it. The error, if any, will be in one part of the sentence. Mark the number of. that part with error as your answer, If there is no error, mark (5).

26. 1) I have criticize /2) the remarkable book /3) because I benefited /4) from reading it. /5) No error

27. 1) As Arundhati Roy /2) in her foreword write /3) John offers /4) untold stories of people /5) No error

28. 1) Citizens needed /2) to know that /3) our leader cannot /4) be trusted. /5) No error

29. 1) Responsibilities includes /2) working with the editors /3) on all aspects /4) of the editorial process. /5) No error

30. 1) We build a simple model /2) to test whether /3) there is a phase change /4) in the Indian economy. /5) No error

Answers:

1. (3); liberalization

2. (4); through

3. (2); occupies

4. (3); higher

5. (4); improving

6. (4); banks

7. (2); obligations

8. (3); adequate

9. (3); network

10. (3); areas

11. (1); The correct spelling is profession.

12. (5); All correct

13. (1); The correct spelling is matchstick.

14. (4); The correct spelling is explode.

15. (2); The correct spelling is stretch.

16. (2); The correct spelling is patrol.

17. (5); All correct

18. (3); The correct spelling is commissioner.

19. (1); The correct spelling is welcome.

20. (3); The correct spelling is administration.

21. (3); thank

22. (2); worth

23. (2); over

24. (3); familiar

25. (3); made

26. (1); The error lies in part (1) of the sentence. 'I have criticize' should be replaced with 'I did not criticize'. It will make the sentence meaningful.

27. (2); The word 'write" is in Present Indefinite tense. It should be replaced with 'has written' as Present Perfect is used to express post action whose time is not given and not definite.

28. (1); Citizens needed

29. (1); The word responsibilities is a plural subject. It will take plural verb.

30. (5); No error

2. Reasoning

1. In a class of forty students, Samir's rank from the top is twelfth. Alok is eight ranks below Samir. What is Alok's rank from the bottom?

(1) 20^{th} (2) 21^{st} (3) 22^{nd} (4) 19^{th} (5) None of these

2. 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 that group?

(1) Jowar (2) Paddy (3) Millet (4) Wheat (5) Sesame

3. How many such pairs of letters are there in the word GOLDEN 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

4. In a certain code DAYLONG is written as ZBEKHOP. How is CORDIAL written in that code?

(1) SPDCMBJ (2) SPDEMBJ (3) DPSCMBJ (4) SPDCJBM (5) None of these

5. If it is possible to make only one meaningful English word with the third, the seventh, the eighth and the tenth letters of the word PREDICAMENT, which of the following will be the third letter of that word ? If no such word can be made, give 'X' as the answer and if more than one such word can be made, give 'V as the answer.

(1) M (2) N (3) E (4) X (5) Y

Direction (Q. 6 - 10): These questions are based on the following letter/ number/symbol arrangement. Study it carefully and answer the questions that follow:

6 E F # 3 J A K 4 @ D 7 B R U L T $ 5 I H 1 % M 2 © 8

6. 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 the group?

(1) M©8 (2) 3AK (3) 6F# (4) BRL (5) 4D7

7. If from the above arrangement, all the symbols are dropped, which element will be third to the right of eighth from the right end?

(1) H (2) 1 (3) 1 (4) M (5) None of these

8. How many such consonants are there in the above arrangement, each of which is immediately followed by another consonant which is immediately followed by a symbol?

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

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

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

10. Which element is fifth to the right of sixth from the left?

(1) @ (2) D (3) T (4) $ (5) None of these

11. In a certain code ROBE is written as '5136' and BIND is written as '3792'. How is RIDE written in that code?

(1) 5276 (2) 5726 (3) 5376 (4) 5326 (5) None of these

12. Pravin walked 30 metres towards East, took a right turn and walked 20 metres, again took a right turn and walked 30 metres. How far was he from the starting point?

(1) 30 metres (2) 80 metres (3) 50 metres (4) 20 metres (5) None of these

13. In a certain code 'good and bad' is written as '725'; 'one and all' is written as '932' and 'this is good' is written as '154'. How is 'one' written in that code?

(1) 9 (2) 3 (3) 2 (4) Data inadequate (5) None of these

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

(1) One (2) Two (3) Three (4) Four (5) More than four

15. Which of the following will be the middle digit of the second lowest number among the five numbers given below?

317 528 439 254 861

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

16. 'BEAN' is related to 'NEAB' and 'SAID' is related to 'DAIS' in the same way as 'LIME' is related to-

(1) MLEI (2) ELMI (3) EIML (4) EILM (5) None of these

Direction (Q. 17 - 23): In each of the questions below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer (1) if only Conclusion I follow.

Give answer (2) If only Conclusion II follows.

Give answer (3) if either Conclusion I or Conclusion II follows.

Give answer (4) if neither Conclusion I nor Conclusion II follows.

Give answer (5) if both Conclusion I and Conclusion II follow.

17. Statements:

All poles are lights.

All lights are bulbs.

All bulbs are tubes.

Conclusions:

I. All tubes are poles.

II. Some bulbs are poles.

18. Statements:

All tires are wheels.

Some wheels are desks.

All desks are plates.

Conclusions:

I. Some plates are wheels.

II. Some plates are tires.

19. Statements:

Some kites are threads.

Some threads are sticks.

All sticks are umbrellas.

Conclusions:

I. Some kites are umbrellas.

II. Some umbrellas are threads.

20. Statements:

Some flowers are trees.

No tree is room.

Some rooms are hotels.

Conclusions:

I. Some hotels are flowers.

II. Some rooms are flowers.

21. Statements:

All jackets are shirts.

All shirts are trousers.

No trouser is bag.

Conclusions:

I. No jacket is bag.

II. No bag is shirt.

22. Statements:

Some keys are cards.

Some cards are phones.

Some phones are locks.

Conclusions:

I. Some keys are locks.

II. No key is lock.

23. Statements:

Some chairs are tables.

All tables are computers.

All computers are boards.

Conclusions:

I. Some chairs are boards.

II. Some chairs are computers.

24. If 'red' means 'orange', 'orange' means 'green', 'green' means 'blue', 'blue' means 'white' and 'white' means 'red', then what is the color of fresh grass?

(1) green (2) orange (3) white (4) blue (5) None of these

25. If in the word EXHORBITANT all the vowels are replaced by the next alphabet and all the consonants are replaced by the previous alphabet and then all the letters are arranged alphabetically from left to right, which letter will be fourth from the left end?

(1) 9 (2) J (3) F (4) G (5) None of these

Direction (Q. 26 - 30): 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.

Give answer (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.

Give answer (3) if the data in Statement I alone or in Statement II alone are sufficient to answer the question.

Give answer (4) if the data in both the Statements I and II are not sufficient to answer the question.

Give answer (5) if the data in both the Statements 1 and II together are necessary to answer the question.

26. How is Nikhil related to Shashikant?

Statements:

I. Nikhil is grandson of Shashikant's father.

II. Nikhil is the only child of his parents.

27. Who is oldest among Sunil, Neelesh, Rajendra, Madhav and Gaurav?

Statements:

I. Neelesh is older than only Madhav and Sunil among them.

II. Rajendra is not the oldest.

28. What is the code for 'school' in the code language?

Statements:

I. 'go to school' is written as 'fil ka na'.

II. 'go for exercise' is written as 'ka pit rom'.

29. How many siblings does Radha have?

Statements:

I. Radha has only one brother.

II. Radha is the only daughter of her parents.

30. What is Neeta's position from left end in the row of children facing north?

Statements:

I. Neeta is second to the right of Subodh who is eighth from the left end.

II. Neeta is third to the left of Ravi who is tenth from the right end.

Direction (Q. 31 - 35): Study the following information carefully to answer these questions.

Seven students A, B, C, D, E, F and G from three different colleges X, Y and Z study different subjects viz. Psychology, Sociology, History, Geography, Economics, Accountancy and English not necessarily in the same order. At least two students study in each college. D studies Psychology in college X with only F. B

studies English and E studies Geography but none of them studies in college Y. The one who studies Sociology studies in college Z. G studies Accountancy and C studies History.

31. Which of the following is the correct combination of college, student and subject?

(1) Z-A-English (2) Y-A- Sociology (3) Y-E-Geography (4) Z-E-Geography (5) None of these

32. A studies in which of the following colleges?

(1) Y (2) X (3) Z (4) Y or Z (5) Cannot be determined

33. Which of the following pair of students study in college Y?

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

34. Who studies Sociology?

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

35. Which subject is studied by F?

(1) Econpmics (2) Sociology (3) History (4) Cannot be determined (5) None of these

Answers:

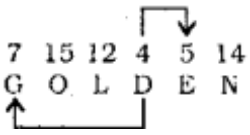
1. (2);

Alok's rank from the top = 20^{th}

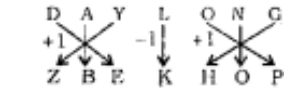
Alok's rank from the bottom = 40 – 20 + 1 = 21st

2. (5); Except sesame, all other are grains sesame is an oilseed.

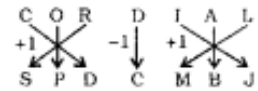
3. (3);



4. (1);



Therefore,



5. (5);

1 2 $\boxed{3}$ 4 5 6 $\boxed{7}$ $\boxed{8}$ 9 $\boxed{10}$ 11

P R $\boxed{E}$ D I C $\boxed{A}$ $\boxed{M}$ E $\boxed{N}$ T

Meaningful Words

= MEAN, NAME, MANE

6. (4);

M $\xrightarrow{+2}$ © $\xrightarrow{+1}$ 8

3 $\xrightarrow{+2}$ A $\xrightarrow{+1}$ K

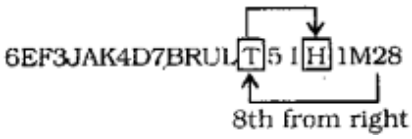
6 $\xrightarrow{+2}$ F $\xrightarrow{+1}$ #

B $\xrightarrow{+1}$ R $\xrightarrow{+2}$ L

4 $\xrightarrow{+2}$ D $\xrightarrow{+1}$ 7

7. (1);

According to question, the new sequence would be:



8. (2);

Consonant	Consonant	symbol

There is only such combination: $\boxed{LT\$}$

9. (3);

Number	Symbol	Consonant

Such combination are:

$\boxed{4@D}$, $\boxed{1\%M}$

10. (2);

5th to the right of sixth from the left means 11th from the left, i.e. D

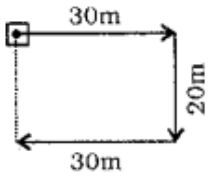
11. (2);

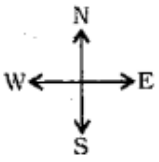
R O B E B I N D
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
5 1 3 6 3 7 9 2

Therefore,

R I D E
↓ ↓ ↓ ↓
5 7 2 6

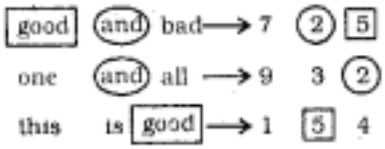
12. (4);





Required distance = 20 m

13. (4);



The code for one is either 9 or 3.

14. (2); Meaningful Words = LEAN, LANE

15. (1); Second lowest number = 3 1 7

16. (3);

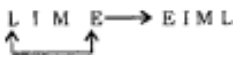
1 2 3 4 – 4 2 3 1

B E A N N E A B

1 2 3 4 - 4 2 3 1

S A I D D A I S

Therefore,



(17 - 23):

(i) All poles are lights – Universal Affirmative (A-type).

(ii) Some wheels are desks – particular Affirmative (I-type).

(iii) No tree is room – Universal Negative (E-type).

(iv) Some trees are not rooms – particular Negative (O-type).

17. (2);

Some poles are lights.

All lights are bulbs.

A + A = A-type of conclusion

All poles are bibles.

Conclusion II is Converse of it

All poles are bulbs

All bulbs are tubes.

A + A = A-type of Conclusion

All poles are tubes.

18. (1);

Some wheels are desks.

All desks are plates.

I + A = I-type of Conclusion

Some wheels are plates.

Conclusion I is Converse of it.

19. (2);

Some threads are sticks

All sticks are umbrellas.

I + A = I-type of Conclusion

Some threads are umbrellas

Conclusion II is Converse of it

20. (4);

Some flowers are trees.

No trees is room.

I + E = O-type of Conclusion

Some flowers are not rooms.

No trees is room

Some rooms are hotels.

E + I = O-type of Conclusion

Some hotels are not trees.

21. (5);

All jackets are shirts

All shirts are trousers.

No trousers are bag.

A + A + E = E-type of Conclusion

No jacket is bag.

This is Conclusion I.

All shirts are trousers

No trousers is bag.

A + E = E-type of Conclusion

No shirt is bag.

Conclusion II is Converse of it.

22. (3);

All the three premises are particular Affirmative (I-type). No Conclusion follows from the two particular Premises. Conclusion I and II form Complementary Pair. Therefore, either I or II follows.

23. (5);

Some chairs are tables.

All tables are computers.

I + A = I-type of Conclusion

Some chairs are computers

This is Conclusion II.

Some chairs are computers

All computers are boards.

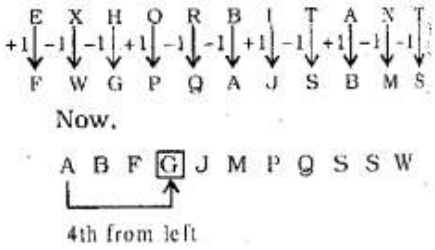
I + A = I-type of Conclusion

Some chairs are boards.

This is Conclusion I.

24. (4); The color of fresh grass is green. Here, green has been called blue.

25. (4);



26. (4); From both the statements Nikhil is either son or nephew of Shashikant.

27. (5);

From both the statements Gaurav is the oldest.

Gaurav > Rajendra > Neelesh > Madhav, Sunil

28. (4);

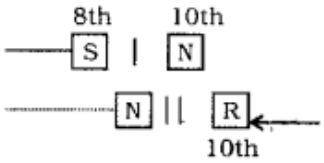
From both statements

Go to school – fil ka na

29. (5); From both statements Radha has only one sibling.

30. (1);

From statement I



(31 - 35):

Student	College	Subject
A	Z	Sociology
B	Z	English
C	Y	History
D	X	Psychology
E	Z	Geography
F	X	Economics
G	Y	Accountancy

31. (4); Z-E-Geography is correct.

32. (3); A studies in college Z.

33. (2); C and G studies in college Y.

34. (5); A studies Sociology.

35. (1); F studies Economics.

3. Quantitative Aptitude

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

1. $[(4)^3 \times (5)^4] \div (4)^5$ =?

1) 30.0925 2) 39.0625 3) 35.6015 4) 29.0825 5) None of these

2. $\frac{1.6 \; x \; 3.2}{0.08}$ =?

1) 6.4 2) 8 3) 64 4) 0.8 5) None of these

3. (7857 + 3596 + 4123) ÷ 96 =?

1) 155.06 2) 162.25 3) 151.83 4) 165.70 5) None of these

4. 741560 + 935416 + 1143 + 17364 = ?

1) 1694583 2) 1695438 3) 1695483 4) 1659483 5) None of these

5. $(84)^2 \div \sqrt{?} = 168$

1) 1936 2) 1521 3) 1681 4) 1464 5) None of these

6. 514789 – 317463 – 87695 – 11207 =?

1) 96584 2) 98242 3) 96845 4) 98424 5) None of these

7. 8926 - ?% of 650 = 8848

1) 15 2) 8 3) 12 4) 10 5) None of these

8. $\sqrt[3]{50653}$ = ?

1) 39 2) 43 3) 33 4) 41 5) None of these

9. (17891 + 16239 - 26352) x ? = 93336

1) 12 2) 15 3) 18 4) 8 5) None of these

10. $\frac{1}{4}$ x 6624 x $\frac{1}{6}$ x 12 =?

1) 3312 2) 3864 3) 2208 4) 4416 5) None of these

11. $\frac{18\ x\ 15-50}{(40\ x\ 80)\div 160}$ = ?

1) 20 2) 8.5 3) 11.5 4) 22 5) None of these

12. 36% of 4800 x 0.2% of 1320 =?

1) 4535.52 2) 4551.36 3) 4561.92 4) 4572.48 5) None of these

13. $\sqrt{?}$ x $\sqrt{1681}$ = 2296

1) 2196 2) 3364 3) 2809 4) 3025 5) None of these

14. 93 x 45 ÷ 25 =?

1) 167.4 2) 837 3) 279 4) 130.2 5) None of these

15. 0.08 x ? x 1.6 = 0.2944

1) 1.3 2) 0.4 3) 0.2 4) 2.3 5) None of these

16. $\frac{3}{9}$ x $\frac{9}{4}$ ÷ ($\frac{7}{2}$ x $\frac{3}{7}$) =?

1) $\frac{9}{5}$ 2) $\frac{2}{5}$ 3) $\frac{81}{245}$ 4) $\frac{46}{15}$ 5) None of these

17. ?% of 380 = 57

1) 25 2) 15 3) 12.5 4) 18 5) None of these

18. 5187 ÷ 15 x 5 =?

1) 69.16 2) 1779 3) 691.6 4) 1729 5) None of these

19. $\frac{4}{7}$ x 40% of 350 =?

1) 80 2) 20 3) 160 4) 60 5) None of these

20. 23.04 x $\frac{140}{8}$ =?

1) 403.2 2) 4023 3) 4032 4) 3892 5) None of these

21. (47432 - 33980) x 2.5 =?

1) 34880 2) 33630 3) 3388 4) 3363 5) None of these

22. ? of (7% o2f 400 + 25% of 208) = 16

1) $\frac{1}{5}$ 2) $\frac{2}{5}$ 3) $\frac{1}{9}$ 4) $\frac{4}{19}$ 5) None of these

23. $\frac{22+12x5-1}{7-6\div2-1}$ =?

1) 9 2) 27 3) 6 4) 17.5 5) None of these

24. $\sqrt{?}$ - 161 = 8^2

1) 225 2) 2025 3) 52250 4) 289 5) None of these

25. $(1\frac{1}{3}+1\frac{1}{5})\div(\frac{4}{9}-\frac{2}{5})$ =?

1) $\frac{19}{3}$ 2) 57 3) $\frac{23}{15}$ 4) 19 5) None of these

26. Anita spent 5% on school fees, 15% on rent, and 12% on furniture. 40% of the remaining amount was spent on medical bills arid the remaining Rs. 16,320 was set aside for investment. How much money does she spend on rent?

(1) Rs. 4,800 (2) Rs. 6,000 (3) Rs. 9,000 (4) Rs. 10, 880 (5) None of these

27. The average number of handicrafts made by 5 women in a day is 28. If their supervisor also joins them the average number of handicrafts made in a day increases by 1. How many handicrafts does the supervisor make?

(1) 24 (2) 34 (3) 33 (4) 36 (5) None of these

28. Akash sold a walkman for Rs. 795. If he made a 6% profit on the cost price, what was the original cost price of the walkman?

(1) Rs. 750 (2) Rs. 705 (3) Rs. 735 (4) Rs. 805 (5) None of these

29. A 225 metre long train crosses a 45 metre platform in 18 seconds. What is the speed of the train in km./hr.?

(1) 45 (2) 54 (3) 63 (4) 59 (5) None of these

30. A person subscribing to Cable for a year pays Rs. 3,444. If the monthly subscription is Rs. 350, how much discount does a yearly subscriber get?

(1) 18% (2) 11% (3) 13% (4) 15% (5) None of these

31. What will be the compound interest on an amount of Rs. 7,500 for a period of 2 years at 3% yearly rate of interest?

(1) Rs. 847 (2) Rs. 522 (3) Rs.456.75 (4) Rs. 947 (5) None of these

32. Naresh started a business investing Rs. 32,000. Three months later Satish joined him with Rs. 16,000. In what ratio should the profit they make after a year and a half be distributed between them?

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

33. Mahesh invested an amount of Rs. 12050 at simple interest. He got an amount of Rs. 13,496 at the end of 2 years. At what rate of interest did he invest?

(1) 12 p.c.p.a. (2) 8 p.c.p.a. (3) 6 p.c.p.a. (4) 4.5 p.c.p.a. (5) None of these

34. The difference between the simple and the compound interest earned on a sum of money at the rate of 5 p.c.p.a. for 2 years is Rs. 21. Find the principal.

(1) Rs. 8,000 (2) Rs. 8,250 (3) Rs. 8,400 (4) Cannot be determined (5) None of these

35. If the sum of 4 consecutive odd numbers is 104, what will be the third number if they are arranged in ascending order?

(1) 25 (2) 29 (3) 27 (4) 21 (5) None of these

Answers:

1. (2);

$? = \frac{43\ x\ 54}{45} = \frac{5x5x5x5}{4x4}$

= $\frac{625}{16}$ = 39.0625

2. (3);

? = $\frac{1.6x3.2}{0.08}$ = 64

3. (2);

? = (7857 + 3596 + 4123) ÷ 96

= $\frac{15576}{96}$ = 162.25

4. (3);

? = 741560 + 935416 + 1143 + 17364 = 1695483

5. (4);

$(84)^2 \div \sqrt{?} = 168$

= $\frac{84x84}{\sqrt{?}}$ = 168

= $\sqrt{?} = \frac{84x84}{168} = 42$

$\therefore ? = (42)^2 = 1764$

6. (4);

? = 514789 – 317463 – 87695 – 11207

= 514789 – 416365 = 98424

7. (3);

8926 – $\frac{650\ x\ ?}{100}$ = 8848

= $\frac{650\ x\ ?}{100}$ = 8926 – 8848 = 78

= ? = $\frac{78\ x\ 100}{650}$ = 12

8. (5); ? = $\sqrt[3]{50653} = \sqrt[3]{37x37x37}$ = 37

9. (1);

(17891 + 16239 - 26352) x ? = 93336

= (34130 - 26352) x ? = 93336

= ? x 7778 = 93336

= ? = $\frac{93336}{7778}$ = 12

10. (1);

? = $\frac{1}{4}$ x 6624 x $\frac{1}{6}$ x 12 = 3312

11. (5);

? = $\frac{18x15-50}{(40x80)\div160}$

= $\frac{270-50}{20}$ = $\frac{220}{20}$ = 11

12. (3);

? = 4800 x $\frac{36}{100}$ x 1320 x $\frac{0.2}{100}$

= 4561.92

13. (5);

$\sqrt{?}$ x $\sqrt{1681}$ = 2296

= $\sqrt{?}$ = 41 = 2296

= $\sqrt{?}$ = $\frac{2296}{41}$ = 56

$\therefore ? = (56)^2 = 3136$

14. (1);

? = $\frac{93x45}{25}$ = 167.4

15. (4);

0.08 x ? x 1.6 = 0.2944

= ? = $\frac{0.2944}{0.08\ x\ 1.6}$ = 2.3

16. (5);

? = $\frac{3}{9}$ x $\frac{9}{4}$ ÷ ($\frac{7}{2}$ x $\frac{3}{7}$)

= $\frac{3}{9}$ x $\frac{9}{4}$ ÷ $\frac{3}{2}$

$= \frac{3}{9} \times \frac{9}{4} \times \frac{2}{3} = \frac{1}{2}$

17. (2);

$380 \times \frac{?}{100} = 57$

$= ? = \frac{57 \times 100}{380} = 15$

18. (4);

$? = 5187 \times \frac{1}{15} \times 5 = 1729$

19. (1); $? = \frac{4}{7} \times 350 \times \frac{40}{100} = 80$

20. (1); $? = 23.04 \times \frac{140}{8} = 403.2$

21. (2);

? = (47432 - 33980) x 2.5

= 13452 x 2.5 = 33630

22. (1);

$(400 \times \frac{7}{100} + 208 \times \frac{25}{100}) \times ? = 16$

= (28 + 52) x ? = 16

$= ? = \frac{16}{80} = \frac{1}{5}$

23. (2);

$? = \frac{22+12x5-1}{7-6\div2-1}$

$= \frac{22+60-1}{7-3-1} = \frac{81}{3} = 27$

24. (5);

$\sqrt{?} = 161 + 64 = 225$

$= ? = (225)^2 = 50625$

25. (2);

$? = (\frac{4}{3} + \frac{6}{5}) \div (\frac{4}{9} - \frac{2}{5})$

$= (\frac{20+18}{15}) \div (\frac{20-18}{45})$

$= \frac{38}{15} \div \frac{2}{45} = \frac{38}{15} \text{ x } \frac{45}{2} = 57$

26. (2);

Percentage of expenditure on school fees, rent and furniture

= 5 + 15 + 12 = 32%

Let the total money with Anita be Rs. X

$\therefore$ Remaining amount

$= \text{x} - \frac{32x}{100} = \frac{68x}{100}$

$= \text{Rs.} \frac{17x}{25}$

Expenditure on medical bills

$= 40\% \text{ of Rs.} \frac{17x}{25}$

Remaining amount after expenditure on medical bills

$= \frac{17x}{25} - \frac{17x}{25} \text{ x } \frac{40}{100}$

$= \frac{17x}{25} - \frac{34x}{125}$

$= \frac{85x-34x}{125} = \frac{51x}{125}$

According to the question

$\frac{51x}{125} = 16320$

$= \text{x} = \frac{16320x125}{51}$

$= \text{Rs. } 40000$

$\therefore$ Money spent on rent

$= \text{Rs.} (\frac{15}{100} \text{ x } 40000) = \text{Rs. } 6000$

27. (2);

Required number of handicrafts made by supervisor

= 28 + 6 = 34

28. (1);

CP of a walkman

= Rs. ($\frac{100}{106}$ x 795)

= Rs. 750

29. (2);

Speed of train

= $\frac{Length\ of\ (platform+train)}{Time\ taken\ to\ cross}$

= ($\frac{45+225}{18}$) m/sec

= $\frac{270}{18}$ x $\frac{18}{5}$ kmph

= 54 kmph

30. (1);

Monthly subscription = Rs. 350

Annual subscription = Rs. (12 x 350) = Rs. 4200

Amount paid annually = Rs. 3444

Discount = Rs. (4200 - 3444) = Rs. 756

Percentage discount

= $\frac{756}{4200}$ x 100 = 18

31. (3);

Amount

= Principal $(1 + \frac{Rate}{100})^{\text{Time}}$

= 7500 $(1 + \frac{3}{100})^2$

= 7500 x 1.03 x 1.03

= Rs. 7956.75

$\therefore$ C.I = Rs. (7956.75 - 7500)

= Rs. 456.75

32. (5);

Ratio of the equivalent capitals of Naresh and Satish for 1 month

= 32000 x 18 : 16000 x 15

= 12:5

$\therefore$ Ratio of Profit distribution

= 12:5

33. (3); SI = Rs. (13496 - 12050)

= Rs. 1446

$\therefore$ Rate $= \frac{Interest\ x\ 100}{Principal\ x\ Time}$

$= \frac{1446\ x\ 100}{12050\ x\ 2}$

= 6% per annum

34. (3);

When difference between the compound interest and simple interest on a certain sum of money for 2 years at r% rate is Rs. X, then the sum is given by

Sum = $\frac{Difference\ x\ 10000}{(Rate)2}$

= $\frac{21\ x\ 10000}{5\ x\ 5}$ = Rs. 8400

35. (3);

Let the four consecutive odd numbers be x, x + 2, x + 4 and x + 6 respectively.

According to the question,

X + x + 2 + x + 4 + x + 6 = 104

= 4x = 104 – 12 = 92

$\therefore$ x $= \frac{92}{4} = 23$

$\therefore$ Required number = x +4

$= 23 + 4 = 27$