SECTION-I : GAT

1. What should come in place of question mark (?)
   \[
   \begin{array}{cccc}
   4 & 4 & 5 \\
   13 & 5 & ? = 14 \\
   7 & 9 & 21 \\
   \end{array}
   \]
   (a) 4 ----  (b) 3 ----  (c) 4 ----  (d) 3 ----  (e) None
   \[
   \begin{array}{cccc}
   11 & 13 & 13 & 11 \\
   21 & 21 & 19 & 21 \\
   \end{array}
   \]

2. What profit percentage is made by selling an article at a certain price, if by selling an article at a certain price, if by selling at 40% of that price there would be a loss of 20%?
   (1) 100%  (b) 200%  (c) 33 1/3%  (d) 66 2/3%  (e) Can’t be determined.

3. Find the appropriate value of a question mark in the following question:
   \[45.147 + 32.943 \times 6.4 + ? = 703.634\]
   (a) 470  (b) 440  (c) 460  (d) 430  (e) 450

4. If the value of OCTOBER is 2520 and EITHER = 360, what is the value of DECEMBER?
   (a) 4060  (b) 13540  (c) 6720  (d) 3806  (e) None

5. In a class of 150 students, 40 passed in physics and chemistry, 40 in physics and mathematics, 30 in mathematics and chemistry, and 10 students passed in all the three subjects. How many students passed only in mathematics?
   (a) 40  (b) 30  (c) 20  (d) can’t be determined  (e) None of these

Study the following and answer accordingly:

**Medal Tally of countries in World Games 2000**

<table>
<thead>
<tr>
<th>Country</th>
<th>Gold</th>
<th>Silver</th>
<th>Bronze</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>39</td>
<td>25</td>
<td>33</td>
</tr>
<tr>
<td>Russia</td>
<td>32</td>
<td>28</td>
<td>30</td>
</tr>
<tr>
<td>China</td>
<td>28</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Australia</td>
<td>16</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>Germany</td>
<td>14</td>
<td>17</td>
<td>31</td>
</tr>
<tr>
<td>France</td>
<td>13</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Italy</td>
<td>13</td>
<td>08</td>
<td>15</td>
</tr>
</tbody>
</table>

6. The number of gold medals bagged by Australia is what per cent of that by Russia?
   (a) 200%  (b) 50%  (c) 100%  (d) 66 2/3%  (e) None

7. Which of the following countries bagged the maximum medals
   (a) Italy  (b) Australia  (c) China  (d) Germany  (e) France

8. The number of gold medals bagged by Australia and silver by Germany together is equal to:
   (a) Germany (Bronze)  (b) Russia (Gold)  (c) Italy (Gold+Bronze)  (d) USA (Silver)  (e) Australia (Silver) + Italy (Silver)
9. If there is an increase of 20% compared to the previous Olympics in the total no. of medals of Russia, then what was the total number of medals bagged by Russia in the previous Olympics?
(a) 80  (b) 75  (c) 70  (d) 108  (e) Can’t be determined.

10. The total number of medals bagged by Australia is what per cent more than that by Italy?
(a) 75%  (b) 65%  (c) 60%  (d) 70%  (e) 80%

11. Find the approximate value of: \( \frac{87}{87} \times 7549 + \frac{71}{71} \times 6325 = ? \)
(a) 15750  (b) 11210  (c) 13800  (d) 11060  (e) 11000

12. 15 men can do a piece of work in 30 days, 16 children can do the same work in 45 days, 7 men and 16 children can finish the remaining work in how many days if 10 men started the work and left after 4 days, following which 3 children worked for 15 days and they also left?
(a) 7 \frac{29}{136} days  (b) 19 \frac{71}{136} days  (c) 19 \frac{35}{136} days  (d) 6 \frac{129}{136} days  (e) None of these.

13. A certain number of men can do a work in 40 days. If there were 8 men more it could be finished in 5 days less. How many men are there?
(a) 64  (b) 72  (c) 56  (d) 28  (e) None of these.

14. The average age of a family of 8 members is 22 years. If the age of the youngest member is 12 years, then what was the average age of the family right before the birth of the youngest member?
(a) 22 years  (b) 13 \frac{1}{7} years  (c) 15 \frac{5}{7} years  (d) 11 \frac{3}{7} years  (e) 12 years

15. If A’s income is 25% more than that of B, how much percent B’s income is less than that of A
(a) 10%  (b) 15%  (c) 25%  (d) 20%  (e) 40%

16. A man is walking at a speed of 10 kms per hour. After every kilometer, he takes rest for 5 minutes. How much time will he take to cover a distance of 5 kilometers?
(a) 20 minutes  (b) 30 minutes  (c) 50 minutes  (d) 60 minutes  (e) 70 minutes

17. Find the cash realized by selling Rs.2,000/-, 5% stock at 6 premium (brokerage \( \frac{1}{2} \))%
(a) Rs.2,100/-  (b) Rs.2,500/-  (c) Rs.3,000/-  (d) Rs.2,110/-  (e) Rs.2,010/-

18. If Rs.85 amounts to Rs.95/- in 3 years, what Rs.102 will amount to in 5 years at the same rate per cent?
(a) Rs.120  (b) Rs.122  (c) Rs.130  (d) Rs.125  (e) Rs.127

19. By selling 66 meters of cloth, I gain the selling price of 22 meters. Find the gain percent.
(a) 30%  (b) 50%  (c) 20%  (d) 40%  (e) 60%

20. In what ratio must 25% alcohol be mixed with 50% alcohol to get a mixture of 40% alcohol strength?
(a) 3:2  (b) 2:3  (c) 4:3  (d) 3:5  (e) 5:3
21. The ratio of the number of boys and girls in a school is 2:5. If there 350 students in a school, find the number of girls in the school.
(a) 200 girls  (b) 210 girls  (c) 220 girls  (d) 250 girls  (e) 280 girls

22. \(55^2 + 57^2 + 42^2 + 59^2 = ?\)
(a) 11519  (b) 11159  (c) 15119  (d) 15191  (e) None of these

23. \(14 \frac{3}{7} + 15 \frac{5}{9} + 19 \frac{5}{9} = ?\)
(a) 48 + 1 97/63  (b) 49 34/63  (c) 48 34/63  (d) 48 97/36  (e) 48 30/46

24. \(4357 + 9862 - 3798 + 9122 = ?\)
(a) 18664  (b) 16864  (c) 16684  (d) 18466  (e) 16468

25. \((997 \times 996) + (98 \times 105) + 98^2 = ?\)
(a) 1102906  (b) 1210906  (c) 1012906  (d) 1921006  (e) None of these

26. \(\sqrt{484} + \sqrt{1089} - \sqrt{3025}\)
(a) 0  (b) 1  (c) 2  (d) 5  (e) 10

27. \(\frac{1}{4}\) th of a rod is yellow, \(\frac{1}{8}\) th is red, \(\frac{1}{2}\) th is green and \(\frac{1}{16}\) th is blue and the remaining 138 cm is black. The length of the rod is (in cms):
(a) 96  (b) 192  (c) 288  (d) 384

28. The least number of four digits exactly divisible by 16, 24 and 36 is:
(a) 1004  (b) 1008  (c) 1012  (d) 1016

29. The difference between \(\frac{2}{3}\) rd and \(\frac{1}{5}\) th of a number is 28. The number is:
(a) 90  (b) 75  (c) 60  (d) 45

30. If the cost price of 6 articles be the same as the selling price of 5 articles, the profit will be:
(a) 25%  (b) 22 \(\frac{1}{2}\)%  (c) 25%  (d) 18 \(\frac{3}{4}\)%
In these questions, look at the underlined part of each sentence. Below each sentence, three substitutions (a), (b) and (c) are given. If one of them is better than the underlined part, indicate your response against the corresponding letter (a), (b) or (c). If none of the substitutions improves the sentence, indicate (d) as your answer.

1. She tried to shake him up but he continued to pester her.
   (a) Away  (b) Of  (c) Off  (d) No improvement

2. Scarcely had she left the place than the children arrived.
   (a) Had she left the place and
   (b) Had she left the place when
   (c) She had left the place than
   (d) No improvement

3. I dislike him interrupting me so rudely.
   (a) His interrupting
   (b) He interrupting
   (c) His interruption of
   (d) No improvement

4. I wonder whether he has finished the work still.
   (a) He has yet finished the work.
   (b) He has finished the work yet.
   (c) He has still finished the work
   (d) No improvement.

5. It being bad weather, the repainting of the building was completed before the agreed date.
   (a) It being a
   (b) In spite of being a
   (c) In spite of the
   (d) No improvement

6. If this book is neither mine nor yours, it must be somebody’s else.
   (a) Somebody’s
   (b) Somebody else
   (c) Somebody else’s
   (d) No improvement

7. Anju is not so stupid as she looks, she is?
   (a) Isn’t it?
   (b) Is she?
   (c) Does she?
   (d) No improvement
8. To have acquainted with him, I could easily understand why he had done it.
   (a) To be acquainted
   (b) Having acquainted
   (c) Being acquainted
   (d) No improvement

9. With a view to detect any weapon carried by a passenger, sensitive machines are used at airports.
   (a) Detect all weapons
   (b) Detecting all weapons
   (c) Detecting any weapon
   (d) No improvement

10. If the school had been destroyed we would have to go home.
    (a) Would go home
    (b) Would have had to go home
    (c) Should go home
    (d) No improvement

In each of these questions, you find a sentence, a part of which is underlined. For each underlined part, four words/phrases (a), (b), (c) and (d) are listed below each of the sentences. Choose the word/phrase nearest in meaning to the underlined part.

11. The surreptitious movements of a lone figure among the dunes filled the villagers with curiosity and awe.
    (a) Invisible (b) Nocturnal (c) Secret (d) Concealed

12. One’s remonstration against social ills has to be consistent to be fruitful.
    (a) Outrage (b) Demonstration (c) Protest (d) Criticism

13. Sanguine as he is in his attitude to life and its problems, he cannot but be noticed wherever he goes.
    (a) Optimistic (b) Enthusiastic (c) Realistic (d) Dispassionate

14. Even the most careful researcher cannot predict the possible future ramifications of his findings.
    (a) Uses (b) Developments (c) Consequences (d) Conclusions

15. He ended his speech on a supercilious note, which was quite unexpected of a person of his balanced and stable temperament.
    (a) Defamatory (b) Contemptuous (c) Superfluous (d) Irrelevant
Each of these questions consists of a word or a phrase, which is underlined, in the given sentence. For each underlined part, four words or phrases (a), (b), (c) and (d) are listed below each of the sentences. Choose the word or phrase, which is closest to the opposite in meaning of the underlined word or phrase.

16. The facts of the case were **obscured** by the speech of the defence counsel.
   (a) Reflected   (b) Illustrated   (c) Clarified   (d) Exhibited.

17. Due to his excessive **craftiness** he achieved success but lost friends.
   (a) Simplicity   (b) Sincerity   (c) straightforwardness   (d) Innocence

18. He made several attempts to **placate** his opponents.
   (a) Infuriate   (b) Defeat   (c) Discourage   (d) Deceive

19. There are no permanent **adversaries** in politics.
   (a) Associates   (b) Allies   (c) Collaborators   (d) Partners

20. He produced **cogent** reasons for the change of policy.
   (a) Flimsy   (b) Unconvincing   (c) Improper   (d) Simple
SECTION-I
GAT
PART - II

In each of these questions, a related pair of words in capital letters is followed by four pairs of words. Choose the pair that best express a relationship similar to the one expressed in the original pair.

1. FOX : CUNNING
   (A) Cat : Playful
   (B) Horse : Runner
   (C) Vixen : Cute
   (D) Ant : Industrious

2. BANYAN TREE : PROPROOTS
   (A) Potato : Tuber
   (B) Climbers : Tendrils
   (C) Ginger : Stem
   (D) Spinach : Root

3. LOVE : ADORE
   (A) Pride : Prejudice
   (B) Affection : Indifference
   (C) Flight : Wear
   (D) Legible : Eligible

4. SONNET : POEM
   (A) Ballad : Stanza
   (B) Murder : Crime
   (C) Chapter : Book
   (D) Lie : Falsehood

In each of these questions, a word is given in capital letters followed by four words. Choose the word that is most nearly opposite in meaning to the word given in capital letters.

5. POLEMIC
   (A) Friendship
   (B) Agreement
   (C) Amity
   (D) Cooperation

6. FECUND
   (A) Hard
   (B) Unploughed
   (C) Solid
   (D) Barren

7. LANGUID
   (A) Cheerful
   (B) Progressive
   (C) Vigorous
   (D) Fasionable

8. DASTARD
   (A) Open
   (B) Brave
   (C) Concise
   (D) Innocent
Each of these questions consists of a word given in capital letters, followed by four words. Choose the word that is most nearly similar in meaning to the word given in capital letters.

9. GARGOYLE
   (A) Stone Spout
   (B) Gibleneagle
   (C) Ganesh
   (D) Vile

10. SOPORIFIC
    (A) Impressive
    (B) Soothing
    (C) Merry
    (D) Lethargic

11. LACHRYMOSE
    (A) Impious
    (B) Moist
    (C) Mournful
    (D) Unimpressive

12. FUSILLADE
    (A) Confusion
    (B) Unwarranted aggression
    (C) Excitement
    (D) Sustained outburst of criticism

In each of these questions, a sentence has a blank, indicating that something has been omitted. Beneath the sentence there are given four words or phrases. Choose the word or phrase that fits the meaning of the sentence as a whole.

13. The skill and ease with which he repaired the machine proved that he is an/a ……… mechanic
    (A) Able
    (B) Handy
    (C) Competent
    (D) Maladroit

14. Even at the risk of economic los……… refused to take the beaten track as continuously.
    (A) Fastly
    (B) Often
    (C) Regularly
    (D) Instead

15. It was the help he got from his friends which ……… him through the tragedy.
    (A) Perked
    (B) Sustained
    (C) Booted
    (D) Supported

16. His logic ………… everyone including the experts.
    (A) Surprised
    (B) Confounded
    (C) Overwhelmed
    (D) Defied

17. A ………… Firms are having trouble with industrial relations.
    (A) Considerable amount of
    (B) Great deal of
    (C) Large part of
    (D) Great many

18. He was frightened …………
    (A) To be killed
    (B) To being killed
    (C) For being killed
    (D) Of being killed
19. Capitalist society ………. profit as a valued goal.
   (A) Which regards   (B) Regarding
   (C) Regards        (D) Was regarded

20. The impact of two vehicles can cause a lot of ………. to both.
   (A) Damage         (B) Damages
   (C) Damaging       (D) Damagings

Read the two passages given below carefully to answer these questions that follow according to the contents of the respective passages.

PASSAGE I

Patriotism is a very complex feeling built up out of primitive instincts and highly intellectual convictions. There is love of home and family and friends, making us peculiarly anxious to preserve our own country from invasion. There is the mild instinctive liking for compatriots as against foreigners. There is pride, which is bound up with the success of the community to which we feel that we belong. There is a belief, suggested by pride but reinforced by history, that one’s own nation represents a great tradition and stands for ideals that are important to the human race. But besides all these, there is another element, at once nobler and more open to attack an element of worship, of willing sacrifice, of joyful merging of the individual life in the life of the nation. This religious element in patriotism is essential to the strength of the State, since it enlists the best that is in most men on the side of national sacrifice.

21. A suitable title for the passage could be
   (A) Elements of patriotism
   (B) Historical development of a nation
   (C) The role of religion and history in patriotism
   (D) Religion and patriotism

22. Describing the element of worship “Open to attack” the author implies that it
   (A) Is unnecessary
   (B) Leads to national sacrifice
   (C) Has no historical basis
   (D) Cannot be justified on rational ground

23. The tone of the passage can be best described as
   (A) Critical       (B) Descriptive   (C) Persuasive   (D) Analytical

24. Which of the following can clearly be grouped under “intellectual convictions” that the author mentions in the opening sentence?
   (A) Love of family
   (B) Love of compatriots
   (C) The element of worship
   (D) None of these

25. Which one of the following statement is false?
(A) We tend to like to our own countrymen better that we like foreigners.
(B) Nations always stands for ideals that are important to the human race.
(C) It is the religious element in patriotism that motivates us for sacrificing ourselves for our nation.
(D) Our pride of the community is bound with the community’s success.

PASSAGE II

Compact Discs (CDs) have revolutionized the music industry with their surprisingly realistic sound. The six-inch disc looks like thin plastic sandwiches with aluminum at the center. They have digitally recorded material that is read by laser beams, so the sound has none of the crackling of vinyl records. CDs are also virtually indestructible and they are lighter and smaller than conventional records. Since their introduction, CDs have become more affordable and widely available. In fact, they are no sold in electronics and video stores that didn’t formerly carry records or cassettes.

There has been a phenomenal growth in the sale of CDs. Sales climbed dramatically during the second half of the 1980s. In the 1990s, sales have been greater. CDs have all but replaced records in the stores and in spite of their being less affordable than cassettes, they continue to gain in popularity.

26. The main appeal of CDs is their
   (A) Price       (B) Size       (C) Availability     (D) Sound

27. The sound ‘revolutionized’ as used in line 2 of the passage could best be replaced by
   (A) Changed    (B) Fought     (C) Surprised        (D) Marked

28. The author refers to CDs as ‘sandwiches’ because they
   (A) Are light  (B) Are small    (C) Are layered   (D) Don’t crackle

29. According to the passage, which one of the following is true?
   (A) New kinds of stores are selling CDs.
   (B) CDs are available as cassettes.
   (C) Stores are selling more CDs than cassettes.
   (D) Stores are losing money on their cassettes.

30. The author’s main purpose is to
   (A) Tell how CDs are made.
   (B) Discuss the growth of CDs.
   (C) Compare CDs to sandwiches.
   (E) Describe the stores that sell CDs.
1. Which of the following numbers should be added to 11158 to make it exactly divisible by 77?
   (a) 9    (b) 8    (c) 7    (d) 5

2. What largest number of five digits is divisible by 99?
   (a) 99999    (b) 99981    (c) 99909    (d) 99990

3. If \( \sqrt{3^n} = 81 \), then \( n = ? \)
   (a) 2    (b) 4    (c) 6    (d) 8

4. \( 1399 \times 1399 = ? \)
   (a) 1687401    (b) 1901541    (c) 1943211    (d) 1957201

5. \( 14.3 + 16.78 - ? = 9.009 \)
   (a) 40.089    (b) 22.071    (c) 21.810    (d) None

6. The fraction for 0.535353… is:
   (a) 26/53    (b) 27/53    (c) 58/53    (d) 53/99

7. \( 5005 - 5000 \div 10.00 = ? \)
   (a) 0.5    (b) 50    (c) 5000    (d) 4505

8. How many pieces of 0.85 meters can be cut from a rod 42.5 meters long?
   (a) 30    (b) 40    (c) 60    (d) None of these

9. A boy was asked to multiply a certain number by 25. He multiplied it by 52 and got his answer more than the correct one by 324. The number to be multiplied was:
   (a) 12    (b) 15    (c) 25    (d) 32

10. On sports day, if 30 children were made to stand in a column, 16 columns could be formed. If 24 children were made to stand in a column, how many columns could be formed?
    (a) 45    (b) 20    (c) 22    (d) 29

11. In an examination, a student scores 4 marks for every correct answer and loses 1 mark for every wrong answer. If he attempts all and secures 125 marks, the number of questions he attempts correctly is:
    (a) 35    (b) 40    (c) 42    (d) 46

12. The value of 36 coins of 10 p and 20 p is Rs.6.60. The number of 20 p coins is
    (a) 16    (b) 20    (c) 28    (d) 30

13. If \( x \ast y \ast z = \frac{\sqrt{(x+2)(y+3)}}{z+1} \), the value of \( 6 \ast 15 \ast 3 \) is:
    (a) 2    (b) 3    (c) 4    (d) None
14. The average of ten numbers is 7. If each number is multiplied by 12, then the average of the new set of numbers is:
   (a) 7        (b) 19        (c) 82        (d) 84

15. The sum of two numbers is 15 and the sum of their squares is 113. The numbers are:
   (a) 4, 11    (b) 5, 10    (c) 6, 9     (d) 7, 8

16. The ratio of the ages of Swati and Varun is 2:5. After 8 years, their ages will be in the ratio of 1:2. The difference in their present ages (in years) is:
   (a) 24       (b) 26       (c) 29       (d) 32

17. 5% of (25% of Rs.1600) is:
   (a) Rs. 5   (b) Rs.17.50   (c) Rs.20   (d) Rs.25

18. What percent of 7.2 kg is 18 gms.?
   (a) 25%     (b) 2.5%      (c) 0.25%   (d) 0.025%

19. The cost price of 20 articles is the same as selling price of 15 articles. The profit percent in the transaction is:
   (a) 25%     (b) 30%       (c) 33 1/3   (d) 50

20. The ratio between two numbers is 3:4. If each number is increased by 6, the ratio becomes 4:5. The difference between the numbers is:
   (a) 1       (b) 3        (c) 6        (d) 8

21. Three partners, A, B, C invest Rs.36000, Rs.45000 and Rs.54000 respectively in a business. Out of a total profit of Rs.37500, C’s share is:
   (a) Rs.12500  (b) Rs.15000  (c) Rs.10000  (d) Rs.15500

22. The price of 357 mangoes is Rs.1517.25. What will be the approximate price of 49 dozens of such mangoes?
   (a) Rs.3000   (b) Rs.3500   (c) Rs.4000   (d) Rs.2500

23. If 10 men can reap a field in 8 days, then 8 men will reap the same field in:
   (a) 5 days    (b) 4 days    (c) 10 days   (d) 20 days

The odd man out:

24. 3, 5, 7, 12, 17, 19.
   (a) 19       (b) 17       (c) 13       (d) 12

25. 10, 14, 16, 18, 21, 24, 26.
   (a) 26       (b) 24       (c) 21       (d) 18

26. 3, 5, 9, 11, 14, 17, 21.
   (a) 21       (b) 17       (c) 14       (d) 9

27. 1, 4, 9, 16, 23, 25, 36.
   (a) 9        (b) 23       (c) 25       (d) 36

28. 6, 9, 15, 21, 24, 28, 30.
   (a) 28       (b) 21       (c) 24       (d) 30

29. 41, 43, 47, 53, 61, 71, 73, 81.
   (a) 61       (b) 71       (c) 73       (d) 81

30. 16, 25, 36, 72, 144, 196, 225.
   (a) 36       (b) 72       (c) 196      (d) 225
1. 5 * 2 is a three digit number with * as a missing digit. If the number is divisible by 6, the missing digit is:
   a) 3       b) 6       c) 7       d) 2

2. What smallest number of six digits is divisible by 111?
   a) 111111   b) 110011   c) 100011   d) None of these

3. On dividing a number by 999, the quotient is 366 and the remainder is 103. The number is:
   a) 364724   b) 365387   c) 365737   d) 366757

4. 8756 x 99999 = ?
   a) 815491244   b) 796491244   c) 875597844   d) None of these

5. 3.1469 + 6.837 + ? = 15
   a) 24.9839   b) 5.7634   c) 5.0161   d) None

6. 1.086 – 0.3983 – 0.669 = ?
   a) 0.6208   b) 1.3948   c) 0.0048   d) 0.0187

7. On simplification 1/0.04 is equal to:
   a) 2.5       b) 25       c) 2/5       d) 1/40

8. \[
\frac{1}{2} \div \frac{4+20}{1} \times 4+20 = ?
\]
   a) 81/88   b) 2 3/11   c) 161 / 176   d) 1

9. What fraction must be subtracted from the sum of \( \frac{1}{4} \) and \( \frac{1}{6} \) to have an average of \( \frac{1}{12} \) of all the three fractions?
   a) \( \frac{1}{2} \)   b) \( \frac{1}{3} \)   c) \( \frac{1}{4} \)   d) \( \frac{1}{6} \)
10. The number of students in each section of a school is 24. After admitting new students, three new sections were started. Now, the total number of sections is 16 and there are 21 students in each section. The number of new students admitted is:

a) 24  b) 14  c) 48  d) 114

11. A class starts at 10 a.m. and lasts till 1.27 p.m. Four periods are held during this interval. After every period, 5 minutes are given free to the students. The exact duration of each period is

a) 42 minutes  b) 48 minutes  c) 51 minutes  d) 53 minutes

12. If (a-b) is 6 more than (c+d) and (a+b) is 3 less than (c-d), then (a-c) is-

a) 0.5  b) 1  c) 1.5  d) None of these

13. $\frac{32.4}{?} = 2$

a) 9  b) 0.9  c) 0.09  d) None

14. The average of 50 numbers is 38. If two numbers, namely 45 and 55 are discarded, the average of the remaining numbers is:

a) 36.5  b) 37  c) 37.5  d) 37.52

15. The difference between the squares of two consecutive numbers is 35. The smaller number is

a) 14  b) 15  c) 17  d) 18

16. Three numbers are in the ratio of 4 : 5 : 6 and their average is 25. The largest number is;

a) 30  b) 32  c) 36  d) 42

17. A father is twice as old as his son. 20 years ago, the age of the father was 12 times the age of the son. The present age of the father (in years) is:

a) 44  b) 32  c) 22  d) 45

18. $35\%$ of 30 = $25\%$ of $? + 1$

a) 28  b) 38  c) 42  d) 32

19. If 70% of students in a school are boys and the number of girls is 504, the number of boys is:

a) 1680  b) 1176  c) 1276  d) None of these
20. A retailer buys a radio for Rs.225/- His overhead expenses are Rs.15. He sells the radio for Rs.300. The profit percent of the retailer is-

a) 10  

b) 25  

c) 50  

d) 52

21. Which of the following ratios is the greatest?

a) 7 : 15  

b) 15 : 23  

c) 17 : 25  

d) 21 : 29

Find out the wrong number in each sequence

22. 22, 33, 66, 99, 121, 279, 594

a) 33  

b) 121  

c) 279  

d) 594

23. 36, 54, 18, 27, 9.5, 4.5

a) 4.5  

b) 18.5  

c) 54  

d) 18

24. 582, 605, 588, 611, 634, 617, 600

a) 634  

b) 611  

c) 605  

d) 600

25. 46080, 3840, 384, 48, 24, 2, 1

a) 1  

b) 2  

c) 24  

d) 384
Alzheimer’s disease impairs (i)/ a person’s ability to recall memories, both distant and as recent as a few hours before. Although there is no cure yet for the illness, there may be hope for a cure with a protein called nerve growth factor. The protein is produced by nerve cells in the same region of the brain where Alzheimer’s occurs. Based on this relationship, scientists from the University of Lund in Sweden and the University of California at San Diego designed an experiment to test whether doses of nerve growth factors could service the effects of memory loss caused by Alzheimer’s. Using a group of rats with impaired memory, the scientist gave half of the rats doses of nerve growth factor while giving the other half a blood protein as a placebo, thus creating a control group. At the end of the four-week test, the rats given the nerve growth factor performed equally to rats with normal memory abilities. While experiments do not show that nerve growth factor can stop the general process of deterioration (ii)/ caused by Alzheimer’s they do show potential as a means to slowing the process significantly.

1. This passage is mainly concerned with
   1) Cures for Alzheimer’s disease
   2) Impaired memory of patients
   3) The use of rats as experimental subjects.
   4) Nerve growth factor as a cure for Alzheimer’s.

2. According to the passage, where is nerve growth factor produced in the body?
   1) In the pituitary gland
   2) In nerve cells in brain
   3) In red blood cells in the circulatory system
   4) In nerve cells in the special column

3. The word impairs [underlined in (i)] is most similar to which of the following?
   1) affects
   2) destroys
   3) enhances
   4) diminishes

4. Which of the following can the inferred from the passage/ 
   1) Alzheimer’s disease is deadly.
   2) though unsuccessful, the experiments did show some benefits derived from new growth factors
   3) the experiment did not show any significant benefits from nerve growth factor.
   4) More work needs to be done to understand the effects of nerve growth center.

5. The passage most closely resembles which of the following patterns of organization?
   1) Chronological
   2) Statement and illustration
   3) Alphabetical order
   4) None of the above.

6. Which of the following is closest in meaning to the word deterioration [underlined (ii)]?
   1) depression
   2) deduction
   3) decline
   4) disconnection
To answer these questions, choose a word or phrase which is underlined and would not be appropriate in standard English.

7. I prefer The Hindu, (1)/ but my eldest (2) son reads (3)/ Times of India (4)

8. He was wearing shabby, (1)/ faded trouser (2)/ which he explained, were called jeans (3)/ and cost (4)/ a fortune.

9. He has become (1)/ so weak that even (2)/ a two furlongs (3)/ walk makes him breathless (4).

10. A picture of one of the progenitors (2)/ of the founder (3)/ of the company hanged (4)/ on the wall.

11. His secretary told me (1)/ that she was unable to tell us when (2)/ her boss would return back (3)/ from (4)/ his work.

12. Lost in thought (1)/ with a vacant look (2)/ in his eyes (3)/ he laid (4)/ on the couch.

13. The symptoms (1)/ of a diabetes in the (2)/ early stages are too (3)/ slight that people do not notice them (4).

14. Studying (1)/ the science (2)/ of logic is one way to (3)/ cultivate one’s reason (4)/ skills.

To answer these questions, choose the word that is closest in meaning to the key word.

15. ACCOUTREMENTS
   1) relatives  2) companions  3) blemishes  4) belongings

16. APOLITICAL
   1) antipolitical  20 subversive  3) not interested in politics  4) terrorist

17. AZURE
   1) blue  2) green  3) brown  4) round and big

18. BONHOMIE
   1) friendliness  2) wrath  3) very  4) greed

19. CANDOUR
   1) enthusiasm  2) openness  3) freedom  4) intimacy

To answer these questions, choose the pair which best expresses the relationship similar to the one expressed in the main pair.

20. BACTERIA : ILLNESS
   1) Medicine : Germs
   2) Calcium : Bones
   3) Knife : Laceration
   4) Fire : Explosion
21. POETRY : PROSE
   1) Stanza : Chapter
   2) Art : Fiction
   3) Clause : Sentence
   4) Novel : Variation

22. SIP : GULP
   1) Soup : Water
   2) Tent : Hut
   3) Touch : Push
   4) Cup : Glass

23. FRAGILE : CRACK
   1) Irreducible : Reduce
   2) Cemetery : Death
   3) Hydro : Water
   4) Pilable : Bend

To answer these questions, choose the word that is most nearly opposite in meaning to the key word.

24. ELAN
   1) brashness  2) dignity  3) composure  4) nervousness

25. PENCHANT
   1) disinclination  2) lone  3) directness  4) lack of skill