

1. Aprajita multiplies a number by 72 instead of 27, then her new answer will increase by, than the actual result :
 (a) $7/2$ (b) $8/3$ (c) $5/3$ (d) none of these
2. Four consecutive even numbers are such that 3 times of the first number is equal to twice of the third number. The sum of all the four numbers is :
 (a) 20 (b) 40 (c) 44 (d) can't be determined
3. A mixture of rice is sold at Rs. 3.00 per kg. This mixture is formed by mixing the rice of Rs. 2.10 and Rs. 2.52 per kg. What is the ratio of price of cheaper to the costlier quality in the mixture if the profit of 25% is being earned?
 (a) 5:2 (b) 2:7 (c) 2:5 (d) 15:8
4. The ratio of students in a coaching preparing for B.Tech and MBA is 4:5. The ratio of fees collected from each of B.Tech and MBA student is 25:16. If the total amount collected from all the students is 1.62 lakh, what is the total amount collected from only MBA aspirants?
 (a) Rs.62,000 (b) Rs.72,000 (c) Rs.80,000 (d) none of these
5. 60% goods are sold at 5% loss while rest are sold at 10% profit. If there is a total profit of Rs.100, then the worth of goods sold is :
 (a) Rs.6000 (b) Rs.5000 (c) Rs.10,000 (d) none of these
6. Kashif invested $1/7$ of his total investment at 4% and $1/2$ at 5% and rest at 6% for one year and received total interest of Rs.730. What is the total sum invested?
 (a) Rs.70,000 (b) Rs.14,000 (c) Rs.24,000 (d) Rs.38,000
7. A tub can be filled in 20 minutes but there is a leakage in it which can empty the fill tub in 60 minutes. In how many minutes it can be filled?
 (a) 20 minutes (b) 40 minutes (c) 30 minutes (d) 60 minutes
8. The ratio of time taken to run a certain distance by Harsh and Dev is 4:3 and thus Dev wins the race by 360m. What is the distance of the race course?
 (a) 1550m (b) 360m (c) 1440m (d) 1020m
9. Einstein walks on an escalator at a rate of 5 steps per second and reaches the other end in 10 seconds. While coming back, walking at the same speed he reaches the starting point in 40 seconds. What is the number of steps on the escalator?
 (a) 40 (b) 60 (c) 120 (d) 80
10. An equilateral triangle is cut from its three vertices to form a regular hexagon. What is the percentage of area wasted?
 (a) 20% (b) 50% (c) 33.33% (d) 66.66%
11. Venkat travels 760 km to his home partly by train and partly by car. He takes 8 hours if he travels 160 km by train and the rest by car. He takes 12 minutes more if he travels 240 km by train and the rest by car. Find the speed of the train and the car respectively (in km/hr).
 (a) 40, 80 (b) 60, 120 (c) 80, 100 (d) 100, 120
12. A two digit number is such that the product of its digits is 12. When 36 is added to the number, its digits are reversed. Find the number?
 (a) 12 (b) 18 (c) 24 (d) 26
13. What is the sum of 100 terms of the series : $1 - 2 + 3 - 4 + 5 - 6 + \dots$?
 (a) 100 (b) 50 (c) 550 (d) none of these

Direction for Q14 & Q15 : In a class of 80 students 25 passed in QA and DI, 25 passed in DI and English, 20 passed in QA and English. 10 students passed in all the three subjects.

14. How many students passed only in Q.A.?
 (a) 20 (b) 15 (c) 12 (d) can't be determined
15. If no student failed in all three subjects, what is the total number of students who passed in Q.A. only , DI only and English only?
 (a) 50 (b) 30 (c) 25 (d) can't be determined

Direction for Q16 & Q21: Fabric X has to go through three stages of manufacturing, viz., spinning, weaving and dyeing. In Rimal Fabric Company, there are six spinning machines, ten weaving machines and five dyeing machines. Each machine works for 10 hours a day. One unit of Fabric X needs 40 minutes on a spinning machine, 2 hours on a weaving machine and 30 minutes on a dyeing machine in order to be completed. Similarly one unit of Fabric Y needs 60 minutes on a spinning machine, 30 minutes on a weaving machine and 60 minutes on a dyeing machine in order to be completed.

16. In a day, how many units of Fabric Y can be completed at most?
 (a) 20 (b) 30 (c) 40 (d) 50
17. If 20 units of Fabric Y are made in a day, how many units of Fabric X can be completed same day?
 (a) 0 (b) 20 (c) 40 (d) 45
18. If only 30 units of Fabric Y are made in a day, how many machine hours will be idle that day?
 (a) 120 (b) 130 (c) 135 (d) 150
19. If one more dyeing machine is added, at the most how many more units of Fabric X can be made in day?
 (a) 0 (b) 5 (c) 8 (d) 10
20. If only Fabric X has to be made, what machines should be bought so that there is a maximum increase in production capacity (only one machine has to be bought)?
 (a) Spinning machine (b) Weaving machine (c) Dyeing machine (d) Any one of three
21. If only Fabric Y has to be made, what machines should be bought so that there is a maximum increase in production capacity (only one machine has to be bought)?
 (a) Spinning machine (b) Weaving machine (c) Dyeing machine (d) Any one of three

Direction for Q22 to Q24: Roads P, Q and T run from south to north and roads R and S run from north to south. The order of the roads, from left to right, is, P, Q, R, S and T. Road U runs from west to east and road V runs in a south-eastern direction. U, V and T intersect at B. Road W run from east to west. W, V and R intersect at A. All roads are one-way roads and the traffic is allowed only in the direction of the road. In going from one point to another no intersection is crossed more than once.

22. How many routes connect the intersection of the roads U and R, and T and V?
 (a) 8 (b) 4 (c) 6 (d) None of these
23. How many different routes can one take in going from A to B?
 (a) 1 (b) 2 (c) 3 (d) None of these
24. How many routes can one take in going from the intersection of roads W and Q to the intersection of roads T and V?
 (a) 2 (b) 4 (c) 6 (d) None of these
25. In taking the longest route from B to A, what is the maximum number of intersections, excluding B and A that one has to cross?
 (a) 8 (b) 6 (c) 2 (d) None of these

Direction for Q25 to Q30: The office staff of the XYZ Corporation presently consists of three bookkeepers (A, B, and C) and five secretaries (D, E, F, G, and H). Management is planning to open a new office in another city using three secretaries and two book keepers of the present staff. To do so they plan to separate certain individuals who do not function well together. The following guidelines were established to set up the new office:

1. Bookkeepers A and C are constantly finding fault with one another and should not be sent as a team to the new office.
 2. C and E function well alone but not as a team. They should be separated.
 3. D and G have not been on speaking terms from many months. They should not go together.
 4. Since D and F have been competing for promotion, they should not be a team.
26. If A is to be moved as one of the Bookkeepers, which of the following CANNOT be possible working unit?
 (a) ABDEH (b) ABDGH (c) ABEFH (d) ABEGH
27. If C and F are moved to the new office, how many combinations are possible?
 (a) 1 (b) 2 (c) 3 (d) 4
28. If C is sent to the new office which member of the staff CANNOT go with C?
 (a) B (b) D (c) F (d) G
29. Under the guidelines developed, which of the following MUST go to the new office?
 (a) B (b) D (c) E (d) G
30. If D goes to the new office which of the following is (are) true?
 1. C cannot go.
 2. A cannot go.
 3. H must also go.

(a) I only

(b) II only

(c) I and II only

(d) I and III only

Direction for question numbers 31-35: In each of the following questions, a related pair of words or phrases is followed by four lettered pairs of words or phrases. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair.

31. CLASP : BRACELET ::

(a) hook : coat

(b) buckle : belt

(c) wrist : watch

(d) cuff : trousers

32. PARDON : OFFENSE ::

(a) repent : sin

(b) detect : violation

(c) arraign : indictment

(d) forgive : wrong

33. GULLY : CANYON ::

(a) eagle : bird

(b) cliff : granite

(c) pebble : boulder

(d) shore : lake

34. THIRST : DRIVE ::

(a) inebriety : excess

(b) success : ambition

(c) taste : gusto

(d) smell : sense

35. SPIKE : SLEDGE ::

(a) runner : sleigh

(b) pole : ski

(c) nail : hammer

(d) clip : paper

Direction for Questions 36—40: Each question below consists of a word printed in capital letters, followed by four lettered words or phrases. Choose the lettered word or phrase that is most nearly opposite in meaning to the word in capital letters. Since some of the questions require you to distinguish fine shades of meaning, be sure to consider all the choices before deciding which one is best

36. DETERIORATE :

(a) Hasten

(b) Demolish

(c) Alter

(d) Improve

37. EVASIVE :

(a) Frank

(b) Serene

(c) Pensive

(d) Mistaken

38. PRODIGAL :

(a) Nomad

(b) Sycophant

(c) Gifted child

(d) Economical person

39. EQUIVOCATE :

(a) Yield

(b) Distinguish

(c) Condescend

(d) Pledge

40. ARTIFICE :

(a) Edifice

(b) Sincerity

(c) Prejudice

(d) Creativity