Q1. The minimum number by which 60 is to be multiplied to generate a square.

**ANS:** 15

Q2. Travelling at 3/4th the speed a man is 20 minutes later then speed is?

**Q3.** Mr. X position in a class is 13th from first and 17th from last, and 8th from the first and 13th from last in passed candidates list, then how many candidates failed in the exam?

**Q4.** The length of the following rectangle is 4a and its breadth is 2a. Radius of the two circles is a. Then find the ratio of total area of the rectangle to the area not covered by the two circles within the rectangle.

**Q5.** A clock was 7 minutes behind the actual time on 3 p.m. on Wednesday and 8 minutes ahead of actual time on (not sure) 4 p.m. Friday. When will it show the correct time?

Q6. A monkey climbs 6 mts and falls 3 mts in alternate minutes. Then time taken to climb a tree 60 metres high?

- a) 35
- b) 37
- c) 32
- d) 34

**ANS:** c) 37

**Q7.** A cistern will be filled in 9 hrs, but because of an outlet it is filled in 10 hrs, if the cistern is filled, then how much time the outlet takes to empty the cistern?

Q8. Maximum numbers that can be formed using all the 4 digits 6 4 8 1 without repetition and which is divisible by 9.

ANS: none

**Q9.** Three circles with same radius r are drawn with centres as three vertices of a triangle. What is the sum of areas of the intersections of these circles with the triangle?

Q10. One monkey climbs a poll at the rate of 6mts/min and fell down 3mts in the alternately. Length of the poll is 60 mtrs, how much time it will take to reach the top?

- a) 31
- b) 33
- c) 37
- d) 40

**ANS:** c) 37

Q11. a+b+c=0, then roots of  $ax^2+bx+c=0$  is

- a) imaginary
- b) real
- c) coincidental
- d) zero

**Q12.** The difference between the simple interest and compound interest for 2 years?

**Q13.** Find the number of sides of a regular convex polygon whose angle is 40 degrees.

**Q14.** Difference b/w the compound interest and simple interest for Rs.2500 for 2 years is given. Find the rate of interest.

**Q15.** The largest number: which is a factor of 1080 and 729.

Q16. If a sales man gets successive gain of 15% and 20% then his actual gain?

**ANS:** 38

**Q17.** Boat moves upstream in 6 hrs and covers the same distance downstream in 5 hrs. then speed of a raft floating?

**Q18.** A man gets a gain of x%. But if he had sold at twice the cost price, what will be his gain?

Q19. A string of pearls such that 1/3 is lost and of that 1/4th is missing, remaining is 20 then actual number of pearls?

**ANS:** 40

**Q20.** There are 6 keys and 6 locks. Then number of combinations to be tried out to get the actual solution?

**Q21.** 6 pipes fill or empty the cistern. Find the number of emptying pipes if it takes 18hrs to fill and 18 hrs to empty.

Q22. Two successive discounts of 20% and 15% is equal to a net discount of ----.

**Q23.** The volume and the radius of both cone and sphere are equal, then find the ratio of height of the cone to the diameter of the sphere?

**Q24.** A number when multiplied by 7/18 instead of 7/8 and got the result 770 less than the actual result, find the original number?

**Q25.** From 6 white balls and 7 black balls, what is the probability that 2 balls drawn at random are of the same color?

Q26. In a class composed of x girls and y boys what part of the class is composed of girls

- a) y/(x + y)
- b) x/xy
- c) x/(x + y)
- d) y/xy

### ANS: c

Q27. If the operation,  $^{^{\prime}}$  is defined by the equation  $x ^{^{\prime}} y = 2x + y$ , what is the value of a in 2  $^{^{\prime}}$  a = a  $^{^{\prime}}$  3

- a) 0
- b) 1
- c) -1
- d) 4

### ANS: b

Q28. A coffee shop blends 2 kinds of coffee, putting in 2 parts of a 33p. a gm. grade to 1 part of a 24p. a gm. If the mixture is changed to 1 part of the 33 p. a gm. to 2 parts of the less expensive grade, how much will the shop save in blending 100 gms?

- a) Rs.90
- b) Rs.1.00
- c) Rs.3.00
- d) Rs.8.00

### ANS: c

Q29. In June a baseball team that played 60 games had won 30% of its game played. After a phenomenal winning streak this team raised its average to 50%. How many games must the team have won in a row to attain this average?

- a) 12
- b) 20
- c) 24
- d) 30

### ANS: c

Q30. In a group of 15, 7 have studied Latin, 8 have studied Greek, and 3 have not studied either. How many of these studied both Latin and Greek?

- a) 0
- b) 3
- c) 4
- d) 5

### ANS: b

Q31. What is the maximum number of half-pint bottles of cream that can be filled with a 4-gallon can of Cream? (2 pt.=1 qt. and 4 qt.=1 gal)

- a) 16
- b) 24
- c) 30
- d) 64

#### ANS: d

Q32. If a and b are positive integers and (a-b)/3.5 = 4/7, then

- a) b < a
- b) b > a
- c) b = a
- d) b >= a

### ANS: a

Q33. If 13 = 13w/(1-w), then (2w)2 =

- a) 1/4
- b) 1/2
- c) 1
- d) 2

### ANS: c

Q34. LCM of 3 numbers is 120. which of the following number must not be their HCF?

a) 8

- b) 24
- c) 12
- d) 24
- e) 30

Q35. M men agree to purchase a gift for Rs. D. If three men drop out how much more will each have to contribute towards the purchase of the gift?

- a) D/(M-3)
- b) MD/3
- c) M/(D-3)
- d) 3D/(M2-3M)

ANS: d