MATHEMATICS QUIZ
Class – VIII
Section – A

1. A monkey ascends a greased pole 30 m. high. He ascends 3 m. in Ist minute and descends 1m. in the next minute, again ascends 3m. in 3rd minute, but descends 1m. in 4th min and so on. In what time he reached the top?

   (a) 29 min (b) 28 min (c) $28\ ^{2}/_{3}$ min (d) $29\ ^{2}/_{3}$ min

2. A woman sells to the first customer half her stock and half an apple to the second, half her remaining stock and half an apple, and so also to a third and to the fourth customer. She finds that she has now 15 apples left. How many had she at first?

   (a) 255 (b) 245 (c) 127 (d) 250

3. A and B working separately can do a piece work in 8 and 10 hrs respectively. If they work for an hour alternately, A beginning in how many hours will the work be completed?

   (a) $8\ ^{4}/_{5}$ hrs (b) 9 hrs (c) 8 hrs (d) $8\ ^{1}/_{10}$ hrs

4. Two numbers are respectively 30% and 40% less than a third number. What % is the second of the first?

   (a) 70% (b) 105 (c) $75\ ^{5}/_{7}$ % (d) $85\ ^{5}/_{7}$ %

5. Three utensils contain equal mixtures of milk and water in the ratio of 4:1, 5:2 and 6:1 respectively. If all the solution are mixed together. Find the ratio of milk to water in the final solution?

   (a) 84: 23 (b) 83:22 (c) 84:23 (d) 35:22

6. A has three times as much money as B, but only Rs 25 more than C. If the total amount is Rs 675, what is the share of C?
   a) 245 b) 265 c) 275 d) 255

7. A square and a rectangle each has a perimeter of 48 m. The difference between the areas of two figures is 4 m^2. Find the dimensions of the rectangle.
   a) 20 m, 4 m b) 18 m, 6 m c) 14 m, 10 m d) 16 m, 8 m.

8. Simplify:

$$\cfrac{1}{2+\cfrac{1}{3+\cfrac{1}{1+\cfrac{1}{4}}}}$$

a) $^{19}/_{33}$ b) $^{19}/_{43}$ c) $^{19}/_{23}$ d) $^{19}/_{53}$

9. A thief steals a motor car at 1 p.m. and drives it at 45 km an hour. The theft is discovered at 2 p.m. and the owner sets off in another car at 54 km an hour. When will he overtake the thief?

a) 3 p.m b) 6 p.m c) 5 p.m d) 7 p.m

10. By selling 11 oranges for a rupee, a man loses 10%. How many for a rupee should he sell to gain 10%?

a) 10 p b) Rs $^{9}/_{10}$ c) 90 p d) Rs $^{1}/_{9}$

Section B

The following questions are related to mathematical instruments:-

11) Which instrument is used for drawing large circles?

a) Pantograph b) Beam Compass
c) Straight edge d) Bow Compass

12) Which is believed to be the most ancient device used for calculation purposes?

a) Abacus b) Napier bones
c) Slide rule d) Calculating clock

The next set of questions reveals the relation of mathematics with art and music.

13) Which artist wrote “Let no one who is not a mathematician read my work”?

a) Frans Hals b) Magritte
b) Rubens d) Leonardo Da Vinci

14) Which branch of mathematics was born out of painting?

a) Topology
b) Projective geometry
c) Solid geometry
d) None

Solve the following Mind ticklers.

15) Which is the number that is equal to the cube of the sum of its digits?

a) 5,673
b) 4,913
c) 5,831
d) 5,784

16) Which number is equal to the sum of the digits of its own cube?

a) 11 b) 27 c) 20 d) 12

Calling By Words

17) What is Sextillion?

a) 10^{36}
b) 10^{11}
c) 10^{20}
d) 10^{15}

18) What is the prefix to denote 20?

a) Deka
b) Penta
c) Icosa
d) No prefix exists

The following questions deals with the contribution of India in the field of mathematics.

19) What were the Jaina mathematicians fond of?

a) Drawing geometrical curves
b) Enumerating large numbers
c) Drawing geometrical figures
d) All

20) He is the pioneer in applying mathematical and statistical tools to estimate geological sediments and are deposits. Who is he?

a) J. G. Negi
b) K.S. Valdiya
c) K. Chandrasekhram
d) B. K. Sahu