

PART-II MATHEMATICS

1. My brother is 3 years elder to me. My father was 28 years of age when my sister was born while my mother was 26 years of age when I was born. If my sister was 4 years of age when my brother was born, then what was the age my father when my brother was born?

- A. 35 years
C. 33 years

- B. 34 years
D. 32 years

2. The ratio between the length and the breadth of a rectangular park is 3 : 2. If a man cycling along the boundary of the park at the speed of 12 km/hr completes one round in 8 minutes, then what is the area of the park (in sq. m)?

- A. 142000
C. 142500

- B. 112800
D. 153600

3. Solve $4.\overline{86} - 3.\overline{71} = ?$

A. $1.\overline{6}$

B. $1.\overline{5}$

C. $1.\overline{14}$

D. $1.\overline{15}$

4. What is the rational number for recurring decimal $0.890890890.....$?

- A. $890890/1000$
C. $890/999$

- B. $67/421$
D. None of these

5. Which is the least among the following?

- A. $1 \div 0.3$
C. 0.3

- B. $0.\overline{3}$
D. $(0.3)^2$

6. Which of the following integers has the most number of divisors?

- A. 101
C. 182

- B. 99
D. 176

7. What is the HCF of $\frac{1}{3}$, $\frac{2}{3}$ and $\frac{1}{4}$?

A. $\frac{2}{3}$

B. $\frac{1}{3}$

C. $\frac{1}{4}$

D. $\frac{1}{12}$

8. Which of the following statements is not correct?

A. $\log(2 \times 4 \times 6) = \log 2 + \log 4 + \log 6$

B. $\log_5 1 = 0$

C. $\log(3+4) = \log(3 \times 4)$

D. $\log_5 5 = 1$

9. A and B walk around a circular track. A and B walk at a speed of 2 rounds per hour and 3 rounds per hour respectively. If they start at 8 a.m. from the same point in opposite directions, how many times shall they cross each other before 9.30 a.m.?

A. 5

B. 6

C. 7

D. 8

10. 3 men and 7 women can complete a work in 10 days . But 4 men and 6 women need 8 days to complete the same work . In how many days will 10 women complete the same work?

A. 50

B. 40

C. 30

D. 20