

Symbiosis Entrance Test (SET)

Ques 1. Two trains 126 m and 114 m long are running in opposite directions, one at the rate of 30 kmph and another one at 42 kmph. From the moment they meet will cross each other in

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|---------|---------|
| 1. 8 s | 2. 10 s |
| 3. 12 s | 4. 14 s |

Ans. 12 s

Ques 2. A train 270 m long is moving at a speed of 24kmph. It will cross a man coming from the Opposite direction at a speed of 3kmph, in

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| 1. 12 s | 2. 24 s |
| 3. 36 s | 4. 45 s |

Ans. 36 s

Ques 3. A train crosses a platform 100 m long in 60 seconds at a speed of 45kmph. The time by the train to cross an electric pole is

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| 1. 52 s | 2. 48 s |
| 3. 43 s | 4. 38 s |

Ans. 52 s

Ques 4. A train 60 m long passes a platform 90 m long in 10 seconds. The speed of the train is

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| 1. 60 km/h | 2. 58 km/h |
| 3. 54 km/h | 4. 50 km/h |

Ans. 54 km/h

Ques 5. The length of a bridge which a train 130 m long and traveling at 45kmph can cross in 30 seconds, is

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| 1. 180m | 2. 210m |
| 3. 225m | 4. 245m |

Ans. 245m

Ques 6. A train 120 m long crosses a standing man in 15 seconds. The speed of the train is

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|--------------|--------------|
| 1. 19.6 km/h | 2. 18.8 km/h |
| 3. 28.8 km/h | 4. 22.6 km/h |

Ans. 28.8 km/h

Ques 7. With a speed of 60kmph a train crosses a pole in 30 seconds. The length of the train is

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| 1. 300m | 2. 400m |
| 3. 500m | 4. 600m |

Ans. 500m

Ques 8. In a 729 litres mixture of milk and water, the ratio of milk to water is 7:2. to get a new mixture containing milk and water in the ratio 7:3, the amount of water to be added is:

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|--------------|--------------|
| 1. 81 litres | 2. 71 litres |
| 3. 56 litres | 4. 50 litres |

Ans. 81 litres

Ques 9. From a container, full of pure milk, 20% is replaced by water and this process is repeated three times. At the end of third operation, the quantity of pure milk reduces to

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|-----------|-----------|
| 1. 40.00% | 2. 50.00% |
| 3. 51.20% | 4. 58.80% |

Ans. 51.20%

Ques 10. Three types of wheat of Rs. 1.27, Rs. 1.29 and Rs. 1.32 per kg are mixed together to be sold at Rs. 1.30 per kg. In what ratio should this wheat be mixed?

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|------------|------------|
| 1. 1:02:03 | 2. 2:02:03 |
| 3. 2:03:01 | 4. 1:01:02 |

Ans. 1:01:02

Ques 11. In a zoo, there are deers and there are ducks. If the heads are counted, there are 180, while the legs are 448. What will be the number of deers in the zoo?

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| 1. 136 | 2. 68 |
| 3. 44 | 4. 22 |

Ans. 44

Ques 12. An amount of Rs. 680 was invested at 6% rate of interest and another sum of money was invested at 10% interest. If the average interest on the total at the end of the year was 7.5%, how much was invested at 10%?

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|--------------|------------------|
| 1. Rs. 480 | 2. Rs. 412.6 |
| 3. Rs. 267.5 | 4. None of these |

Ans. Rs. 480

Ques 13. There are 10 points in a plane out of which 4 are collinear. Find the number of triangles formed by the points as vertices.

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|--------|--------|
| 1. 120 | 2. 116 |
| 3. 140 | 4. 20 |

Ans. 116

3. (1/8)

4. (3/7)

Ans. (4/7)

Ques 14. In a party every person shakes hands with every other person. If there are 105 hands shakes, find the number of person in the party.

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| 1. 15 | 2. 14 |
| 3. 21 | 4. 25 |

Ans. 15

Ques 15. The number of positive integers which can be formed by using any number of digits from 0,1,2,3,4,5 without repetition.

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|----------------|----------------|
| 1. 1200 | 2. 1500 |
| 3. 1600 | 4. 1630 |

Ans. 1630

Ques 16. If letters of the word KUBER are written in all possible orders and arranged as in a dictionary, then the rank of the word KUBER will be:

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|--------------|--------------|
| 1. 67 | 2. 68 |
| 3. 65 | 4. 69 |

Ans. 67

Ques 17. There are 10 person among whom two are brother. The total number of ways in which these persons can be seated around a round table so that exactly one person sit between the brothers , is equal to:

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|------------------------------------|------------------------------------|
| 1. $2! \cdot 7!$ | 2. $2! \cdot 8!$ |
| 3. $3! \cdot 7!$ | 4. $3! \cdot 8!$ |

Ans. $2! \cdot 7!$

Ques 18. In the next World cup of cricket there will be 12 teams, divided equally in two groups. Teams of each group will play a match against each other. From each group 3 top teams will qualify for the next round. In this round each team will play against each others once. Four top teams of this round will qualify for the semifinal round, where they play the best of three matches. The Minimum number of matches in the next World cup will be:

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|--------------|--------------|
| 1. 54 | 2. 53 |
| 3. 38 | 4. 43 |

Ans. 53

Ques 19.

A bag contains 6 black and 8 white balls. One ball is drawn at random. What is the probability that the ball drawn is white?

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|-----------------|-----------------|
| 1. (3/4) | 2. (4/7) |
|-----------------|-----------------|

Ques 20.

Two cards are drawn together from a pack of 52 cards. The probability that one is a spade and one is a heart, is:

1. $(3/20)$ 2. $(29/34)$
3. $(47/100)$ 4. $(13/102)$

Ans. $(13/102)$

Ques 21.

A clock is started at noon. By 10 minutes past 5, the hour hand has turned through:

1. 145° 2. 150°
3. 155° 4. 160°

Ans. 155°

Ques 22.

The angle between the minute hand and the hour hand of a clock when the time is 4.20, is: 1. 0° 2. 10°

3. 5° 4. 20°

Ans. 10°

Ques 23.

How many times are the hands of a clock at right angle in a day?

1. 22 2. 24
3. 44 4. 48

Ans. 44

Ques 24.

The angle between the minute hand and the hour hand of a clock when the time is 8.30, is: 1. 80°

2. 75°
3. 60° 4. 105°

Ans. 75°

Ques 25.

What will be the ratio of simple interest earned by certain amount at the same rate of interest for 6 years and that for 9 years?

1. 1 : 3 2. 1 : 4
3. 2 : 3 4. None of these

Ans. 2 : 3

Ques 26.

A certain amount earns simple interest of Rs. 1750 after 7 years. Had the interest been 2% more, how much more interest would it have earned?

1. Rs. 35 2. Rs. 245
3. Rs. 350 4. Cannot be determined

Ans. Cannot be determined

Ques 27.

A person borrows Rs. 5000 for 2 years at 4% p.a. simple interest. He immediately lends it to another person at $6\frac{1}{4}$ % p.a for 2 years. Find his gain in the transaction per year.

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|---------------|---------------|
| 1. Rs. 112.50 | 2. Rs. 125 |
| 3. Rs. 150 | 4. Rs. 167.50 |

Ans. Rs. 112.50

Ques 28

One card is drawn at random from a pack of 52 cards. What is the probability that the card drawn is a face card (Jack, Queen and King only)?

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| 1. (1/13) | 2. (3/13) |
| 3. (1/4) | 4. (9/52) |

Ans. (3/13)