

**IEM KOLKATA****PROBABILITY**

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- Q1) The probability of an event can be  
(a) -0.04 (b) 1.00009 (c)  $18/23$  (d) None
- Q2) There are 3 children in a family. What is the probability that atleast 1 child in the family is a girl?  
(a)  $3/4$  (b)  $2/3$  (c)  $7/8$  (d)  $1/3$
- Q3) A speaks the truth 7 times out of 11 times & B speaks the truth 5 times out of 8. What is the probability that they will contradict each other in stating the same fact?  
(a)  $47/88$  (b)  $43/88$  (c)  $28/77$  (d)  $41/88$
- Q4) A & B appear for an interview for two vacancies. The probability of A's selection is  $1/3$  & that of B is  $1/5$ . Find the probability that none of them be selected.  
(a)  $8/15$  (b)  $14/15$  (c)  $1/15$  (d)  $2/15$
- Q5) A speaks the truth in 60% cases & B speaks the truth in 70% cases. Find the probability that they will say the same thing while describing a single event?  
(a)  $27/50$  (b)  $14/25$  (c)  $3/5$  (d)  $11/20$
- Q6) What is the probability that any one of the numbers 1,2,3,...,100 is a prime number?  
(a)  $16/50$  (b)  $8/25$  (c)  $6/25$  (d)  $1/4$
- Q7) In a lottery, there are 10 prizes & 25 blanks. A lottery is drawn at random. What is the probability of getting a prize?  
(a)  $1/10$  (b)  $2/5$  (c)  $2/7$  (d)  $5/7$
- Q8) What is the probability of having 53 Thursdays in a non-leap year?
- Q9) What is the probability of having 53 Thursdays in a leap year?
- Q10) What is the probability that a leap year will contain 53 Tuesdays and 52 Wednesdays?