CLASS 10 MATHS

PROBABILITY

BASIC CONCEPT OF PROBABILITY

EXERCISE

- **Q.1** Find the probability that a leap year selected at random will contain 53 Tuesdays
- **Q.2** A bag contains 12 balls out of which x are white.
 - (i) If one ball is drawn at random, what is the probability it will be a white ball?
 - (ii) If 6 more white balls are put in the box. The probability of drawing a white ball will be double than that is (i). Find x.
- Q.3 In a class, there are 18 girls and 16 boys. The class teacher wants to choose one pupil for class monitor. What she does, she writes the name of each pupil a card and puts them into a basket and mixes thoroughly. A child is asked to pick one card from the basket. What is the probability that the name written on the card is:
 - (i) The name of a girl

- (ii) The name of boy?
- Q.4 The probability of selecting a green marble at random from a jar that contains only green, white and yellow marbles is 1/4. The probability of selecting a white marble from the same jar is 1/3. If this jar contains 10 yellow marbles. What is the total number of marbles in the jar?
- **Q.5** A number is chosen at random among the first 100 natural numbers. Find the probability that the number chosen being a multiple of 5.
- Q.6 There are 5 green, 6 black and 7 white balls in a bag. A ball it drawn at random from the bag. Find the probability that it may be -
 - (i) a white ball

	(ii)	either a green or a black ball
	(iii)	not a black ball
Q.7	A bag contains 4 red and 8 blue marbles. A marble is drawn at random. What is the probability of drawing	
	(i)	a red marble?
	(ii)	a blue marble ?
Q.8	A bag contains 6 black, 7 red and 2 white balls. A ball is drawn from the bag at random. Find the probability that the ball drawn is -	
	(i)	Red
	(ii)	Black or white
	(iii)	Not black
Q.9 Comp		plete the statement :
	(a)	Probability of event A + Probability of event 'not A'
	(b)	Probability of a 'sure' event is
	(c)	Probability of an 'impossible' event is
	(d)	Sum of the probabilities of each outcome in an experiment is
	(e)	Probability of an outcome/ event is greater than or equal to and less than or equal to

ANSWER

1.
$$\frac{2}{7}$$

- (i) $\frac{9}{17}$ (ii) $\frac{8}{17}$ 3.
- 24 4.
- 5.
- (i) $\frac{7}{18}$ 6.
- (ii) $\frac{11}{18}$ (iii) $\frac{2}{3}$
- (i) $\frac{1}{3}$ (ii) $\frac{2}{3}$ 7.
- (i) $\frac{7}{15}$ (ii) $\frac{8}{15}$ (iii) $\frac{3}{5}$ 8.

- 9. (a) 1
- (b) 1 (c) 0 (d) 1 (e) 0, 1