CLASS 8

MATHS

DATA HANDLING

CHANGE AND PROBABILITY

EXERCISE

- **Q.1** List the outcomes you can see in these experiments.
 - (a) Spinning a wheel
 - (b) Tossing two coins together

Q.2 When a die is thrown, list the outcomes of an event of getting

- (i) (a) a prime number
 - (b) not a prime number
- (ii) (a) a number greater than 5
 - (b) a number not greater than 5

Q.3 Find the

- (a) Probability of the pointer stopping on D in (Question 1-(a))?
- (b) Probability of getting an ace from a well shuffled deck of 52 playing cards?
- (c) Probability of getting a red apple.(see figure below)





CLASS 8

- Q.4 Numbers 1 to 10 are written on ten separate slips (one number on one slip), kept in a box and mixed well. One slip is chosen from the box without looking into it. What is the probability of-
 - (i) getting a number 6?
 - (ii) getting a number less than 6?
 - (iii) getting a number greater than 6?
 - (iv) getting a 1-digit number?
- Q.5 If you have a spinning wheel with 3 green sectors, 1 blue sector and 1 red sector, what is the probability of getting a green sector ? What is the probability of getting a non blue sector ?
- Q.6 In a pack of cards there are 52 cards. 4 suits-2 black, 2 red. So each suit has 13 cards. What is the probability of drawing a red card ?
- **Q.7** Find the probability of a 6 appearing when a dice is thrown.
- **Q.8** What is the probability of drawing a red ball in a bag with 6 red balls, 8 white and 4 blue balls ?
- Q.9 Cards are marked with the letters M, A, T, H, S and shuffled well.

What is the probability of M being taken out?

- **Q.10** The letters of the word 'experiment' are marked on cards. Find the probability of drawing the following cards marked :
 - (a) e (b) m (c) t
- Q.11 A spinner, circular in shape, is divided into 8 equal sectors. The colours red, blue, green and white are marked on two sectors each. Find the probability of the pointer showing white.

CLASS 8

ANSWER KEY

(a) Outcomes \rightarrow A, B, C, D 1.

(b) HT, HH, TH, TT

(Here HT means Head on first coin and Tail on the second coin and so on).

- 2. Outcomes of an event of getting
 - (b) 1, 4, 6 (i) (a) 2, 3, 5
 - (b) 1, 2, 3, 4, 5 (ii) (a) 6
- (a) $\frac{1}{5}$ (b) $\frac{1}{13}$ (c) $\frac{4}{7}$ 3.
- 4. (i) $\frac{1}{10}$ (ii) $\frac{1}{2}$
 - (iv) $\frac{9}{10}$ $(iii)\frac{2}{5}$

5. Probability of getting a green sector
$$=\frac{3}{5}$$
,

probability of getting a non-blue sector = $\frac{4}{5}$

- $\frac{1}{2}$ 6.
- $\frac{1}{6}$ 7.
- $\frac{6}{18}$ 8.
- $\frac{1}{5}$ 9.
- (a) $\frac{3}{10}$ (b) $\frac{1}{10}$ (c) $\frac{1}{10}$ 10. 2 8
- 11.