



LGS GROUP OF COLLEGES

A PROJECT OF LAHORE GRAMMAR SCHOOL

Sheet # _____

Name: Rida Fatima Class: 1-year Roll No. _____

Subject: Statistic Test No. WT-5 Date: _____

A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	Marks Obtained
1	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
2	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
3	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	18	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	19	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	20	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

SECTION-1

(i)

SET:

A set is a well defined collection of distinct objects. The objects making up a set are called elements. A set is usually denoted by a capital letter i.e., A, B, C etc. e.g.: - $A = \{1, 2, 3, 4, 5\}$ is a set.

(ii)

$$= 479001600$$

$$3628800$$

$$= 132 \text{ Ans}$$

(iii)

Sample space = $S = \{HH, HT, TH, TT\}$

A = At least one head. $A = \{HH, HT, TH\}$

$$P(A) = \frac{n(A)}{n(S)}$$

$$= \frac{3}{4}$$

$$P(A) = 0.75$$



(iv)

Sample space = $\{1, 2, 3, 4, 5, 6\}$

A = even number = $\{2, 4, 6\}$

$$P(A) = \frac{n(A)}{n(S)} = \frac{3}{6} = \frac{1}{2}$$

$$P(A) = 0.5$$

SECTION-II

QUESTION-3

Sample space = $S = \{(1, 2), (1, 3), (1, 4), (1, 5), (1, 6), (2, 1), (2, 3), (2, 4), (2, 5), (2, 6), (3, 1), (3, 2), (3, 4), (3, 5), (3, 6), (4, 1), (4, 2), (4, 3), (4, 5), (4, 6), (5, 1), (5, 2), (5, 3), (5, 4), (5, 6), (6, 1), (6, 2), (6, 3), (6, 4), (6, 5)\}$ $\rightarrow n(S) = 30$

(i) A = sum of 6 = $\{(1, 5), (2, 4), (4, 2), (5, 1)\}$ $\rightarrow n(A) = 4$

$$P(A) = \frac{n(A)}{n(S)} = \frac{4}{30} = \frac{2}{15}$$

(ii) B = sum of 4 or less = $\{(1, 2), (1, 3), (2, 1), (3, 1)\}$ $\rightarrow n(B) = 4$

$$P(B) = \frac{n(B)}{n(S)} = \frac{4}{30} = \frac{2}{15}$$

(iii) C = sum of even no. = $\{(1, 3), (1, 5), (2, 4), (2, 6), (3, 1), (3, 5), (4, 2), (4, 6), (5, 1), (5, 3), (6, 2), (6, 4)\}$ $\rightarrow n(C) = 12$

$$P(C) = \frac{n(C)}{n(S)} = \frac{12}{30} = \frac{2}{5}$$