ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

SOLUTION OF WORKSHEET- 29

SUBJECT – STATISTICS

Term : 2nd

Topic – Probability **Class: XI**
Full Marks: 15 **Date:23 .11. 2020**

Q1. Select the correct alternative of the following questions.

i) Probability of getting 1 or 2 when an unbiased die is rolled once
a) 1/2 b) 1/6 c)1/36 **d) none of these**

ii) The probability of having no head from 3 throws of an unbiased coin is
a) $\frac{1}{3}$ **b)** $\frac{1}{8}$ c) $\frac{3}{8}$ d) $\frac{7}{8}$

iii) If A and B are independent events and P(A) = 0.5, P(B) = 0.7, then P(A–B) equals a)
a)0.15 b) 0.35 c) 0.25 d) none of these

iv) If $P(A)=\frac{3}{8}, P(B)=\frac{5}{8}$ *and* $P(A+B)=\frac{3}{4}$, then $P(A/B)$ equals
a) $\frac{2}{3}$ b) $\frac{1}{3}$ **c)** $\frac{2}{5}$ d) none of these

v) If A_1, A_2, A_3 are mutually exclusive, mutually independent and exhaustive, then the probability that A_1, A_2, A_3 occur simultaneously is
a) $\frac{1}{3}$ **b) 0** c) 1 d) none of these

vi) The probability of getting 9 dots with two unbiased dice is
a) $\frac{1}{9}$ **b)** $\frac{1}{6}$ c) $\frac{1}{18}$ d) none of these

vii) If A_1, A_2, A_3 are equally likely, exhaustive and mutually exclusive, then $P(A_1)$ equals

a) 1 b) 0 c) $\frac{1}{2}$ **d)** $\frac{1}{3}$

viii) If $P(A)=0.2, P(B)=0.4$ *and* $P(AB)=0.08$, then $P(B/\overline{A})$ equals

a) 0.4 b) 0.2 c) 0.8 **d) none of these**

ix) The probability of getting a 'heart' in drawing a card from a full pack of cards is

a) $\frac{1}{13}$ b) $\frac{1}{3}$ c) $\frac{1}{4}$ d) none of these

x) Total probability of any experiment is

a) 1 b)∅ c)0 d) none of these

xi) If the sets A and B are equally likely then

a) P(A)=0 b) P(B)=0 **c)P(A)=P(B)** d) none of these

xii) The probability of getting two heads when an unbiased die is rolled thrice

a) 0 b) 0.25 c) 0.5 **d) none of these**

xiii) The probability of an event lies between

a) -1 & 1 b) 0& 1 c)-1 & 0 d) none of these

xiv) If A and B can hit the target with probabilities 1/2 and 1/3, then the probability that exactly one of them hits the target is

a) 1/3 b) 1/6 c) 1/12 **d) none of these**

xv) If A and B can hit the target with probabilities 1/2 and 1/3, then the probability that the target will be hit is

a) 1/3 b) 1/6 c) 1/12 **d) none of these**

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