

BOARD OF INTERMEDIATE & SECONDARY EDUCATION, SAHRAWAL

P-6/12

SUBJECT: Statistics EXAM Inter 2nd A/2022 CLASS: 2nd year

GROUP: _____ DATE: 15-12-22 ⑦

GENERAL INSTRUCTIONS FOR MARKING KEY

Q.No-4 Award two marks for full

Correct definition of Part (i) to (ix)

(ii)

$$(\alpha\beta) = \frac{(\alpha)(\beta)}{n} \Rightarrow \frac{(880)(640)}{1024} \Rightarrow 550 \text{ Ans (2 marks)}$$

(iii)

$$\begin{array}{c|c} X & Y \\ \hline 4 & 2 \\ 1 & 3 \\ 2 & 1 \\ 5 & 6 \\ 6 & 5 \\ 3 & 4 \end{array} \quad \begin{array}{c} d = x - y \\ \hline 2 \\ -2 \\ 1 \\ -1 \\ 1 \\ -1 \end{array} \quad \begin{array}{c} 4 \\ 4 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} \quad \begin{array}{c} d^2 \\ \hline 4 \\ 4 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} \quad \begin{array}{c} 12 \\ \hline 12 \end{array}$$

$$\begin{aligned} r_{\alpha\beta} &= 1 - \frac{6 \sum d^2}{n(n^2 - 1)} \\ &= 1 - \frac{6(12)}{6(36 - 1)} \\ &= 0.6571 \text{ Ans (2 marks)} \end{aligned}$$

(vi)

$$\hat{y} = 10 + 3x$$

$$\begin{aligned} \hat{y} &= 10 + 3(1) = 13 \\ &= 10 + 3(2) = 16 \\ &= 10 + 3(3) = 19 \\ &= 10 + 3(4) = 22 \end{aligned}$$

(2 marks)

(vii)

$$\bar{x} = 50, \bar{y} = 110, a = 10$$

$$a_{yx} = \bar{y} - b_{yx} \bar{x}$$

$$10 = 110 - b_{yx}(50)$$

$$\begin{aligned} 10 - 110 &= -b_{yx}(50) \\ +100 &= +50 b_{yx} \end{aligned}$$

$$\boxed{b_{yx} = 2} \text{ Ans}$$

(2 marks)

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RE-CHECKED BY _____ نے درج بالا سوال پر (انتخابی + سرمدی) اور دیات کے حوالے سے مکمل طور پر تکیہ کر کے۔ کسی قسم کی کوئی غلطی نہ ہے۔

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