

Topic: Mode in Continuous Series

Continuous series ka mode nikalne ke liye 3rd step chahiye aur continuous series ke liye formula hai Discrete series ke mode ke jaisa jaha continuous series ka formula hai uska mode nikalenge aur 2 step ke baad uske ke 3rd step mode ke formula use karenge

C.I	f ₁	f	f ₀	f ₁	f ₂	f ₃	Analysis Table
0-5	20						I = 1
5-10	24	44	56	26			II = 3
10-15	32	60	48	64	84		IIII = 5
15-20	28	36	48	64	80		III = 3
20-25	20	36	53	64	73		I = 1
25-30	16	36	53	64	73		= 0
30-35	32	47	55	55	63		= 1
35-40	10						
40-45	8						

Yeh analysis table se dikha hai ki modal series 10-15 ke jaha hai aur 3rd step ke baad 5.33 ka formula hai aur 5th step ke baad mode nikalenge aur

$$Z = L_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times C$$

$$Z = 10 + \frac{32 - 24}{2 \times 32 - 24 - 28} \times 5$$

$$Z = 10 + \frac{8}{64 - 52} \times 5$$

$$Z = 10 + \frac{8}{12} \times 5$$

$$\checkmark Z = 10 + \frac{40}{12} = 3.33$$

$$\checkmark Z = 10 + 3.33$$

$$\checkmark Z = 13.33$$

Iska formula Z = mode

L₁ = mode ke jaha ki frequency hai

f₁ = mode ke jaha ki frequency

f₂ = mode ke jaha ki frequency ke baad ki frequency

f₀ = mode ke jaha ki frequency ke pehle ki frequency

C = class interval aur L₂ - L₁

Is formula se mode nikalenge aur 10 aur 13.33 ke jaha hai aur 13.33 ke jaha hai

$$\textcircled{1} Z = L_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (L_2 - L_1)$$

$$\textcircled{2} Z = L_1 + \frac{f_1 - f_0}{(f_1 - f_0) + (f_1 - f_2)} \times C$$