

BOARD OF INTERMEDIATE & SECONDARY EDUCATION, SAHIVAL

P-1/18

SUBJECT: Statistics EXAM Inter md #2022 CLASS: 2nd year

DATE: 05-12-22

GROUP: —

(GENERAL INSTRUCTIONS FOR MARKING KEY)

(4)

Q. No. 2 Award two marks for full

Correct definition of Part (i) to (xii)

(i) $\mu = 5, \sigma^2 = 1$ (2 marks)

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2}$$

$$= \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}(x-5)^2}$$

(ii) $N(24, 4), \mu = 24, \sigma = 2$ (2 marks)

value of maximum ordinate at $\mu = 24$

$$f(\mu) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{1}{2}\left(\frac{24-24}{2}\right)^2}$$

$$= \frac{1}{2\sqrt{2\pi}} \Rightarrow 0.1995 \text{ Ans}$$

(iii) $\mu = 20, \sigma = 5$

$$M.D = 0.6745\sigma$$

$$= 0.6745(5)$$

$$= 3.3725$$

01 mark Ans

PREPARED BY

Sr.#	Name	Desig.	Institution	Mobile No.	Signature
1	FIJAZ BASHIR	A.P	GIAC, Renala Khurd	03455771	M. An
2	M. Henif Rana	A.P	Geec Schiwal	0333630497	M. An

RE-CHECKED BY

Sr.#	Name	Desig.	Institution	Mobile No.	Signature
1	Rana Usman Hudey	A.P	Geec Schiwal	0333-690846	M. An
2	Riaz Ahmed Khan AP	A.P	Geec Schiwal	0333-738417	M. An

تم نے درج بالا سوالیہ جزء (نفاذیہ و موزونی) اور ہدایات کے حوالے سے مکمل طور پر تعمیل کی ہے۔ کسی قسم کی کوئی غلطی نہ ہے۔