(63)
A)
$$f(t) = \begin{cases} 4, & 0 \in \mathbb{R} \leq 3 \\ 0, & \mathbb{R} \neq 3 \end{cases}$$

$$\mathcal{L} \left\{ f(t) \right\} = \begin{cases} 6 - st & f(t) \ dt \\ = \int_{0}^{3} 4 \cdot e^{-st} \ dt + 0 \end{cases}$$

$$= 4 \int_{-s}^{2} e^{-st} \ dt + 0$$

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Subject: - Maths

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c) 1(x/= e-x Let $f(r) = \sum_{n=1}^{\infty} b_n \frac{\sin(n\pi x)}{2}$ bn= 2/1/2/ sin [n Tx] dr - 2 / e-y sin (MTX) dx - 2 1 - e-> (-1) sinhtix - na coinax) $= 2 \left[\frac{e^{-i}}{1+n^2\pi^2} \left[-\sin\left(\pi n\right) - n\pi\left(osn\pi\right) - 1 \left[o - n\pi\left(\mathbf{1}\right) \right] \right]$ $b_h = 2 \left[\frac{e^{-1}}{1 + n^2 \pi^2} \left[-\frac{(-1)^h}{1 + n^2} \right] + \frac{n \pi}{1 + n^2 \pi^2} \right] = \frac{2n\pi}{1 + n^2 \pi^2} \left[1 - \frac{e^{-1}(-1)^h}{1 + n^2 \pi^2} \right]$ flot= 25 na [1-e-(-1)h] sin (nax) Information => Seat no: - 42213077

Sem: - II Signolore: - 5.5.540Hg

Subject: - Maths

۵	$u = \partial^2 sin 20$
	Us = 2rsin20
	Urr = 2 sin2b
	11 - 2)1:10
	Uo = 2 × 2 (0)20
	-6.2 1.26
	doo = -9x2 sin20
	$\frac{u_{r_1}+1}{y}\frac{u_r}{y^2}\frac{f}{y^2}\frac{u_{00}>0}{y^2}$
	8 82
	291 = 2 sin 20 + 1 2 r sin 20 - 1 - 982 sin 20
	r 12
1	= 45in20 - 4sin20
	- 4. 211/5 (3/1) = 0
	20
	· Mosmonic
	1811 - 2 4 1 62212022
	Information = Seaf No:- 42213077 Sen:- III Signature:- S. D. Shelly - Subject:- Mulhs
	Subject: - Mulhs
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(-Regh $u_r = \int v_\theta$ Up = IVy 2xsin20 = 1 Vo Vo= 2x2 sin20 to = Integrating Vo / vo do = 2 x 2 / sin 20 do V = 2,2 (-(0)20)+C V= -82 (0)26 fc v(r, 0) = -82 (0,20 fc W= Resin20 - ig 2 cos20 +c Information => Feat No: - 422 13077 Sem:- III Subject:- Math, Signobole: - S.D. shely F)

$$E(1X) = 2$$

$$E(2) = \frac{3}{2} P_i N_i^2$$

$$-\frac{0 \times 1}{16} + 1^{2} \times \frac{6}{10} + 1^{2} \times \frac{6}{10} + 2^{2} \times \frac{1}{10} + 4^{2} \times \frac{1}{10}$$

Information=> Seat No:- 42213077
Sem:-III
Subject:- Math)

Signature: - Stocketty

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