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Cool! I'am really happy

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My friends are so mad that they do not know how I have all the high quality ebook which they do not!

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so many fake sites. this is the first one which worked! Many thanks

A. Nagaraj'S -
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32. Evaluate $\int_0^1 \frac{x}{(x+1)^2} dx$
33. Find the Area of the region bounded by the curve $y^2 = x$ and the lines $x = 1, x = 4$ and the x-axis.
34. From the Differential equation of the family of circles having centre on Y-axis and radius 3 units.
35. Show that the points $A(-2, -3) + 5i, B(1 + 2i + 3i), C(7i - 4)$ are collinear.
36. If $|z - 1| = |z + 1| = 5$ and each one of them being \perp to the other two, find $|z + \bar{z} + 1|$
37. Find the vector and the Cartesian equations of the line through the point $(5, 2, 4)$ and which is parallel to the vector $\hat{i} + 2\hat{j} - 3\hat{k}$
38. From a lot of 30 bulbs which includes 6 defectives, a sample of 4 bulbs is drawn at random with Replacement. Find the probability distribution of the number of defective bulbs.
- PART - D** 6 × 5 = 30

Answer any SIX questions

39. Let $f: R \rightarrow R$ be defined by $f(x) = 3x - 7$, show that f is invertible. Find $f^{-1}: R \rightarrow R$
40. If $A = \begin{bmatrix} 1 & 2 & -3 \\ 5 & 0 & 2 \\ 1 & -1 & 1 \end{bmatrix}, B = \begin{bmatrix} 3 & -1 & 2 \\ 4 & 2 & 5 \\ 2 & -6 & 3 \end{bmatrix}$ & $C = \begin{bmatrix} 4 & 1 & 2 \\ 0 & 3 & 2 \\ 1 & -2 & 3 \end{bmatrix}$ verify that $A + (B - C) = (A + B) - C$.
41. Solve by using Matrix method. $3x - 2y + 3z = 8, 2x + y - z = 1$ & $4x - 3y + 2z = 4$
42. If $y = ae^{mx} + be^{nx}$, show that $y_1 - (m + n)y_2 + my_3 = 0$
43. A Man of height 2m walks at a uniform speed 5m/h away from a Lamp post which is 6m high. Find the rate at which the length of his shadow increases.
44. Prove that $\int \frac{1}{\sqrt{a^2 - x^2}} dx = \sin^{-1} \left(\frac{x}{a} \right) + C$ and hence evaluate $\int \frac{dx}{\sqrt{4 - 12x + 9x^2}}$
45. Find the Area of the circle $x^2 + y^2 = a^2$ by integration method.
46. Derive the equation of a plane in Normal form (both in vector and Cartesian form).
47. Solve the differential equation, $x \frac{dy}{dx} + 2y = x^2 \log x$.
48. If a Fair coin is tossed 10 times. Find the Probability of a) exactly 6 heads b) At least 6 heads c) At most 6 heads.

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