Dantan II Govt. General Degree College

Mathematical physics-III. Internel evolvetion assignment

Sem- IV, Paper C 8 F.M-30

Answer any three

1.1 Discuss C-R equation and prove it

1.2. Show that an analytic function is allways Harmonic

2.1 .Find out $\oint \frac{e^2 d2}{(Z-2)}$; $|Z| = 3$

2.2 State and explain Cauchy's integrate theorem

3.1 Find out eign value and eigen victor for the matrix $\begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$

3.2 Find out the invade of matrix using Caley Htamilton theory $(A) = \begin{pmatrix} 1 & 2 \\ -2 & 3 \end{pmatrix}$ 5+5

4.1 using Residue Theorem find out

(a) $\oint_c \frac{dx}{1+x6}$ (b) $\int_0^{2\pi} \frac{d\theta}{a+b\,cos\theta}$; |0|>b 5+5