4th Sem
Internal Assessment

Marks-10
5+5 = 10

(1) Solve -

$$[D^2 - a^2]y = \sin ax$$

(2) Find the differential equation of the circles passing through origin & having their centres on x-axis.?

2nd sem
Internal Assessment

Marks-10
5+5=10

(a) Show that the vectors $(-1,2,1)$; $(3,0,-1)$; $(-5,4,3)$ are linearly dependent.

(b) Find the eigen values of the matrix

$$A = \begin{bmatrix} 3 & 1 & 1 \\ 1 & 5 & 1 \\ 1 & 1 & 3 \end{bmatrix}$$

6th Sem
Internal Assessment

Marks-10

(a) Show that $f(z) = |z|^2$ is continuous for all $z \in \mathbb{C}$

(b) Let f be analytic in a region G then If $f'(z) = 0$ on G then f is constant on G

$2nd$ sem

Marks-10

Internal. Assessment $5 + 5 = 10$

(a) Show that the vectors $(-1,2,1); (3,0,-1); (-5,4,3)$ are linearly dependent.
(b) Find the eigen values of the matrix

$$A = \begin{bmatrix} 3 & 1 & 1 \\ 1 & 5 & 1 \\ 1 & 1 & 3 \end{bmatrix}$$

4th sem

Marks-10

Internal Assessment 5+5=10

(1) Solve –

$$[D^2 - a^2]y = \sin ax$$

(2) Find the differential equation of the circles parsing through origin 2 having their centers on x-axis.?