

Syllabus for Bridge Course in Advanced Mathematics –II

(Common to all branches)

Total Number of hours of teaching	: 40
Examination Marks	: 100
Hours per week	: 4

1) Solid Geometry

Distance Formula (without proof), Division formula, Direction cosines and Direction ratios, planes and straight lines, angle between the planes

12 hrs

2) Vectors:

Vector Algebra:

Vector addition, multiplication (Dot and Cross products), Triple products, Vector differentiation Velocity, acceleration of a vector point function, gradient, curl and divergence, solenoid and irrotational fields, simple and direct problems

12 hrs

3) Laplace transforms:

Definitions, Laplace transforms of elementary, functions, functions, derivatives and integrals. Inverse, transforms, Applications Laplace transforms to differential equations

16 hrs

Text Books:

- a) Higher Engineering Mathematics – B.S. Grewal
- b) Higher Engineering Mathematics – H K Dass