Review of Analysis, Complex variables, vector calculus, generalized functions, infinite series, Fourier series and transforms.
Partial differential equations of Mathematical physics: Physical background of: Laplace, Poisson, wave and Klein Gordon equations
Linear integral equations: Types of integral equations. Integral equation with separable kernels, Solution of integral equation of second kind by successive substitutions. Fredholm’s method of solution of the inhomogeneous equation and the homogeneous equation

TEXT BOOKS / REFERENCES: