Engineering Mathematics-III_Previous year question paper analysis

Statistical Techniques: 19-20 \rightarrow 1) spearman's rank correlation

- 2) Karl Pearson's coefficient of correlation
- 3) Question of regression lines
- 4) Fit a straight line or fit a parabola

Complex Variables: 16-18 \rightarrow 1) Determine the constants a, b, c, d, e

- 2) Milne Thomson method(u/v/u+v/u-v is given)
- 3) Find orthogonal trajectories

Fourier Series: $22-27 \rightarrow 1$) Even/odd Fourier series

- 2) Half range sine/cosine series
- 3) fourier series in any interval

Laplace Transform: 18-20 \rightarrow 1) find L.T of function using definition/formula

2) Evaluation of integration $\int_0^\infty \dots$

Inverse Laplace Transform: 14-16 \rightarrow 1) Partial fraction

- 2) Convolution theorem
- 3) ILT using First shifting Theorem

Probability Distribution: $18 \rightarrow 1$) Question on Pmf & pdf

- 2) Question on finding Mean, variance, MGF.
- 3) Question on Conditional probability