

N.B.

- Question No.1 Compulsory.
- Answer any three from the remaining.
- Figures to the right indicate full marks
- Give illustrations and examples wherever necessary

- 1 a) Write down four layers of pressure sensitive label and their application. (5)
b) Compare Paper labels and Film labels with apt applications. (5)
c) Enlist different types of label and their apt printing technology to be used. (5)
d) What is a liner-less label? Discuss its applications and limitations. (5)
- 2 a) Explain the factors to be considered while designing a label. (10)
b) What is corona treatment? Why it is done during printing labels? (5)
c) Write the pre-treatment done for Plastic, Metal and Glass. (5)
- 3 a) If a container has larger diameter d_1 and smaller diameter d_2 , and height of label h , Find the formulae used to design a shrink sleeve label. (10)
b) Explain Self-adhesive label production process, starting from liner production with neat diagram. (10)
- 4 a) Explain Pressure sensitive label application in detail with diagram. (10)
b) Explain different types of die cutting and their application. (5)
c) Compare various filmic face stock with respect to their printability. (5)
- 5 a) Which adhesive can be used for i) champagne bottle, ii) Detergent liquid container, iii) Pickle bottle, iv) Tablet container, and v) Water bottle. Justify the selection. (10)
b) What liner material should be chosen for i) Hand wash bottle ii) Pickle bottle iii) Vehicle Number plate label iv) Reflectors v) Airplane labels (10)
- 6 a) Write about various Print finishing operations done in label. (10)
b) Describe Pre-cut labelling machinery with neat diagram. (10)
