

Module-4

- 7 a. Write a note on application of ferrous and non-ferrous alloys. (06 Marks)
b. Define composite material. State the advantages and applications of composite material. (05 Marks)
c. Differentiate between Soldering, Brazing and Welding. (09 Marks)

OR

- 8 a. Differentiate between Open and Crossed belt drive. (06 Marks)
b. Enumerate the advantages and disadvantages of gear drive over belt drive. (06 Marks)
c. Derive an equation for length of belt in open belt drive. (08 Marks)

Module-5

- 9 a. Explain the following operation on lathe with suitable sketches:
(i) Turning (ii) Knurling (iii) Facing (iv) Thread cutting (10 Marks)
b. Explain the following operation on milling machine with suitable sketches:
(i) Form milling (ii) Angular milling (iii) Gang milling (10 Mark)

OR

- 10 a. Differentiate between open loop and closed loop systems. (06 Marks)
b. Define robot. Write down industrial applications of robot. (04 Marks)
c. Explain the components of CNC with a block diagram. (10 Marks)

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