

06/06/2025 SE MECHANICAL SEM-III C-SCHEME QP CODE: 10082314

Time: 3 hours

Max. Marks: 80

Note-

1. Question one is compulsory.
2. Solve any three out of remaining five.

- Q.1** Write Short notes with sketch wherever applicable. (Solve any Four) 20
- a Pattern Allowances
 - b Friction welding
 - c Rolling defects
 - d Gear shaping
 - e Industrial revolutions
- Q.2**
- a Explain the desirables properties of molding sands, also explain different types molding sands used in the foundry 10
 - b Classify welding and compare soldering and brazing 10
- Q.3**
- a Describe different types of dies with neat sketches 10
 - b Write short not on column and knee type milling machine 10
- Q.4**
- a What are various methods of taper turning on lathe machine, explain any one type in detail with neat sketch 10
 - b Explain stepwise procedure of powder metallurgy. 10
- Q.5**
- a Describe the investment casting process with neat sketches. 10
 - b Write short note on thermit welding with their advantages, disadvantages applications. 10
- Q.6**
- a Compare the following 10
 1. Shaper and planer
 2. Hot chamber and cold chamber die casting
 - b List various nontraditional machining methods and explain electro-chemical machining in detail 10