

17402

11718

3 Hours / 100 Marks

Seat No.

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- Instructions* –
- (1) All Questions are *Compulsory*.
 - (2) Illustrate your answers with neat sketches wherever necessary.
 - (3) Figures to the right indicate full marks.
 - (4) Assume suitable data, if necessary.
 - (5) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following:** **20**
- a) State the advantages of press forging over drop forging.
 - b) Explain the classification of rolling mills with neat sketches.
 - c) State the advantages of extrusion.
 - d) State the classification of presses.
 - e) Explain stripper in press with neat sketch.
 - f) Explain the drawing operation with neat sketch.
 - g) State the various types of patterns. Explain any one with sketch.

P.T.O.

- 2. Attempt any FOUR of the following:** **16**
- a) Explain the open die forging with neat sketch.
 - b) Explain rolling process with neat sketch.
 - c) Explain direct extrusion.
 - d) Explain the blanking operation with respect to press work with neat sketch.
 - e) Explain the combination die with neat sketch.
 - f) Explain why wood is preferred as pattern material.
- 3. Attempt any FOUR of the following:** **16**
- a) Explain upset forging with neat sketch.
 - b) State and explain the characteristics of moulding sand.
 - c) Explain green sand moulding.
 - d) Explain true centrifugal casting with neat sketch.
 - e) Explain various oxy-acetylene gas flames with neat sketches.
 - f) Explain soft and hard soldering.
- 4. Attempt any FOUR of the following:** **16**
- a) State the types of gates. Explain any one with neat sketch.
 - b) Draw the cross-section through cupola stating various zones and elements.
 - c) Explain hot chamber die casting machine.
 - d) Explain TIG welding.
 - e) Explain taper turning by setting over the tailstock.
 - f) State the various types of thermosetting plastics. Explain any one in brief.

- 5. Attempt any FOUR of the following: 16**
- a) Explain electron beam welding with neat sketch.
 - b) State the various operations performed on the lathe. Explain any two in brief.
 - c) State and explain the major factors considered for selection of cutting speed in lathe machine.
 - d) State the classification of drilling machine.
 - e) State the various operations performed on drilling machine. Explain any one.
 - f) Explain compression moulding with neat sketch.
- 6. Attempt any FOUR of the following: 16**
- a) State the various welding defects and reasons for it.
 - b) Explain the factors influencing the rake angle of the single point cutting tool.
 - c) Explain cutting tool signature for single point cutting tool.
 - d) Explain twist drill nomenclature with neat sketch.
 - e) Explain calendaring with neat sketch.
 - f) State the various materials for processing plastics.
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