

sem-III  
Manufacturing Engg.-I / PROD / 09.12.15



QP Code : 5205

Duration: - 03 Hours

Total marks assigned to the paper: - 80

N.B.:- (1) Question No. 1 is compulsory.

- (2) Attempt any three questions out of remaining five questions.
- (3) Figures to the right indicate full marks.
- (4) Illustrate answers with proper justification and neat sketches wherever required.
- (5) Answers to questions should be grouped and written

1. Explain in brief with the help of neat sketch: (Any Four) (5 X4)
  - (A) Types of slotting machines.
  - (B) Universal dividing head.
  - (C) Elements of typical internal broach.
  - (D) Classification and Nomenclature of single point cutting tool.
  - (E) Need and classification of machine tool.
2. (A) Explain taper turning methods and thread cutting operation on lathe with neat sketch. (10)  
(B) Name different types of drilling machines. Explain radial drilling M/C with neat sketch. (10)
3. (A) Describe the principle of quick return mechanism as used in shapers. How you can adjust the length of stroke in a shaper? Explain. (10)  
(B) Name different broaching machines. Explain horizontal broaching with neat sketch. (10)
4. Explain in brief with the help of neat sketch: (Any Four) (5 X4)
  - (A) Deep hole boring machine.
  - (B) Feed Mechanism related to planer.
  - (C) Blow moulding with ceramics.
  - (D) Difference between capstan and turret lathe.
  - (E) Milling cutters.
5. (A) Classify milling machines. Explain with neat sketch fixed bed type milling machine. (10)  
(B) Explain basic concepts related to compression molding. (10)
6. Write short notes on: (Any Four) (5 X4)
  - (A) Power hack-saws cutting off machines.
  - (B) Thermoforming and extrusion.
  - (C) Compound indexing method.
  - (D) Machining time calculations of shaper.
  - (E) Types and materials of drills.

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