SE/III/PROD/M-EI/CBGS/30.05.16 Manufacturing Engg. I G.C.

Duration: - 03 Hours

Total marks assigned to the paper: - 80 79JAT

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 together.
- Explain in brief with the help of neat sketch: (Any Four)

(5 X4)

- (A) Types of shapers.
- (B) Special accessories for milling.
- (C) Broaching process.
- (D) Classification and Nomenclature of twist drill.
- (E) Machining time in turning.
- 2. (A) Explain any ten operations performed on the lathe with neat sketch.

(10)

(B) Name different types of drilling machines. Explain upright drilling M/C.

(10)

- 3. (A) Describe the principle of quick return mechanism as used in shapers. How you can adjust the (10)length of stroke in a shaper? Explain.
 - (B) Name different broaching machines. Explain vertical broaching with neat sketch. (10)
- Explain in brief with the help of neat sketch: (Any Four)

(5 X4)

- (A) Horizontal boring machine.
- (B) Types of planning machines.
- (C) Transfer moulding with plastics.
- (D) Feed mechanism related to lathe.
- (E) Face and shell Milling cutters.

TURN OVER

- 5. (A) State indexing methods. Explain any one in details with neat sketch.
 - (B) Explain basic concepts related to rotational molding.
- 6. Write short notes on: (Any Four)
 - (A) Friction saws cutting off machines.
 - (B) Thermoforming and extrusion related to plastics.
 - (C) Moulding with ceramics.
 - (D) Slotting machine.
 - (E) Machining time in drilling.

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(10)

(10)

(5 X4)