

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– III (New) EXAMINATION – WINTER 2019****Subject Code: 2133404****Date: 3/12/2019****Subject Name: Basic Manufacturing Processes****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Describe types of Production. **03**
(b) Explain the working of lathe machine. **04**
(c) Write down the Main parts of a lathe and Explain any one in detail with neat diagram. **07**
- Q.2** (a) Draw a block diagram of shaper **03**
(b) Describe the classification of shaping machine **04**
(c) Explain any one work holding devices used in a Planer with neat diagrams. **07**
- OR**
- (c) Explain any two work holding devices used in a shaping machine with diagrams. **07**
- Q.3** (a) State any two differences between the processes of reaming and boring. **03**
(b) Explain any two drill holding devices. **04**
(c) Explain any four operations performed in a drilling machine. **07**
- OR**
- Q.3** (a) Name any four work holding devices used in a drilling machine. **03**
(b) List out the types drilling machines and explain any one detail. **04**
(c) Explain the nomenclature of a twist drill with a diagram. **07**
- Q.4** (a) What are the types of milling machines? **03**
(b) List out various milling machine attachments and any one detail. **04**
(c) Explain – Up milling, Down milling. **07**
- OR**
- Q.4** (a) What are the types of peripheral milling? **03**
(b) What are the differences between a plain milling machine and a universal milling machine? **04**
(c) Draw a neat diagram of a plain milling cutter and explain its nomenclature. **07**
- Q.5** (a) What are the four types of surface grinders? **03**
(b) Explain 'Dressing' of a grinding wheel with a diagram. **04**
(c) Explain 'mounting' of a grinding wheel with a suitable diagram. **07**
- OR**
- Q.5** (a) What are the reasons for chattering? **03**
(b) Explain 'Truing' of a grinding wheel **04**
(c) Draw and explain an external cylindrical grinder. **07**
