

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

Roll No

IP/IEM/ME/PR-603 (GS)**B.E. VI Semester**

Examination, December 2017

Grading System (GS)**Metal Cutting and CNC Machines**

Time : Three Hours

Maximum Marks : 70

- Note: i) Attempt any five questions.
ii) All questions carry equal marks.

1. Describe the method of producing threads on a lathe machine.
2. With the help of simple sketches, explain any seven lathe operations.
3. Describe the different types of bonds used in grinding wheels along with their applications.
4. With the help of neat sketch, explain the centreless grinding process. Also write its applications.
5. Describe the working of a universal dividing head.
6. Explain the process of cutting gears on a milling machine.
7. What is die casting? Describe different types of die casting.

[2]

8. Answer any four of the following:

- a) What is meant by tool signature? Explain.
- b) What is the role of abrasives in a grinding wheel? Name a few common abrasives.
- c) Differentiate among vertical, horizontal and universal milling machines.
- d) Draw the block diagram of a shaper and mention the important parts on it.
- e) What is the importance of mechatronics in mechanical engineering?
- f) What is a transducer? What are its applications?
