



**INTERNATIONAL CENTRE FOR APPLIED SCIENCES
MAHE, MANIPAL**

B.Sc. (Applied Sciences) in Engg.

End – Semester Theory Examinations – Nov./ Dec. 2020

**III SEMESTER - MANUFACTURING PROCESS ENGINEERING (IME 232)
(Branch: Mechanical)**

Time: 3 Hours

Date: 23 November 2020

Max. Marks:50

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- ✓ Answer ALL the questions.
 - ✓ Missing data, if any, may be suitably assumed
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| 1.A With a neat sketch explain the Centrifugal casting process. | 5 |
| 1.B List the different types Lathe Attachments used in lathe and explain any. | 5 |
| 2.A With a neat sketch explain Radial drilling machine. | 5 |
| 2.B Explain the column and knee type of milling machine. | 5 |
| 3.A List and explain Abrasive Particles used in Grinding wheel. | 5 |
| 3.B With a neat sketch explain the seam Welding process. | 5 |
| 4.A Differentiate the shaper and planer machine. | 5 |
| 4.B With neat sketch explain the working principle of orthogonal and oblique cutting operation. | 5 |
| 5.A Explain the bending operation in sheet metal and its advantages as well as disadvantages. | 5 |
| 5.B Explain the shearing process with the help of die and punch. | 5 |
