

**M. Tech.-IV (Mechanical CAD/CAM) (CBCS – 2015 Course) :**  
**SUMMER - 2019**

**SUBJECT: SELF- STUDY PAPER-II DESIGN FOR MANUFACTURE**

Day: Thursday  
Date: 13/06/2019

Time: 11.00 AM TO 02.00 PM  
Max. Marks: 60

**S-2019-3539**

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**N.B:**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Answer to both the sections should be written in **SAME** Answer book.
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**SECTION-I**

**Q.1** Explain in details of rubber and composites are used in Nonmetallic materials. (10)

**OR**

Explain in details the role of Nonferrous materials used in design for manufacturing. (10)

**Q.2** Explain in neat sketch metal extrusion and metal stamping in design of components. (10)

**OR**

Explain in details milled parts in design components. (10)

**Q.3** Explain with sketch screw threaded contoured and internal ground parts in components design. (10)

**OR**

Explain with sketch design thermosetting plastic in component design. (10)

**SECTION-II**

**Q.4** Explain the concept of ceramic matrix composite in details. (10)

**OR**

Explain the different manufacturing methods used in ceramic materials. (10)

**Q.5** Explain with neat sketch bearing assembly in design assembled parts. (10)

**OR**

Explain with neat sketch arc welded parts in design. (10)

**Q.6** Explain in detail press fitted connections in design of assembled parts (10)

**OR**

What are the product design requirements in design of assembled parts? (10)

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