

**B.TECH. SEM -IV MECHANICAL 2014 COURSE (CBCS) :  
WINTER - 2017**

**SUBJECT : MANUFACTURING PROCESS**

Day : **Tuesday**  
Date : **21/11/2017**

Time : **02.30 PM TO 05.30 PM**  
Max. Marks : 60

**W-2017-2094**

**N.B.:**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labeled diagram **WHEREVER** necessary.
- 4) Assume suitable data if necessary.

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**Q.1 a)** What are different types of pattern materials used for pattern making? [05]

**b)** What type of allowances used in pattern making? [05]

**OR**

**a)** Explain the concept core making practice. [05]

**b)** Describe induction furnace with neat sketch. [05]

**Q.2 a)** What is hot working? State its applications. [05]

**b)** With a neat sketch explain extrusion process in detail. [05]

**OR**

**a)** What is cold working? State its applications. [05]

**b)** Explain the process of tube drawing with neat sketch. [05]

**Q.3** List the different types of welding processes. Explain any one in detail with neat sketch. [10]

**OR**

**a)** What are the different types of adhesives used in welding? [05]

**b)** Explain friction welding with neat sketch. [05]

**Q.4** Describe construction and working of lathe machine. [10]

**OR**

**a)** Explain tool geometry of turning tool used on lathe machine. [07]

**b)** What are tool holding devices used on lathe machine? [03]

**Q.5** Describe twist drill geometry with neat sketch. [10]

**OR**

List various types of milling cutters and explain any two with neat sketches. [10]

**Q.6 a)** Explain wheel mounting in grinding with suitable sketch. ? [06]

**b)** Differentiate Honing and Lapping processes. [04]

**OR**

**a)** What are the different types of abrasives used in grinding processes? State effect of size and shape of it on machining. [05]

**b)** Explain blow moulding process with suitable sketch. [05]

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