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S.Y.B.Tech. (Part - II) (Semester -IV) (CBCS)**Examination, May-2025****MECHANICAL****Machine Tools and Processes****Sub. Code : 79123/63364/79411****Day and Date : Friday, 23/05/2025****Total Marks : 70****Time : 10:30 a.m. to 01:00 p.m.**

- Instructions :**
- 1) **All questions are compulsory.**
 - 2) **Figures to the right indicate full marks.**
 - 3) **Assume suitable data wherever necessary.**

Q1) Solve any Two. [12]

- A) What are the steps involved in sand casting process? State its advantages and limitations.
- B) Explain Centrifugal casting process and state its applications.
- C) Explain with a neat sketch a suitable furnace used for melting of nonferrous-metals.

Q2) Solve any Two. [12]

- A) Distinguish between open and closed die forging processes.
- B) Why is the strength of rolled part is better than a cast piece?
- C) Compare hot working and cold working.

Q3) Solve any Two. [12]

- A) Write a short note on Blow molding.
- B) Explain with a neat sketch Calendaring process for plastic.
- C) Explain various applications of Thermoplastic materials.

Q4) Solve any Two. [12]

- A) Draw a block diagram of Radial drilling machine and explain its working.
- B) Where would you propose use of face plate on a lathe? Justify your answer.
- C) Compare center lathe with capstan and turret lathes.

Q5) Solve any Two. [12]

- A) Compare planer and shaper machine.
- B) List the different types of milling cutters and explain any three types of milling cutters with a neat sketch.
- C) Describe gear cutting on milling machine.

Q6) Solve any Two. [10]

- A) Write a note on Water jet machining.
 - B) Write applications of Electro-chemical machining.
 - C) Discuss Electrical Discharge machining advantages and limitations.
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