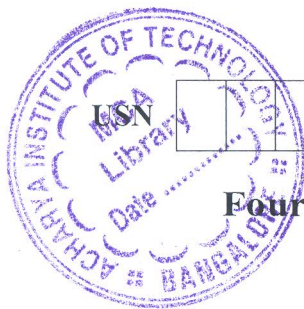


CBCS SCHEME



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18MT44

Fourth Semester B.E. Degree Examination, July/August 2022 Manufacturing Technology

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. What is manufacturing process? (02 Marks)
- b. List the advantages and disadvantages of casting. (06 Marks)
- c. Sketch and explain match plate and sweep pattern. (12 Marks)

OR

- 2 a. Define Core. List the different types of Core. Explain any one of them. (10 Marks)
- b. What is Casting? Explain the steps involved in casting and give components produced by casting. (10 Marks)

Module-2

- 3 a. Write Classification of metal working process and list advantages and limitation of metal working process. (10 Marks)
- b. Write the different die design parameter considered while designing a forging die and explain each one of them. (10 Marks)

OR

- 4 a. Explain the tube drawing process. And list the different methods for the drawing process. (10 Marks)
- b. What is rolling process and explain different types of rolling mills with suitable diagram. (10 Marks)

Module-3

- 5 a. What is Extrusion process? Mention the different types of Extrusion processes and explain any one extrusion process. (10 Marks)
- b. Write short notes on defects in extruded products with neat sketches. (10 Marks)
 - i) Extrusion defect
 - ii) Extrusion piping
 - iii) Surface cracking
 - iv) Chevron cracking

OR

- 6 a. With a neat sketch, explain the working of Tungsten inert gas welding list its advantages. (10 Marks)
- b. Explain with a neat sketch the working of Resistance welding. List its advantages. (10 Marks)

Module-4

- 7 a. Explain with a neat sketch Laser Beam Machining. Lists its advantages. (10 Marks)
- b. Explain with a neat sketch the Electron Beam Machining Process and list its advantages. (10 Marks)

OR

- 8 a. With a neat sketch, explain ultra sonic machining process and list its advantages. (10 Marks)
 b. Explain with a neat sketch working principle of Plasma Arc Machining (PAM) Process. List its advantages. (10 Marks)

Module-5

- 9 a. Briefly explain computer Aided Part Programming. (10 Marks)
 b. Explain basic components and principles of CNC machining operation. (10 Marks)

OR

- 10 a. Explain Manual Part Programming in detail. (10 Marks)
 b. Prepare the manual part programming to drill the holer for the part shown in Fig Q10(b)

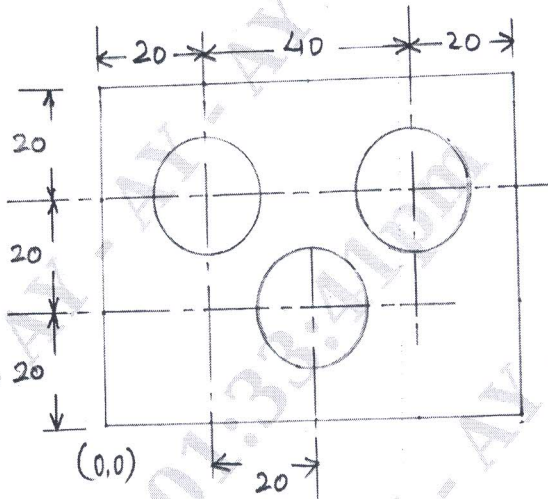


Fig Q10(b)

(10 Marks)
