

Seat No. **OCT-NOV 2025 WINTER EXAMINATION****11731 Bachelor of Technology (NEP-2.0)****Sub. Name: Automation in Production Systems & Management****Sub. Code: 114507/113440****Day and Date: Friday ,12-12-2025****Total Marks: 60****Time: 02:30 PM To 05:00 PM**

Instructions:

- 1. All questions are compulsory**
- 2. Draw neat labelled diagrams wherever necessary**
- 3. Figures to the right indicate full marks**

Q1) Solve any three. [15]

- What is computer-integrated manufacturing? [5]
- What Are the 5 Stages of Product Development? [5]
- What is a part family? [5]
- Explain the MICLASS GT method in detail. [5]

Q2) Solve any three. [15]

- What is a flexible manufacturing system? [5]
- What is the difference between a dedicated FMS and a random-order FMS? [5]
- What are three of the five functions of the material handling and storage system in a flexible manufacturing system? [5]
- Explain categories of layout configurations that are found in a flexible manufacturing system. [5]

Q3) Solve any three. [15]

- What are the five common body-and-arm configurations in robotics? [5]
- Discuss how robots can be used in assembly and inspection. [5]

- c. Robotic sensors are classified as internal and external. What is the distinction? [5]
- d. Discuss the social aspects of robots. [5]

Q4) Solve any three. [15]

- a. What is process planning? [5]
- b. What is enterprise resource planning (ERP)? [5]
- c. Name three of the four activities within the scope of production planning. [5]
- d. What is the difference between the aggregate production plan and the master production schedule? [5]

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

This Question Paper may be distributed for following Subjects as common code.

सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

- 1] (11731) Bachelor of Technology (NEP-2.0) (113440) Automation in Production Systems & Management Part 2 SEM 3
- 2] (1154) B.Tech. CBCS (114507) Automation in Production Systems & Management Part 2 SEM 3