

**4th SEM./MECH(IND.INT.)/ MECH(SAND)/MECH(PROD.)/
MECH(MAINT)/AERO/DME/MECH/AUTO/2022(S)**

TH 2 Manufacturing Technology

Full Marks: 80

Time- 3 Hrs

Answer any five Questions including Q No.1& 2
Figures in the right-hand margin indicates marks

1. Answer **All** questions 2 x 10
 - a. Define superfinishing.
 - b. Explain grinding.
 - c. Define indexing.
 - d. Name four major parts of lathe machine.
 - e. What do you understand by quick return mechanism?
 - f. What is multiple holder?
 - g. Define lapping.
 - h. State the composition of 18-4-1 HSS tool.
 - i. Compare drilling with boring operation.
 - j. Define speed and feed of cut.

2. Answer **Any Six** Questions 6 x 5
 - a. Why ram is used in shaper?
 - b. Explain work holding attachment in milling machine.
 - c. Write different parts of a slotter and their function.
 - d. Explain tool geometry of a single point cutting tool.
 - e. State the advantages of broaching.
 - f. Discuss about the tooling layout of a hexagonal bolt.
 - g. Discuss about the functions of centreless grinder.

3. Name various cutting tool materials. Briefly describe one important tool material along with its characteristics and uses. 10

4. Describe the function of different components of a shaper with schematics. 10

5. With neat sketch explain the function of pillar drilling machine. 10

6. Explain with a neat sketch, the working of an universal dividing head. 10

7. Describe in brief various parts of capstan and turret lathe. 10