

S.B. Roll. No.....

**WORKSHOP TECHNOLOGY-III**  
**5<sup>th</sup> Exam/Mech./5332/Jun'2022**  
**(For 2018 Batch Onwards)**

**Duration: 3Hrs.**

**M.Marks:75**

**SECTION-A**

**Q1. Do as directed.**

**15x1=15**

- a. \_\_\_\_\_ is a milling machine shaft for holding and driving cutters.
- b. Milling operation which uses combination of more than two cutters is called\_\_\_\_\_
- c. \_\_\_\_\_ is used to grind small cylindrical parts without holding them between centers.
- d. Universal dividing head is used for\_\_\_\_\_
- e. \_\_\_\_\_ is a mass production process of manufacturing small and thin gears of metal sheet.
- f. \_\_\_\_\_ convert reciprocating motion into rotary motion and vice versa.
- g. Transducer in ultrasonic machining is used to\_\_\_\_\_
- h. Sharpening of carbide tips and tools is done by the process of\_\_\_\_\_
- i. Process of providing thin layer of zinc on mild steel is called\_\_\_\_\_
- j. Buffing is surface finishing process is performed to provide\_\_\_\_\_
- k. Milling cutter generally moves perpendicular to its axis. (True/False)
- l. Indexing head is designed to divide circle into the desired number. (True/False)
- m. A process in which two surfaces are rubbed together with an abrasive between them is called Honing ( True / False)
- n. Cutting of ferrous and non ferrous metal is possible with plasma arc welding. ( True / False)
- o. Bevel gears are used to connect two shafts at 45° angle. ( True / False)

**SECTION-B**

**Q2. Attempt any six questions.**

**6x5=30**

- i. Explain working principle of milling machine.
- ii. Write short note on internal centreless grinding.
- iii. What are advantages and disadvantages of gear hobbing process?
- iv. What are applications of electro chemical machining?
- v. Explain working principle of electrical discharge machining.
- vi. Explain briefly Electroplating.
- vii. What are applications of honing process?
- viii. Discuss briefly machine lapping process.
- ix. What is polishing in metal finishing process?

**SECTION-C**

**Q3. Attempt any three questions.**

**3x10=30**

- a. Explain working of universal milling machine with the help of neat sketch.
- b. Discuss various grinding methods.
- c. Explain constructional detail and working of ultrasonic machining process.
- d. Describe types of hones used in honing process.
- e. Explain constructional detail and working of Electron beam machining.