DEPARTMENT OF MECHANICAL ENGINEERING

UNIVERSITY INSTITUTE OF ENGINEERINGAND TECHNOLOGY, CSJM UNIVERSITY, KANPUR

Workshop Concept (TCA-S102)

Semester: 2022-23 (Odd Semester) Year: 1st Year (2K22)

Mid Semester Examination (II) (IT Branch)

Time: 1.5 h Maximum marks: 30

All questions are compulsory

Section A

10 marks (10 questions of 1 mark each)

- 1. What is Blow holes?
- 2. What is shrinkage cavity?
- 3. What do you understand by misrun?
- 4. What do you understand by pattern?
- 5. What is shrinkage allowance?
- 6. What is machining allowance?
- 7. What is taper allowance?
- 8. Why we use riser in casting process?
- 9. What is use of chaplet?

Section B

9 marks (3 questions of 3 marks each)

- 1. What are casting defects?
- 2. Write down principle, working, equipment and application of EDM process.
- 3. Brief introduction about ultrasonic machining.

Section C

12 marks (2 questions of 6 marks each,)

- 1. (a) Differentiate between up milling and down milling.
 - (b) Explain face milling, peripheral milling and counter sinking operation.
- 2. (a) Explain reaming, tapping, and step drilling operation.
 - (b) Discuss drilling operation and drill bit.