NSPIRED BY LIFE

**Timing: 3 hours** 

## INTERNATIONAL CENTRE FOR APPLIED SCIENCES (MAHE)

## III SEMESTER B.Sc. (Applied Sciences) MAKE -UP EXAMINATION – January 2022

SUBJECT: MANUFACTURING PROCESS ENGINEERING (IME 232)

(BRANCH: MECH)

Date: 10<sup>th</sup> January 2022

Max. Marks: 50

5

5

5

5

✓ Answer All questions

✓ Missing data, if any, may be suitably assumed

- **1.A** With a neat sketch explain the tungsten Inert Gas Welding and explain its advantages and **5** disadvantages.
- **1.B** With neat sketch explain the working principle of orthogonal and oblique cutting operation. 5
- **2.A** Explain the Washer manufacturing by blanking and piercing operations.
- **2.B** List the different types of taper turning operations used in lathe and explain Compound rest swivel method.
- **3.A** With a neat sketch explain Plaster mould casting and its advantages, Disadvantages and **5** applications
- 3.B With a neat sketch explain the Twist Drill Nomenclature
- **4.A** Divide the periphery of the job into 69 divisions using standard index plate two of B & S 5 type having 21,23,27,29,31.33 holes by compound indexing method.

Plate No. 1	15	16	17	18	19	20
Plate No. 2	21	23	27	29	31	33
Plate No. 3	37	39	41	43	47	49

- **4.B** List and explain the Selection of Grinding Wheels using constant factors
- **5.A** List the different types of milling machine and explain any 2 operations.
- **5.B** With a neat sketch explain Stereolithography method of Rapid proto type technology. **5**