

SECTION-B

2. Explain the distinction between Conventional & Non-Traditional Manufacturing Processes.
3. Explain the steps involved in machining using photo-chemical machining process. Show the photo-chemical machining setup and explain its working.
4. Show the elements of USM process. Discuss the following in relation to Ultrasonic machining process :
 - a) Functions of slurry, horn transducer, and oscillator in USM;
 - b) Types of abrasives used in USM.
5. Explain the mechanism of material removal in laser beam machining processes. Explain the lasing process in Gas Laser process giving neat sketch.
6. With the help of a neat sketch, explain the mechanism of material removal in EDM.

SECTION-C

7.
 - a) Describe the elements of abrasive flow machining giving a neat sketch. Also discuss the tooling and working media used in AFM process.
 - b) Describe the following elements of water jet machining process giving a neat sketches :
 - i) Intensifier
 - ii) Accumulator
 - iii) Nozzle.
8.
 - a) Discuss the material removal mechanism in plasma arc machining. Explain the working of air plasma torch giving a neat sketch.
 - b) Explain the working principle of electro-chemical machining process and also elaborate the electrochemistry of the ECM process.
9. Write short notes on any two of the following :
 - a) Hybrid machining processes and their applications;
 - b) Tool materials used in EDM;
 - c) Flushing techniques for dielectric fluids in EDM process

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