



PART – B

(5×13=65 Marks)

11. a) Analyze the process capabilities and process economy of different unconventional machining processes in detail. (13)
- (OR)
- b) Justify the need of unconventional manufacturing process in today's Industries. Explain the classification of unconventional machining according to major energy source employed. (13)
12. a) Describe the principle and equipment for AWJM. Give the process capabilities and applications of AWJM. (13)
- (OR)
- b) i) Give principle of material removal in USM. Explain ultrasonic sinking and contour machining with a simple sketch. (6)
- ii) List the factors which affect the MRR in USM and write short notes on each of them. (7)
13. a) Describe the wire cut EDM equipment, its working applications and advantages. (13)
- (OR)
- b) i) Write about various types of flushing techniques used in EDM. (6)
- ii) Explain different types of control circuits used in EDM. (7)
14. a) Explain in detail the ECM process with neat sketch and also mention the advantages and applications. (13)
- (OR)
- b) i) Discuss about the electrochemical honing. (6)
- ii) Explain the principle of ECG with a neat sketch. (7)
15. a) Describe, with the help of neat sketch, the principle and working of an EBM machine. (13)
- (OR)
- b) Discuss the principle and working of PAM with the help of neat sketch. (13)

PART – C

(1×15=15 Marks)

16. a) Describe the working principle and construction of LBM. Mention its merits, demerits and applications. (15)
- (OR)
- b) Compare and contrast the working principle of AJM and WJM. Mention their exclusive applications. (15)