

GANPAT UNIVERSITY
B. TECH SEM- III (Marine) REGULAR EXAMINATION– NOV-DEC 2015
WORKSHOP TECHNOLOGY 2MR301

TIME: 3 HRS

TOTAL MARKS: 60

- Instructions:** (1) This Question paper has two sections. Attempt each section in separate answer book.
(2) Figures on right indicate marks.
(3) Be precise and to the point in answering the descriptive questions.

SECTION: I

- Q.1 (a) Explain the different types of calipers and micrometers in detail. (7)
(b) Explain the Abrasive process of Grinding and lapping. (3)

OR

- Q. 1 (a) List the different types of planner machine and explain any one in detail with neat sketch. (6)
(b) Explain the chip breakers in detail with neat sketch. (4)

- Q.2 (a) Explain the different machining operations of lathe machine. (7)
(b) Explain the cutting speed, depth of cut and feed of tool for slotting machine in detail. (3)

OR

- Q.2 (a) Draw the Block Diagram of Radial Drilling Machine and Explain its parts in detail (6)
(b) Explain the difference between up milling and down milling operation in detail. (4)

- Q.3 (a) Draw the Block Diagram of Milling Machine and Explain its parts in detail. (6)
(b) Explain the work holding devices used in shaper machine with neat sketch in detail. (4)

SECTION: II

- Q.4 (a) Sketch and describe the working principle of micrometer and calculate the least count. (6)
(b) Describe the use of limit gauges with suitable sketches. (4)

OR

- Q.4 (a) Describe the Hydraulic mechanism used in shaper machine with neat sketch. (7)
(b) Describe the uses of (i) Thread Gauges (ii) Feeler Gauges (iii) Indicating Gauges (3)

- Q.5 (a) Describe the terms welding in detail and explain the welding equipment in detail. (5)
(b) Explain the gas welding in detail with neat sketch. (5)

OR

- Q.5 (a) Describe the Reducing valve used for steam and air in detail with neat sketch. (5)
(b) Describe the source of dangers and methods of protection in industry. (5)
- Q.6 (a) List the types of bearing used in machine and explain the roller contact bearing in detail. (5)
(b) Write short notes about optical measuring instruments. (5)

-----END OF PAPER-----