

- Q.26 Draw the single point cutting tool and label its every part.
- Q.27 Define Reamers with a neat diagram. Enlist the various types of reamers.
- Q.28 Explain the following with respect to lathe
- a) dog
 - b) steady rest
- Q.29 Classify lubricants, giving its functions.
- Q.30 Write a short note on 4 operations to be performed on a lathe.
- Q.31 List the various parts of a drilling machine with a neat diagram.
- Q.32 Name the various methods of taper turning method. Explain any two.
- Q.33 Describe the following drilling operations with neat sketch
- a) counter boring
 - b) spot facing
- Q.34 Write a short note on indexing method.
- Q.35 Explain any two methods of machine Lubrication.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain why a Quick return mechanism is required in shaper. Describe crank and slotted link mechanism of quick return.
- Q.37 Explain the main parts of lathe machine and their functions with the help of neat sketch.
- Q.38 Classify the boring machines and explain various part of table type horizontal boring machine.

No. of Printed Pages : 4
Roll No.

202454/122454

5th Sem. / Mechatronics

Subject:- Manufacturing Processes

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Functions of cutting fluids are
- a) to cool the cutting tool and the workpiece
 - b) to lubricate the chip, tool and workpiece
 - c) to help carry away the chips
 - d) all of the mentioned
- Q.2 _____ form mixtures ranging from emulsions to solutions.
- a) Water miscible fluids
 - b) Neat oils
 - c) Synthetics
 - d) none of the mentioned
- Q.3 Which of the following is the advantage of shaping process?
- a) Large objects can be machined easily
 - b) Thin or fragile workpiece can also be machined
 - c) Lower machining time
 - d) Higher tool life
- Q.4 Milling machine can hold _____ cutters at a time.
- a) only one
 - b) only two
 - c) only three
 - d) none of the mentioned

- Q.5 Producing circular hole in a solid metal by means of revolving tool is known as
 a) Drilling b) Reaming
 c) Boring d) all of the above
- Q.6 Process of enlarging the hole size and enhancing its surface finish is known as
 a) Drilling b) Reaming
 c) Boring d) Counter boring
- Q.7 How many types of shapers are there?
 a) 5 b) 8
 c) 10 d) 11
- Q.8 Which of the following motion does a milling machine has?
 a) vertical motion b) crosswise motion
 c) longitudinal motion d) all of the mentioned
- Q.9 _____ acts downward on the tool tip.
 a) Cutting force
 b) Radial force
 c) Thrust force
 d) none of the mentioned
- Q.10 Operation of enlarging the end of the hole to give conical shape at end is known as
 a) Drilling b) Reaming
 c) Boring d) Counter sinking

SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 In milling machine, cutter rotates at high speed and removes metal at very high speed. (true/false)
- Q.12 Pneumatic drilling machines gets power from the _____.
- Q.13 In a lathe, _____ is used locate and hold a work-piece with central hole.
- Q.14 The usual ratio of forward to return stroke in shaper is _____.
- Q.15 Wax is an example of liquid lubricant. (true/false)
- Q.16 A good lubricant should have _____ acid value.
- Q.17 The size of a horizontal boring machine is specified by the _____.
- Q.18 Sensitive drilling machine is also known as _____.
- Q.19 In a planer, V-Block is used for holding round jobs. (true/false)
- Q.20 Boring bit is made up of stainless steel. (true/false)

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Differentiate between shaper and planer.
- Q.22 List the various properties of cutting fluids.
- Q.23 Describe the various principal part of shaping machine.
- Q.24 Explain briefly about the working principle of boring machine.
- Q.25 Write the safety precautions associated with lathe operations.