

No. of Printed Pages : 4
Roll No.

220334

**3rd Sem / Automobile, Mechanical Engg.,
Mechanical (Tool & Die Design)**
Subject:- Workshop Technology - II

Time : 3Hrs. M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Sweep patterns is used for moulding parts of

- a) Uniform symmetrical shape
- b) Intricate shape
- c) Rectangular shape
- d) None of the above

Q.2 A jig is a device

- a) Which holds and locates the work piece and guides and controls the cutting tool
- b) Is used to check the accuracy of the work piece
- c) Is used to check the accuracy of the cutting tool
- d) All of the above

(1)

220334

Q.3 In automobile industries, welding generally used is

- a) Gas welding
- b) MIG welding
- c) Spot welding
- d) None of the above

Q.4 The cutting action of slotter occurs in

- a) Downward stroke
- b) Upward stroke
- c) Horizontal stroke
- d) None of the above

Q.5 Jigs are used to hold work in

- a) Milling
- b) Turning
- c) Planning
- d) Drilling

Q.6 Which of the following is not a moulding tool?

- a) Trowel
- b) Riddle
- c) Crucible
- d) Lifter

SECTION-B

Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Plasma is a stream of _____ particles.

Q.8 Uneven wall thickness is produced by _____ casting.

(2)

220334

Q.9 Casting is a process of _____ the metal and _____ it into moulds made of metal or sand.

Q.10 A broach used for broaching internal surfaces is called _____ broach.

Q.11 Baking sand is also called _____

Q.12 A device used for clamping a work piece in a jig or fixture is known as _____

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. $(8 \times 4 = 32)$

Q.13 Explain working principle of slotter.

Q.14 Explain the principle of working of milling machine.

Q.15 Write the advantages of MIG welding.

Q.16 Write the applications of die casting.

Q.17 What are the causes and remedies of misruns and cold shuts in castings?

Q.18 Explain any two casting defects with causes and remedies?

Q.19 Explain any three Non-Destructive Inspection / Testing.

Q.20 Differentiate between a jig and a fixture.

Q.21 Explain single ram and duplex ram horizontal type broaching machine.

Q.22 What are the causes and remedies of porosity?

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. $(2 \times 8 = 16)$

Q.23 Explain various milling operations - Face milling, angular milling, form milling, straddle milling and gang milling.

Q.24 Differentiate between TIG (Tungsten inert gas welding) and MIG (Metal inert gas welding).

Q.25 Explain hot chamber die casting machine with a neat sketch.