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

Time : 3Hrs. M.M. : 60

**SECTION-A**

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

Q.1 In automobile industries, welding generally used is

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

Q.2 Spatter occur due to

- a) Arc blow
- b) Gas entrapment
- c) Stresses
- d) None of the above

Q.3 Chaplets are made by

- a) Core sand
- b) Wood
- c) Metals
- d) Silica

Q.4 Sweep patterns is used for moulding parts of

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

Q.5 Jigs are used to hold work in

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

Q.6 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

**SECTION-B**

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

Q.7 A device used for clamping a work piece in a jig or fixture is known as \_\_\_\_\_.

Q.8 When two or milling cutters are mounted on the arbor so that each cutter produces its own distinctive surface as the work piece is fed to it is called \_\_\_\_\_

Q.9 A broach used for broaching internal surfaces is called \_\_\_\_\_ broach.

Q.10 The opening in the mould connected with the sprue through which the molten metal flows into mould cavity is called \_\_\_\_\_.

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Q.11 Casting is a process of \_\_\_\_\_ the metal and \_\_\_\_\_ it into moulds made of metal or sand.

Q.12 Plain milling cutter is also known as \_\_\_\_\_.

### SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Write the advantages of MIG welding.

Q.14 What should be the properties of materials which are used for pattern making?

Q.15 Write a brief note on facing sand.

Q.16 Write the applications of die casting

Q.17 Explain working principle of slotter.

Q.18 Write the advantages of planer.

Q.19 Explain the principle of working of milling machine.

Q.20 What are the causes and remedies of misruns and cold shuts in castings?

Q.21 Write the difference between pull and push broach.

Q.22 Name the elements of jig/fixture.

### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 What is resistance welding? Explain its principle.

Q.24 Explain hot chamber die casting machine with a neat sketch.

Q.25 Explain Principle of jigs and fixture design.