

No. of Printed Pages : 4
Roll No.

220334

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

Time : 3 Hrs.

M.M. : 60

SECTION-A

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

- Q.1 Under cutting in a weld appears due to
- a) Non-uniform heating
 - b) Non-uniform feeding of electrode
 - c) Presence of moisture
 - d) None of the above
- Q.2 The cutting action of slotter occurs in
- a) Downward stroke b) Upward stroke
 - c) Horizontal stroke d) None of the above
- Q.3 A fixture is a device
- a) Which holds and located the work piece and guides the cutting tool.
 - b) Which holds and positions the work, but does not in itself guide, location or position the work piece.

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- c) Which is not fixed to machine table.
- d) None of the above

- Q.4 Green sand is a mixture of
- a) 30% sand and 70% clay
 - b) 50% sand and 50% clay
 - c) 70% sand and 30% clay
 - d) 90% sand and 10% clay
- Q.5 Which of the following is not a moulding tool?
- a) Trowel b) Riddle
 - c) Crucible d) Lifter
- Q.6 Shaper uses a
- a) Single point cutting tool
 - b) Multi point cutting tool
 - c) Rotatory tool
 - d) None of the above

SECTION-B

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

- Q.7 In _____ milling, the cutting tool rotates in the opposite direction to the movement of the table.
- Q.8 A jig is not _____ on the table.
- Q.9 The portion of broach which enters the hole before the teeth start cutting is called _____.

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- Q.10 The vertical passage through which molten metal flows down from a pouring basin to the parting plane is called _____.
- Q.11 Uneven wall thickness is produced by _____ casting.
- Q.12 In TIG welding _____ gases are used for shielding the molten metal pool.

SECTION-C

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

- Q.13 What are the causes and remedies of porosity and blow holes?
- Q.14 Explain any two properties of moulding sand.
- Q.15 Explain any two casting defects with causes and remedies.
- Q.16 Write the working principle of shaper.
- Q.17 Write any five difference between shaper and planer.
- Q.18 Explain different types of broach tools.
- Q.19 Difference between up and down milling.
- Q.20 Explain single ram and duplex ram horizontal type broaching machine.
- Q.21 Explain any three Non-Destructive Inspection /Testing.

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- Q.22 Differentiate between a jig and a fixture.

SECTION-D

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

- Q.23 Difference between TIG (Tungsten inert gas welding) and MIG (Metal inert gas welding)
- Q.24 Explain various milling operations- Face milling, angular milling, form milling straddle milling and gang milling.
- Q.25 Explain locating devices used in jigs.

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