No. of Printed Pages : 4

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031733

Mechanical Engineering

#### Subject : Workshop Technology-I

Time : 3 Hrs.

M.M.: 100

## **SECTION-A**

- Note:Multiple choice questions. All questions are compulsory (10x1=10)
- Q.1 Slag inclusion in casting is a
  - a) surface defect b) internal defect
  - c) notch d) None of them
- Q.2 The function of risers is
  - a) to support care
  - b) to store molten metal
  - c) to make mould cavity
  - d) All of above

c)

- $Q.3 \quad Which \, of \, the \, following \, is \, not \, a \, casting \, defect$ 
  - a) hot tears b) blow holes
    - scale d) porosity
- Q.4 The design of riser is based on
  - a) continuity equation b) bernaullis theorem
  - c) gibbs rule d) chvorinov rule
- $Q.5 \quad In \, centrifugal \, casting \, core \, is \, made \, of$ 
  - a) sand b) ferrous metal
  - c) non ferrous metal d) none of them

(1)180333/171733/121733/

031733

- Q.6 Which of the following is not a casting process
  - a) shell casting b) die casting
  - c) carbon dioxide mould casting
  - d) floor moulding
- Q.7 For picking the unwanted damaged portion of mould we use
  - a) swab b) slick
  - c) riddle d) lifter
- $Q.8 \quad \text{To lift heavy and larger size patterns we use} \\$ 
  - a) rapping plates b) gaggers
  - c) dowel pins d) none of them
- $Q.9 \quad the \, material \, widely \, used \, for \, making \, pattern \, is$ 
  - wood b) cast iron
  - brass d) plastic
- Q.10 The surface to be left unmachined is marked on pattern by
  - a) Red colour b) Black colour
  - c) Yellow colour d) Pink colour

# SECTION-B

- Note:Objective type questions. All questions are compulsory. 10x1=10
- Q.11 Define core blow?

a)

c)

- Q.12 Define stamping?
- Q.13 Define squeezing?
- Q.14 Write the full foam of MIG?
- Q.15 Define rolling?

(2) 180333/171733/121733/ 031733

Q.16 Define roll forging?

- Q.17 Name any two types of rolling?
- Q.18 Define hot extrusion?
- Q.19 Name different types of thermosetting plastic?
- Q.20 Name any two types of plastics?

### SECTION-C

- **Note:**Short answer type questions. Attempt any twelve questions out of fifteen questions. 12x5=60
- Q.21 Write a short note on compound dies?
- Q.22 Name major components of press?
- Q.23 Write a short note on misrun and cold struts?
- Q.24 Explain different types of risers?
- Q.25 Explain wedge and horn gate?
- Q.26 Explain different types of moulding flasks?
- Q.27 Write a brief note on parting sand?
- Q.28 Write are the advantage of wood pattern?
- Q.29 Explain the function of a pattern?
- Q.30 Explain the principle of Thermit welding?
- Q.31 Write the application of resistance welding?
- Q.32 What are the causes of distortion?
- Q.33 Draw a neat sketch of oxy-acetylene welding torch?
- Q.34 Discuss weld ability in details?
- Q.35 What is rightward welding?

(3) 180333/171733/121733/ 031733

### SECTION-D

- **Note:**Long answer type questions. Attempt any two questions out of three questions. 2x10=20
- Q.36 Explain the principle, working, advantage, disadvantage and application of MIG welding.
- Q.37 Explain with neat sketch, construction and working of cupola furnace?
- Q.38 Explain the process of pipe and tube drawing with diagram?