

- Q.27 Explain the various pattern allowances.  
Q.28 Name the various pattern making tools.  
Q.29 Explain the commonly used materials in moulding sand.  
Q.30 Write a short note on extrusion.  
Q.31 Explain cold chamber die-casting machine with the help of neat sketch.  
Q.32 Explain seamless tube manufacturing process.  
Q.33 Explain working Pit furnace with the help of neat sketch.  
Q.34 Explain ultrasonic testing of casting.  
Q.35 Explain progressive die.

#### **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain laser beam welding. Write its advantages, disadvantages and applications.  
Q.37 Define mould and explain various types of moulds.  
Q.38 Explain centrifugal casting with the help of neat sketch.

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**3rd Sem / Mech. Engg. (MSIL)  
Subject:- Workshop Technology - I**

Time : 3Hrs. M.M. : 100

#### **SECTION-A**

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

- Q.1 Filler metal is used in
- a) Gas welding
  - b) Electric resistance welding
  - c) Seam welding
  - d) Spot welding
- Q.2 Electrodes are
- a) None-metal rods
  - b) Nickel plated rods
  - c) Flux coated metal rods
  - d) All of the above
- 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 Which of the following gases is used in MIG?
- a) Argon                          b) Hydrogen
  - c) Nitrogen                          d) Carbon dioxide

- Q.5 Green colour on patterns is used for  
a) Pattern joint      b) Stop offs  
c) Seat for loose piece/core prints  
d) None of the above
- Q.6 Loam 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.7 Sand blasting is used for  
a) Cleaning the castings  
b) Finishing the castings  
c) Core making  
d) Mixing sand and additives
- Q.8 Two or more cutting operation are done simultaneously on  
a) Compound die      b) Progressive die  
c) Simple die      d) None of the above
- Q.9 In four high rolling mill, smaller rolls are called  
a) Working rolls      b) Back up rolls  
c) Main rolls      d) Guide rolls
- Q.10 Melamine is obtained from  
a) Manganese dioxide b) Magnesium sulphate  
c) Calcium carbide      d) Calcium sulphate

## SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Forge welding is a type of \_\_\_\_\_ welding.
- Q.12 Define weld bead.
- Q.13 What is oxidizing flame?
- Q.14 Define arc crater.
- Q.15 In resistance welding \_\_\_\_\_ filler metal is used.
- Q.16 Name some special sand.
- Q.17 Centrifugal casting is type of \_\_\_\_\_ mould casting.
- Q.18 Progressive die is also known as \_\_\_\_\_.
- Q.19 Define hot extrusion.
- Q.20 Melamine is obtained from \_\_\_\_\_.

## SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Name the various equipment and accessories used in arc welding.
- Q.22 Enlist the application of gas welding.
- Q.23 Explain injection moulding.
- Q.24 Enlist the various properties of flux added to the weld.
- Q.25 Write the advantages and applications of resistance welding?
- Q.26 Differentiate between TIG & MIG welding.