



Printed Pages : 3

AG – 124

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 4037

Roll No.

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B. Tech.

(SEM. II) EXAMINATION, 2006-07

WORKSHOP TECHNOLOGY

Time : 2 Hours]

[Total Marks : 50

- Note :*
- (1) Attempts all 4 questions, choice are there within.*
 - (2) Marks allotted to each question are indicated in right-hand column.*

1 Attempt any **four** parts of the following : **4+4+3+3=14**

- (a) Explain in brief the process of applying varnish and polish on wood.
- (b) Discuss the economics of each wood finishing process.
- (c) Explain in brief properties and uses of glues.
- (d) List different types of paints. List the requirements of quality paint. Why thinners are used with paints.
- (e) Explain various methods of seasoning timber. Also mention advantage of each process.
- (f) Mention the characteristics of a good preservative of wood. What is case hardening of wood?

2 Attempt any **four** parts of the following : **3+3+3+3=12**

- (a) Name different types of moulding sand. Also explain the composition of moulding sand. What is permeability ?
- (b) List pattern making tools. Name at least six types of patterns and describe any of them.
- (c) Explain the functions and importance of Gates and Riser. Also list various types gates.
- (d) Explain core making in foundry.
- (e) List common sand casting defects and give their causes.
- (f) Explain shake-out, fettling, snagging and pickling operations.

3 Attempt any **four** parts of the following : **3+3+3+3=12**

- (a) Name different measuring tools used in fitting and indicate the application/purpose of each tool.
- (b) Describe in brief method of cutting internal or external thread.
- (c) Mention uses of marking tools, surface plate and reamers.
- (d) Describe any one welding process that uses nonconsumable electrodes.
- (e) With the help of a neat sketch explain MIG welding process. Also mention its industrial applications.
- (f) Mention various safety precautions, which should be used while welding.

OR

- (f) Describe in brief with a neat sketch submerged arc welding process. Also list its industrial applications.

4 Attempt any **two** parts of the following : **6+6=12**

- (a) Advantages of CAD/CAM in Agriculture Engineering.
 - (b) List various components of NC machines. Also give the function of these components. What is APT ?
 - (c) Differentiate between CNC and DNC machines.
 - (d) Describe briefly CNC programming languages. Give suitable example for turning of a bar.
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