

MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR
SEMESTER END THEORY EXAMINATION, B.Tech. (Dairy Technology)

Semester : 1st (V Dean)
Course No. : DE-101
Credits : 1+1=2
Day & Date : Wednesday; 06/03/2024

Academic Year : 2023-24
Course Title : Workshop Practice
Total Marks : 50
Time : 2.00 hrs.

- Note : 1) All questions from Section 'A' are compulsory.
2) Solve Any Three questions from Section 'B'.
3) Draw neat and well labeled diagram wherever necessary.

SECTION - 'A'

Q.1 A) Define the following.

(05)

- i) Welding
- ii) Sawing
- iii) Reaming
- iv) Milling
- v) File

B) Match the Pairs.

(05)

Column 'A'

Column 'B'

- | | |
|---|----------------|
| i) Shaping processes | a) Soldering |
| ii) Machining processes | b) Painting |
| iii) Joining processes | c) Hot working |
| iv) Surface finishing processes | d) Casting |
| v) Processes effecting change in properties | e) Milling |

Q.2 A) State whether True or False. If false, rewrite the statement after making necessary corrections in underlined word. (05)

- i) The miter square is used to measure an angle of 90^0 .
- ii) A rip saw is used for cutting along the grains of wood.
- iii) In a gas welding, a mixture of aluminium and iron oxide is used.
- iv) A mortise gauge is a measuring tool.
- v) The material used for coating the electrode is called flux.

B) Choose the most appropriate answer from the options given below.

(05)

- i) The fullers are used
 - a) For finishing flat surfaces
 - b) For necking down a piece of work
 - c) For punching a hole
 - d) To finish the punched hole
- ii) The oxyacetylene gas used in gas welding produce a flame temperature of
 - a) 1800^0C
 - b) 2100^0C
 - c) 2400^0C
 - d) 3200^0C
- iii) Which of the following welding process used non consumable electrodes?
 - a) MIG welding
 - b) TIG welding
 - c) Manual arc welding
 - d) Submerged arc welding

(P.T.O.)

- iv) The process of increasing the cross section of a bar at the expense of its length is called
- | | |
|-----------------|--------------|
| a) Drawing down | b) Upsetting |
| c) Spinning | d) Peening |
- v) A hacksaw blade is specified by its
- | | |
|-----------|--------------------|
| a) Width | b) Material |
| c) Length | d) Number of teeth |

SECTION –‘B’

- Q. 3 A) With neat sketches, enlist the commonly used cutting and boring tools. (05)
B) What is the principle of operation of electric arc welding? (05)
- Q. 4 A) Discuss various smithy forging operations in brief. (05)
B) Enumerate the operations commonly performed in bench work. (05)
- Q. 5 A) Differentiate between planner and shaper. (03)
B) What is Grinding machine? Enlist its various parts. (03)
C) How are neutral, oxidizing and carburizing flames obtained in a welding torch? (04)
- Q. 6 A) Define the term ‘Heat treatment’. Enlist the main stages of any heat treatment process. (03)
B) With neat sketch write the function / uses of drilling machine. (03)
C) What do you mean by Soldering and Brazing operations? (04)
- Q. 7 Discuss about the working principle, types and constructional details of lathe machine. (10)
