

MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR
SEMESTER END THEORY EXAMINATION, B. Tech. Dairy Technology 2019-20

Semester	: I (V Dean)	Academic Year	: 2019-2020
Course No.	: DE-101	Course Title	: Workshop practice
Credits	: 1+1-2	Total Marks	: 50
Day & Date	: Tuesday, 07.01.2020	Time	: 11.00 to 13.00 Hrs.

- Note :
- 1) Section "A" is Compulsory.
 - 1) Solve Any Three questions from Section "B".
 - 3) The use of scientific tables, charts and calculator is allowed in case of engineering courses.

SECTION - 'A'

- Q. 1. A) Define the following processes. (05)
- i) Planing
 - ii) Punching
 - iii) Turning
 - iv) Boring
 - v) Knurling
- B) Write the functions / uses of the followings. (05)
- i) Chuck
 - ii) Try square
 - iii) Brace
 - iv) Fullers
 - v) Welding torch
- Q. 2 A) State whether True or False. If false, rewrite the statement after making necessary corrections. (05)
- i) In an oxy-acetylene welding, a neutral flame has three definite zones.
 - ii) In a thermit welding, a mixture of finely divided aluminum and iron oxide is used.
 - iii) Cross-cut saws are used for cutting along the grain in thick wood.
 - iv) Mallet is a wooden headed hammer of round or rectangular cross section.
 - v) The non-consumable electrode is used in TIG arc welding.
- B) Choose the most appropriate answer from the options given below. (05)
- i) A rip saw
 - a) Is a two-man saw
 - b) Is used for cutting along the grains of wood
 - c) Has a narrow blade with two wooden handles
 - d) All of these
 - ii) A mortise gauge is a
 - a) Striking tool
 - b) Planning tool
 - c) Boring tool
 - d) Marking tool

(P.T.O.)

- iii) The upsetting is a process of
- a) Increasing the cross section of a bar
 - b) Reducing the cross-section of a bar
 - c) Joining the two surfaces of metal under pressure after heating
 - d) Bending of a bar
- iv) The flux commonly used in brazing is
- a) Zinc chloride
 - b) Ammonium chloride
 - c) Rosin plus alcohol
 - d) Borax
- v) A gimlet is a tool.
- a) Boring
 - b) Planning
 - c) Marking
 - d) Holding

SECTION - 'B'

- Q. 3 A) Enlist and explain the method of protection. (05)
B) Differentiate boring and drilling. (05)
- Q. 4 A) Define welding? What is the principle of operation of electric arc welding? (05)
B) Describe the various smith forging operations in details. (05)
- Q. 5 A) What are the preventive measures for avoiding accidents? (03)
B) Enlist the measuring and marking tools with their specific uses. (03)
C) Differentiate the planner and shaper. (04)
- Q. 6 A) How are neutral, oxidizing and carburizing flames obtained in a welding torch? (03)
B) Define the term 'heat treatment'? Enlist the main stages of any heat treatment procedure. (03)
C) Describe various part of a lathe machine. (04)
- Q. 7 Sketch and describe giving uses of commonly used a) planning tools, b) boring tools, c) cutting tools. (10)
