



**KERALA AGRICULTURAL UNIVERSITY**  
**B. Tech. (Agrl. Engg.) 2021 Admission**  
**II Semester Final Examination – September 2022**

**Fpme.1201**

**Workshop Technology and Practices (1+2)**

**Marks: 50**  
**Time: 2 hours**

**I Fill in the blanks** **(10x1=10)**

1. An excess of acetylene in gas welding flame is known as .....
2. .... has several parts that serve to support, move and control the cutting tool in a lathe.
3. The portion used for holding a drill in the drilling machine is known as .....

**Choose the correct answer**

4. The oxy-acetylene gas used in gas welding produces a flame temperature  
(a) 1800°C  
(b) 2100°C  
(c) 2400°C  
(d) 3200°C
5. The sand used for making cores is  
(a) Oil sand  
(b) Loam sand  
(c) Dry sand  
(d) None
6. Which of the following operation can be performed by the drilling machine?  
(a) Drilling  
(b) Reaming  
(c) Boring  
(d) All of above

**State True or False**

7. In reverse polarity the electrode is negative and the work is positive.
8. Gas welding is a non-fusion welding process.
9. Punching is the cutting and separating of material without the formation of chips.

**Define**

10. Sand additives

**II Write short notes on ANY FIVE of the following** **(5x2=10)**

1. Types of Plant layouts
2. Equipment and tools in welding
3. Advantages and disadvantages of Moulding processes
4. Main accessories and attachments of centre lathe
5. Discuss on safety in industrial workshops.
6. Wood characteristics for Carpentry work
7. Casting defects in moulding processes.

**III Answer ANY FIVE of the following (5x4=20)**

1. Write about the Mechanical and Technological properties to be considered for Plant layouts.
2. Explain in detail about the Principle of arc welding.
3. Explain about the foundry tools their Pattern and types of materials.
4. Discuss in detail about foundry sand and sand additives and its types.
5. Write in detail about the main operations and functions of centre lathe.
6. Explain the components and main operations of milling machines.
7. Write about seasoning and types of wood.

**IV Write an essay on ANY ONE of the following (1x10=10)**

1. Discuss in detail about types, constructional details and main operations of drilling machines.
2. (a) Explain briefly about types of flames, welding techniques and equipment in welding process.  
(b) Write about the principle of oxyacetylene gas welding.

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