

7. How Indexing is performed on milling machine?
8. Explain 10 different milling machine operations.

*****END OF PAPER*****

2202E006

BACHELOR OF VOCATION
Production Tool and Die Manufacturing
Subject: Workshop Technology
Subject Code: ME-502
Semester: First
February 2022
Theory (External): 70 Marks
Time: 03 Hours

Instructions to the Students

1. This Question paper consists of two Sections. All sections are compulsory.
2. Section A comprises 10 questions of objective type in nature. All questions are compulsory. Each question carries 2 marks.
3. Section B comprises 8 essay type questions out of which students need to do any 5. Each question carries 10 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled

Roll Number

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SECTION -A (SHORT/OBJECTIVE TYPE QUESTIONS)

(10x2=20 Marks)

- A. Define production.
- B. Define feed (a cutting parameter).
- C. The percentages of chromium, tungsten, molybdenum and vanadium in high speed steel tool are-
- | | |
|-------------|------------|
| a) 4-6-10-2 | c) 2-1-3-9 |
| b) 3-6-9-13 | d) 5-7-9-1 |
- D. Thermal conductivity of cutting tool must be
- High
 - Low
 - Very low
 - None of the mentioned
- E. Which machine tool is known as the mother machine tool?
- Drill
 - Milling
 - Lathe
 - None of mentioned
- F. The work holding device in surface grinding is known as
- Chuck
 - Mandrel
 - Tool post
 - None of the above
- G. Stainless steel is very difficult to grind due to its
- Toughness
 - Ability to work harden
 - Both (A) and (B)
 - None of the above

H. Lip Angle of a twist drill is-

- | | |
|---------|---------|
| a) 110° | c) 100° |
| b) 118° | d) 0° |

I. In reamers, flute surface adjacent to cutting is known as

- | | |
|-----------|-----------|
| a) Flutes | c) Heel |
| b) Face | d) Recess |

J. Indexing is done by using a special attachment known as _____

- Dividing head
- Index head
- Both dividing head and index head
- None of the mentioned

SECTION -B (ESSAY TYPE QUESTIONS)

(5x10=50 Marks)

- What are Machine Tools? Write its functions and classification.
- Write 5 different properties and 5 important uses of cutting tool material.
- Explain with neat sketch TIG welding.
- Discuss about 10 important accessories of Lathe with the help of neat sketch.
- Explain Truing and Dressing of grinding wheels. Also differentiate between natural and artificial abrasives.
- Explain different drilling machine operations.