

C-1487

Sub. Code

82215

B.Voc. DEGREE EXAMINATION, NOVEMBER 2019

First Semester

Manufacturing Technology

PRODUCTION TECHNOLOGY

(2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Write a short note on mechanics of chip formation.
2. Mention the advantages of using diamond tools.
3. List the possible operations that could be undergone in a lathe.
4. How do you measure the life of a drill?
5. What is an up milling process?
6. When is a shaping machine used? Name some of its applications.
7. Name any two super abrasives.
8. What is grinding ratio?
9. Give an example of hard turning process.
10. Name some of the applications of laser beam machining process.

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Sketch and explain about the cutting forces that possible act on a single point cutting tool.

Or

- (b) Describe about any two types of cutting tools, also mention about its merits, demerits and application.

12. (a) Illustrate about tracer lathe with a neat sketch.

Or

- (b) Differentiate between a capstan and a turret lathe

13. (a) Explain about horizontal milling machine.

Or

- (b) Write in brief about the design consideration in broaching process.

14. (a) Sketch and explain about the various types of grinding wheels that are used.

Or

- (b) Write in brief about the economics of grinding.

15. (a) Illustrate the working principle of ultrasonic machining process.

Or

- (b) What is the principle of operation of electric discharge machining.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain about the various work holding devices used in a lathe.

Or

- (b) Discuss in detail about tapping operation. Mention the step by step process involved in tapping.

17. (a) Sketch and explain about any two types of finishing operation.

Or

- (b) Write in detail about abrasive flow machining process.

18. (a) Illustrate with a neat sketch about surface grinding process.

Or

- (b) With simple sketch, explain about electron beam machining process.
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