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Register No.:	
ricgiscer No.,	

April 2024

<u>Time - Three hours</u> (Maximum Marks: 100)

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.
 - 2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART - A

- 1. Define tool life and tool wear.
- 2. Write short notes on grit.
- 3. Draw the shaper tool post and name the parts.
- 4. List out the parts of a Slotter.
- 5. Write short notes on standard arbor.
- 6. What are the draw backs of simple indexing?
- 7. What are the abrasives used in USM process?
- 8. Write the machining applications of Laser.
- 9. Write the features of CNC machines.
- 10. Write the purpose of tool inserts.

[Turn over.....

PART - B

11. (a) (i) Explain radial drilling machine with a neat sketch.(7) (ii) Explain the gang drilling machine with a suitable sketch.(7) (Or) (b) Explain tool and cutter grinder with a neat sketch. 12. (a) Explain the construction of planer with a neat sketch. (Or) (b) Explain the various types of broaches with neat sketches. (a) List out the work holding devices used in milling machine and 13. explain any three of them with neat sketches. (Or) (b) Explain the following gear finishing processes with neat sketch. (i) Gear grinding process.(7) (ii) Gear burnishing process.(7) 14. (a) Explain ultrasonic machining process with a neat sketch. (i) Compare EDM with wire cut EDM process.(4) (ii) Explain types of plasma arc torches with simple sketches.(10) 15. (a) Explain construction and working principle of CNC turning centre. (Or) (b) Write any one milling program using linear interpolation.