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Register No.:

April 2024

Time – Three hours
(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. What are the differences between jigs and fixtures?
2. List out the location types.
3. Write any three clamping principles.
4. What is meant by interference fit?
5. What are the machine considerations in jig design?
6. List out the types of jigs.
7. What are the production processes of fixtures?
8. What is meant by indexing?
9. What are limit gauges?
10. What is the use of a snap gauge?

[Turn over.....

PART – B

11. (a) Explain in detail various location methods.
(Or)
(b) Explain in detail any three types of external locators.
12. (a) Explain with neat sketch actuating wedge cam and wedge roller work holders.
(Or)
(b) Explain with a neat sketch any three types of bushes.
13. (a) Explain in detail process considerations of jig design.
(Or)
(b) Draw and explain an example of plate jig design.
14. (a) Explain with a neat sketch broaching fixture and assemble fixture.
(Or)
(b) Explain step by step approach to fixture design.
15. (a) Explain in detail bilateral and unilateral systems.
(Or)
(b) Write about design of plug and ring gauges.
