281 Register No.: _____

April 2019

Time – Three hours
(Maximum Marks: 75)

[N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory. Answer any FOUR questions from the remaining in each PART – A and PART – B
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 marks in PART – A, 3 marks in Part – B and 10 marks in PART – C.]

PART – A

1. Why plastic is used as pattern material?
2. Name any two defects is casting.
3. State the expansion of TIG and MIG welding.
4. Name the types of gas flame.
5. What is lancing?
6. Name any two types of chips.
7. Mention two merits of optical comparator.
8. Differentiate accuracy and precision.

PART – B

9. Describe briefly CO_2 process of core making.
10. List out the advantages of gas welding.
11. Mention any three hot working operations.
12. What is electrolytic deposition of metal powder manufacture?
13. Mention the uses of combination set.
14. Describe about reaming with a neat sketch.
15. What are the factors affecting tool life?
16. Write a note on Geneva indexing mechanism.

[Turn over.....

PART – C

17. (a) Describe with a neat sketch of a cold chamber process of die casting.

(Or)

(b) Narrate the working of an electric arc furnace.

18. (a) Explain the laser beam welding with a neat sketch.

(Or)

(b) What is brazing? Describe briefly two methods of brazing.

19. (a) List out the various press accessories. Explain any one of them with sketch.

(Or)

(b) Discuss the applications of powder metallurgy.

20. (a) Sketch and explain the back gear mechanism in a lathe.

(Or)

(b) Explain with a neat diagram of a collapsible tap used in turret lathe.

21 (a) Describe with a sketch of a autocollimator.

(Or)

(b) Briefly explain electrical comparator with a sketch.
