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Third Semester B.E. Degree Examination, Dec.2019/Jan.2020 Manufacturing Process – I

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain different types of patterns used in casting process. (08 Marks)
b. Explain various pattern allowances provided in casting technology. (08 Marks)
c. Write short note on sand binders and additives used in foundry. (04 Marks)

OR

- 2 a. Explain different types of cores used in casting process. (06 Marks)
b. Explain different types of risers used in casting process. (06 Marks)
c. Explain different types of casting defects. (08 Marks)

Module-2

- 3 a. Explain jolt squeeze machine used in moulding operation with neat sketch. (06 Marks)
b. Explain sweep moulding with neat sketch. (06 Marks)
c. Explain squeeze casting. (08 Marks)

OR

- 4 a. Explain shell moulding with neat diagrams. (10 Marks)
b. Explain cupola furnace describing various zones informed in it. (10 Marks)

Module-3

- 5 a. Explain weld joints formed in welding operation. (06 Marks)
b. Explain TIG welding with neat sketch. (08 Marks)
c. Explain submerged Arc welding. (06 Marks)

OR

- 6 a. Explain Atomic Hydrogen Arc welding. (07 Marks)
b. Explain MIG welding with neat sketch. (06 Marks)
c. Explain flame characteristics in oxy-Acetylene gas welding. (07 Marks)

Module-4

- 7 a. Explain projection welding type of resistance welding. (07 Marks)
b. Explain seam welding type of resistance welding. (07 Marks)
c. Explain friction welding. (06 Marks)

OR

- 8 a. Explain explosive welding. (06 Marks)
b. Explain Thermit welding. (07 Marks)
c. Explain Laser welding. (07 Marks)

Module-5

- 9 a. Explain different types of Brazing. (10 Marks)
b. Explain liquid penetrant inspection method of NDT. (10 Marks)

OR

- 10 a. Explain ultrasonic inspection of NDT. (10 Marks)
b. Explain holographic method of inspection. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.