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Seventh Semester B.E. Degree Examination, Dec.2018/Jan.2019
Foundry Technology

Time: 3 hrs.

Max. Marks:100

**Note: Answer any FIVE full questions, selecting
at least TWO questions from each part.**

PART – A

- 1 a. Explain casting parameters which are consider to produce casting economically. (10 Marks)
b. Explain technical characteristics of casting to produce sound casting. (10 Marks)
- 2 a. Explain moulding factors in design of casting process. (10 Marks)
b. Explain machining factors in casting design. (10 Marks)
- 3 a. What is pattern? Explain different allowances in design of pattern. (10 Marks)
b. What is core? Explain any three types of cores used in casting process. (10 Marks)
- 4 a. Explain the following :
i) Nucleation
ii) Growth
iii) Dendrite growth (06 Marks)
b. Explain significance and practical control on structure of casting. (10 Marks)
c. Write a note on grain shape and orientation. (04 Marks)

PART – B

- 5 a. What is solidification? Explain the concept of progressive and directional solidification during casting. (10 Marks)
b. Explain solidification time and Chovorinov's rule which influence on direction solidification for casting process. (10 Marks)
- 6 a. What is feeder head? With an illustration, explain different types of feeder heads in casting process. (08 Marks)
b. With an illustration, explain the different types of gating systems in casting process. (12 Marks)
- 7 a. What is modernization and mechanization in foundry industries? (08 Marks)
b. Explain any two equipments used on control pollution in foundry industries along with the sketches. (12 Marks)
- 8 a. Explain the parameters considered for planning of a new foundry. (10 Marks)
b. Explain the following :
i) Computer applications in foundries
ii) Energy conservation method. (10 Marks)

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