

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V (NEW) - EXAMINATION – SUMMER 2018

Subject Code:2152506

Date:04/05/2018

Subject Name:Foundry Technology

Time:02:30 PM to 05:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

	MARKS
Q.1 (a) Mention six basic steps of metal casting	03
(b) Give eight examples of products of foundry technology	04
(c) Differentiate Casting and Forging	07
Q.2 (a) Classify Patterns	03
(b) Brief about four important pattern allowances	04
(c) Discuss pattern materials with reasons	07
OR	
(c) Discuss types of patterns with examples	07
Q.3 (a) Differentiate green and dry mold	03
(b) Discuss contents of molding sand	04
(c) Discuss properties of molding sand	07
OR	
Q.3 (a) How permeability of sand is tested?	03
(b) What is Core? What is the use of core prints?	04
(c) Discuss types of cores used in Foundry	07
Q.4 (a) What is Riser? Why it is used?	03
(b) Discuss hand molding tools	04
(c) Explain Gating System with its elements	07
OR	
Q.4 (a) Why a casting is to be heat treated?	03
(b) Draw sketch of Cupola showing different stages	04
(c) Discuss casting defects with causes and remedies	07
Q.5 (a) Discuss Slush Casting in brief	03
(b) Mention steps of Permanent Mold Casting Technique	04
(c) Explain Investment Casting Procedure in detail	07
OR	
Q.5 (a) How computer can be useful in casting process?	03
(b) Discuss four NDT techniques in brief	04
(c) Explain Shell Molding procedure in detail	07
