

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER– VII (New) EXAMINATION – WINTER 2019

Subject Code: 2172601**Date: 23/11/2019****Subject Name: Rubber Equipment Design-II****Time: 10:30 AM TO 01:00 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) Define the terms: (i) Core (ii) Cavity (iii) Parting line	03
(b) Write the general considerations of mold.	04
(c) List out the factors affecting molding and explain in detail.	07
Q.2 (a) Give the basic difference between mold and die.	03
(b) Write the classification of Die according to flow.	04
(c) Explain in detail about the streamlining of extrusion die.	07
OR	
(c) Discuss the general design rules for die.	07
Q.3 (a) Write the advantages of hot feed extruder.	03
(b) Give the difference between bimetallic and induction liner.	04
(c) Explain in detail about the Transfer mix Extruder.	07
OR	
Q.3 (a) Give the importance of Pin Qsm extruder.	03
(b) Write the advantages of single roller die extruder.	04
(c) Short note on “Iddon High Intensity Mixing Screw”.	07
Q.4 (a) Write a brief note on Parting Line of mold.	03
(b) List out the factors affecting shrinkage.	04
(c) Discuss in detail about Cryogenic deflashing.	07
OR	
Q.4 (a) What do you mean by Anisotropy?	03
(b) Write a brief note on Cross linking factors.	04
(c) Draw the diagram of Transfer mold and explain the transfer molding process in detail.	07
Q.5 (a) Define the term (1) Shot capacity (2) Locking Force (3) Sink Mark.	03
(b) Write a brief note on reciprocating screw injection molding process.	04
(c) Discuss the FIFO and FILO system in detail.	07
OR	
Q.5 (a) Write the effect of screw speed on rubber compound.	03
(b) Give the importance of Runner Design.	04
(c) Explain the types of Injection Units.	07
