

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION)**

**CLASS: BE
BRANCH: CHEM-POLY**

**SEMESTER: VI
SESSION: SP/2020**

SUBJECT: PC6005 POLYMER PROCESSING

TIME: 1.5 HOURS

FULL MARKS: 25

INSTRUCTIONS:

1. The total marks of the questions are 30.
 2. Candidates may attempt for all 30 marks.
 3. In those cases where the marks obtained exceed 25 marks, the excess will be ignored.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. The missing data, if any, may be assumed suitably.
 6. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q1 (a) Discuss vented extruder with a neat sketch. [2]
(b) Discuss the function of different zones in the standard extruder screw with a neat sketch. [3]
- Q2 Discuss the following extruders with a neat sketch? [2x2.5]
(i) Drum Extruder
(ii) Multi-ram Extruder
- Q3 (a) Write down the advantages and disadvantages of compression moulding. [2]
(b) Discuss basic process cycle of compression moulding with a neat sketch. [3]
- Q4 (a) Discuss Pot type transfer moulding with a neat sketch. [2]
(b) Discuss the effect of different processing parameters on compression moulding. [3]
- Q5 (a) Write down the advantages of blow moulding process. [2]
(b) Discuss the process of extrusion blow moulding with a neat sketch. [3]
- Q6 (a) How bi-axial orientation is achieved in injection-stretch blow moulding process? [2]
(b) Discuss the process of Injection-stretch blow moulding with a neat sketch. [3]

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