



INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR
Mid-Spring Semester 2022-23

Date of Examination : _____ Session (FN/AN) _____ Duration 2 hrs
Subject No. : EP 60022 _____ Subject Name : Technology Entrepreneurship _____
Department/Center/School : Rajendra mishra School of Engineering Entrepreneurship _____
Specific charts, graph paper, log book etc., required _____
Special Instructions (if any) : _____

1. Present a B-Plan of your choice, selecting any product or service or system. [9]
2. Explicate the elements in a project feasibility study report with brief illustration. [7]
3. (a) Elucidate on the critical performance factors in the manufacturing system
(b) The annual production capacity of a start-up firm is 12,000 mechatronic toys. Determine the break-even volume, if the fixed cost is Rs. 1 Crore, the variable cost is Rs. 2000/- per unit, and the selling price is Rs. 4000/- per product. [4 + 3]
4. (a) Present the typical breakup of cost in a profit earning manufactured enterprise, and
(b) determine, using such information, the percentage change in profit due to the following:

Increase in sales price of 2% and increase in production volume by 10%, on account of quality improvement, coupled with value engineering efforts that helps to reduce the material cost by 5%. The labour and process productivity is raised by 5% due to method improvement. However, the overhead goes up by 2%. You would assume all necessary data and make a note of it. [2 + 5]