BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (END SEMESTER EXAMINATION)

CLASS: M. Tech SEMESTER: I
BRANCH: PIE SESSION: MO/2023

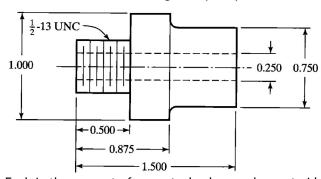
SUBJECT: PE523 MANUFACTURING STRATEGIES

TIME: 3 Hours FULL MARKS: 50

INSTRUCTIONS:

- 1. The question paper contains 5 questions each of 10 marks and total 50 marks.
- 2. Attempt all questions.
- 3. The missing data, if any, may be assumed suitably.
- 4. Before attempting the question paper, be sure that you have got the correct question paper.
- 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1(a)	What is the corporate strategy? Explain the steps for its implementation in industry with example?	[5]	CO 1	BL 3
Q.1(b)	What are the different manufacturing philosophies for manufacturing strategy?	[5]	1	2
Q.2(a)	Justify with volume and variety relationship how does the functionality and capacity contribute to RMS.	[5]	2	4
Q.2(b)	Formulate a manufacturing strategy for implementation of cellular manufacturing in any industry with example.	[5]	2	3
Q.3(a)	Define the "form code" using the Opitz system.	[5]	3	4



- Q.3(b) Explain the concept of group technology and ways to identify part family. [5] 3 2
- Q.4(a) Explain the different tools and techniques of lean manufacturing. [5] 4 1 Q.4(b) How does KANBAN facilitate the concept of lean manufacturing? Explain. [5] 4 3
- Q.5(a) Write short notes on following: [10] 5 1
 - i) VAT analysis
 - ii) Six Sigma

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