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

CLASS: BTECH. SEMESTER: VII
BRANCH: PRODUCTION ENGINEERING SESSION: MO/2024

SUBJECT: PE407 ADVANCED MANUFACTURING PROCESSES

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) Q.1(b)	Describe the Plaster mold Casting processes with industrial applications. Explain the Vacuum Casting processes with applications.	[5] [5]	CO 1 1	BL 2 2
Q.2(a) Q.2(b)	Describe the Diffusion Welding processes with application. Explain the Friction Welding processes with applications.	[5] [5]	2 2	2 2
Q.3(a) Q.3(b)	Explain the Orbital Forging processes with applications. Explain the Explosive Forming processes with applications.	[5] [5]	3	2 2
Q.4(a) Q.4(b)	Describe the Powder Metallurgy processes with industrial applications. Describe the Cold Isostatic processes (CIPing) with applications.	[5] [5]	4 4	2 2
Q.5(a) Q.5(b)	Describe the Rotational Moulding processes with industrial applications. Explain the Compression Moulding processes with application.	[5] [5]	5 5	2 2

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