

R.N.G.PATEL INSTITUTE OF TECHNOLOGY-RNGPIT
(An Autonomous Institute U/s UGC Act 1956)

B.Voc SEMESTER-I, SEMESTER END EXAMINATION – WINTER 2025

SUBJECT CODE: 1PT201

DATE: 07-01-2026

SUBJECT NAME: MANUFACTURING PROCESSES

TIME: 11:00 AM to 01:00 PM

TOTAL MARKS: 50

Instructions

1. It is **compulsory** for students to write **Enrolment No. /Seat No.** on the question paper.
2. Attempt all questions in the question paper.
3. The figures to the right of each question indicate full marks. Make suitable assumptions with proper justification wherever required.
4. Simple, non-programmable scientific calculators are permitted.
5. BL - Cognitive Level (As per Revised Bloom's Taxonomy) (R-Remember, U-Understanding, A –Application, N –Analyze, E – Evaluate, C -Create), CO - Course Outcomes.

		Marks	BL	CO
Q.1	(a) Give classification of manufacturing processes.	05	R	1
	(b) Enlist The various types of patterns which are commonly used in Metal Casting and explain any two of them.	05	R	2
Q.2	(a) Explain the Property of Moulding Sand.	05	U	2
	(b) Enlist The various types of patterns which are commonly used in Metal Casting and explain any two of them.	05	R	2
OR				
Q.2	(a) Explain the Steps involved in making sand Mould.	05	U	2
	(b) Describe in brief about Shell-Mould casting.	05	R	2
Q.3	(a) Write the principle of welding, soldering, Brazing and adhesive bonding.	05	R	3
	(b) Explain the Arc welding process in brief.	05	U	3
OR				
Q.3	(a) Give the classification of welding process.	05	R	3
	(b) Discuss in detail the Gas welding process.	05	U	3
Q.4	(a) Give comparison between Hot Working and Cold Working.	05	R	4

(b) Classify the Rolling Mills and discuss anyone of them. 05 U 4

OR

Q.4 (a) Explain the process of Extrusion. 05 U 4

(b) Explain the Forging process with its advantages and disadvantages. 05 U 4

Q.5 (a) Give types of Hammers and other Forging Tools. Explain anyone of them 05 U 4

(b) Explain Shearing operation in sheet metal. 05 U 5

OR

Q.5 (a) Discuss the Wire Drawing process. 05 U 4

(b) Differentiation between Drawing and deep drawing operations. 05 U 5
