

Roll No .:

Total No. of Questions: Five

Duration (hrs.): 2 hrs.

Total No. Pages: ONE

Maximum Marks: 30 marks

Note: 1. Read the question carefully and then answer.

- Question No. 1 is compulsory. Solve any TWO from the remaining questions.
- 3. All questions carry equal marks.
- Q. 1 : Short Notes (Any Four)
 - a. Storage systems
 - b. Low cost automation
 - c. Ergonomics
 - d. Application areas of Industrial Engineering
 - e. Low cost automation
 - f. International Labour Standards
- Q. 2 : What is productivity? Explain in brief the various factors affecting national productivity & the productivity in manufacturing and the services?
- Q. 3 : What is PMTS? What are its uses? Which are various human body motions?
- Q. 4 : What are the various factors which may be considered while selecting a material handling equipment?
- Q. 5 : Which are the various factors governing plant location? Explain in brief. State various objectives of a good plant layout. Explain in brief the principles of Plant Layout.