GL BAJAJ
Institute of Management & Research
Greater Noida
F I N D   Y O U R   S P A R K

Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) –201306
POST GRADUATE DIPLOMA IN MANAGEMENT (2024-26)
MID-TERM EXAMINATION (TERM -III)

Subject Name: **Production Planning & Control**	Time: **01.00 hrs**
Sub. Code: **PGO31**	Max Marks: **20**

Note: 1. All questions are compulsory.

Read the following case and answer the following questions: 10×2 = 20 Marks

ABC Manufacturing is a mid-sized company that produces custom metal parts for the automotive industry. The company aims to improve its production efficiency by analyzing key process metrics, including lead time, throughput time, and cycle time. The production process consists of several steps that include order processing, raw material preparation, manufacturing and assembly, quality inspection, and lastly, packaging and shipping, consuming 2 days, 3 days, 5 days, 2 days, and 3 days, respectively, for each. The production line operates 8 hours per day. It is expected and estimated that the targeted amount shall reach 50 units per day.

On the basis of the reading of the case, answer the following questions:
Q. 1. Determine the lead time of the process, explaining and showing all the parameters. The answer should explain each and every step. CO1 **(2 marks)**
Q. 2. Determine the throughput time in the process. Clearly explain the steps and any assumptions taken to calculate the answer. CO1 **(4 marks)**
Q. 3. Explain what the cycle time is going into the process and calculate the cycle time in the process. CO3 **(2+4 = 6 marks)**
Q. 4. Analyzing the process analysis shown, what could be the bottleneck stage in the complete process? Explain the reasons also. CO2 **(1+1 =2 marks)**
Q. 5. Suggest at least three process recommendations to improve efficiency and optimize workflows. CO2 **(2+2+2 marks) = 6 marks**