

**First Semester 2023-24**

**Manufacturing Planning and Control (MSE G512)**

**Comprehensive Examinations (Regular / Closed Book)**

**Date: 11-12-2023**

**Maximum Time: 60 min.**

**Maximum Marks: 10**

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*Note: Be succinct, no credit will be given for ambiguous answers. All parts of a question must be answered together and in sequence. Answer of a question must be started from a fresh page.*

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**Q1.** Write down your answer **briefly**. [10]

- i) Under which conditions would a plant manager elect to use a fixed order quantity model as opposed to a fixed time period model?
- ii) Why is the material requirement planning (MRP) process referred to as an “explosion”?
- iii) What information is provided by the critical ratio sequencing rule?
- iv) What effect on the exponential smoothing model will increasing the smoothing constant have?
- v) How is total project variance determined in CPM/PERT analysis?

\*\*\*\*\**Best of luck*\*\*\*\*\*