

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
Fourth Semester MBA Degree Examination June 2022 (2020 scheme)

Course Code: 20MBA282

Course Name: World Class Manufacturing

Max. Marks: 60

Duration: 3 Hours

PART A

Answer all questions. Each question carries 2 marks

Marks

- | | | |
|---|---|-----|
| 1 | What are the principles of World class Manufacturing? | (2) |
| 2 | Define Value stream mapping, | (2) |
| 3 | What is Balanced Score Card? | (2) |
| 4 | Define Rapid Prototyping. | (2) |
| 5 | What is meant by Agile Manufacturing? | (2) |

PART B

Answer any 3 questions. Each question carries 10 marks

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|----|---|------|
| 6 | Discuss in detail, the following World Class Manufacturing models: a) Gunn Model b) Maskell Model | (10) |
| 7 | Explain the different types of waste in Lean Manufacturing. | (10) |
| 8 | Summarise the Organizational consequences of cross-functional teams. | (10) |
| 9 | Explain the Advantages and Limitations of JIT | (10) |
| 10 | Describe the TOPP System and AMBITE Systems | (10) |

PART C

Compulsory question. This question carries 20 marks

- 11 Kenko is a leading manufacturer of industrial refrigeration components. Its sales grew from 50,000 units in 2019 to 360,000 in 2020. In the following few years, the sales were expected to increase to 750,000 units per year. Meeting this large increase in volume was a significant challenge for Kenko.

The plant had good quality control, however, it operated on a traditional big batch and queue approach with large amounts of WIP between processes which lead to poor visibility of the status of production, unbalanced processes and constant expediting of raw materials and sub-assemblies. The connection of the

supply chain from the Chinese suppliers through to the end customers in Europe and the US was also highly challenging for the plant and on-time delivery was poor, despite long lead times.

1. What is the role of Lean management practices at Kenko? (5)
2. Where could be the principles and techniques of lean production be of value to Kenko? (15)
