

Name:	 <b>UPES</b> UNIVERSITY WITH A PURPOSE
Enrolment No:	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Online Examination, May 2020**

<b>Course: Lean Manufacturing</b>	<b>Semester: VI</b>
<b>Program: BBA Core (Specialization Operations)</b>	<b>Time: 03 Hours</b>
<b>Course code: LSCM 2015</b>	<b>Max. Marks: 100</b>

**SECTION A (Attempt all)**

		Marks	CO
Q 1	“Heijunka”, the Japanese term means _____.	5	CO1
Q 2	Two main pillars of TPS are _____ and _____.	5	CO1
Q 3	QFD stands for _____.	5	CO2
Q 4	TQM (Total Quality Management) is mainly used to obtain zero defects. (True/False)	5	CO2
Q 5	Which of the following is type of aggregate planning strategies? a) Chase Strategy b) Business Strategy c) Corporate Strategy d) Lean strategy e) Both b and c	5	CO3
Q 6	_____, firstly coined the term Six Sigma (6σ).	5	CO4

**SECTION B**

Q 7	Differentiate between Manufacturing Operations and Service Operations.	10	CO1
Q 8	Explain JIT with an example. Name four building blocks of JIT Manufacturing.	10	CO1
Q 9	Differentiate between Process Mapping and Value Stream Mapping.	10	CO2
Q 10	Discuss five primary elements of lean manufacturing. <b>OR</b> What are the five core issues towards lean culture change?	10	CO2, CO3
Q 11	Define World Class Manufacturing. What are the success factors for implementing WCM?	10	CO4

**SECTION-C (Attempt all)**

Q 12	Explain Henry Ford mass production. Discuss the Toyota’s ten management principles.	20	CO3, CO4
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