

Reg. No.

**MANIPAL INSTITUTE OF TECHNOLOGY****MANIPAL***(A constituent unit of MAHE, Manipal)***II SEMESTER M.TECH (CEM)****MAKE - UP EXAMINATIONS** [June 2019]**SUBJECT: Construction Quality Management (CIE -5233)**

Date of Exam:

Time of Exam:

Max. Marks: **50****Instructions to Candidates:**

- ❖ Answer **ALL** the questions.
- ❖ Missing data may be assumed suitably.

1A.	Explain Juran’s approach to quality in the form of ‘quality trilogy’.	03	CO1																		
1B.	Write a short note on : (i) Quality loss function (ii) Kano model	04	CO1																		
1C.	Explain in brief the three methods of mistake or error proof concept.	03	CO1																		
2A.	Explain the steps involved in preparing a construction quality management plan.	03	CO1																		
2B.	Briefly explain the 5’s phases for the workplace organization.	03	CO3																		
2C.	Write a short note on : (i) KAIZEN      (ii) Quality circles	04	CO1																		
3A	Construct a Fish bone diagram for a poor quality product.	05	CO2																		
3B.	<div>Following are the results of paint defects identified in an automotive assembly plant :</div> <table><tr><td>Description</td><td>Dirt in paint</td><td>sag</td><td>Orange peel</td><td>Thin paint</td><td>Sealer under</td><td>scratch</td><td>off color</td><td>others</td></tr><tr><td>Defects</td><td>65</td><td>21</td><td>12</td><td>5</td><td>4</td><td>2</td><td>2</td><td>1</td></tr></table> <div>Construct a pareto chart and interpret which defect would be of the highest priority and why?</div>	Description	Dirt in paint	sag	Orange peel	Thin paint	Sealer under	scratch	off color	others	Defects	65	21	12	5	4	2	2	1	05	CO2
Description	Dirt in paint	sag	Orange peel	Thin paint	Sealer under	scratch	off color	others													
Defects	65	21	12	5	4	2	2	1													
4A.	What do you mean by the term ‘Lean construction’?	03	CO4																		
4B.	Explain any three types of Benchmarking.	03	CO4																		
4C.	Explain the eight step plan to sustain improvement in an organization.	04	CO3																		
5A.	Write a short note on : (i) ISO 14000 series (ii) Process management	04	CO3 & CO5																		
5B	Six sigma identifies several key roles for its successful implementation. Explain	04	CO4																		
5C	When is the house of quality or QFD appropriate?	02	CO2																		