

## **SECTION-B**

**Note:Short answer type questions. Attempt any six questions out of Eight questions. (6x5=30)**

Q.11 Distinguish between internal customer and external customer.

Q.12 What is quality Circles(QC)? mention some major objective of quality circle projects.

Q.13 Define pareto diagram. explain how to construct it?

Q.14 Define a control chart (or) shewhart chart.

Q.15 Explain all the element in 5's principle.

Q.16 Describe how kanban supports the pull system.

Q.17 What two fundamental advantages are provided by JIT/Lean?

Q.18 What is the essential feature of total productive maintenance (TPM)? What are the overall goals of TPM.

## **SECTION-C**

**Note:Long answer type questions. Attempt any one questions out of two questions. (10x1=10)**

Q.19 Explain all the elements in 5's principle and also the implementation procedure of 5's in a Manufacturing company.

Q.20 What is BENCH marking? Explain its types.

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**DVOC (Level 5 )**

**Sem 2nd / Ref. & Air Conditioning**

**Subject : Total Quality Management**

Time : 2 Hrs.

M.M. : 50

## **SECTION-A**

**Note: Very short answer type questions .Attempt all ten question (10x1=10)**

Q.1 Choose the incorrect statement regarding the need for quality.

- a) Markets have become more competitive
- b) Quality provides sustained performance
- c) Quality provides customer satisfaction
- d) It is the trend nowadays to introduce quality

Q.2 Juran's trilogy diagram is a plot between \_\_\_\_\_ and \_\_\_\_\_.

- a) Time percent defective
- b) Distance percent defective
- c) Speed percent defective
- d) Velocity percent defective

Q.3 Which of the following is not a used of affinity diagram?

- a) To determine logical priorities
- b) To create new concepts
- c) To calculate mean of the numerical data
- d) To provide a visual representation of large amount of ideas

Q.4 Which of the following is not related with JIT implementation?

- a) Pull system
- b) Push system
- c) Zero inventory
- d) Zero lead time

Q.5 Which of the following technique is used in quality maintenance?

- a) Bench marking
- b) Employee Empowerment
- c) Root cause analysis
- d) Forecasting

Q.6 The product quality after using TQM philosophy \_\_\_\_.

- a) Increases
- b) Decreases
- c) remains the same
- d) We cannot comment on product quality

Q.7 Cause and effect diagram is also known as \_\_\_\_\_.

- a) Fishbone diagram
- b) Ishikawa diagram
- c) Both (a) and (b)
- d) Cause diagram only

Q.8 Bench marking is used by organizations as a \_\_\_\_\_ tool.

- a) Intermittent improvement
- b) Discontinuous improvement
- c) Continuous improvement
- d) Sporadic improvement

Q.9 C-Kanban is also known as \_\_\_\_\_.

- a) P-Kanban
- b) Withdrawal kanban
- c) Production kanban
- d) Poka-yoke

Q.10 In which stage of TPM development steps are taken to improve the effectiveness of each piece of equipment?

- a) Preparation stage
- b) Preliminary inspection stage
- c) TPM implementation stage
- d) Stabilization stage