

Code No: R32036

# R10

**Set No. 1**

**III B.Tech II Semester Supplementary Examinations, Dec - 2015**

**INDUSTRIAL ENGINEERING & MANAGEMENT**

**(Mechanical Engineering)**

**Time: 3 hours**

**Max. Marks: 75**

**Answer any FIVE Questions**

**All Questions carry equal marks**

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- 1 a) Define Industrial management and give its advantages and applications.  
b) Explain the functions of management.
- 2 a) Explain the factors governing the location of a plant.  
b) Differentiate between process, product and fixed position layouts.
- 3 a) Discuss the steps involved in work study.  
b) What are Therbligs? Explain their importance. Give their name, explanation, abbreviation and symbol.
- 4 a) Define 'Quality' and explain the factors that influence the quality of a product.  
b) Discuss the importance of quality in the changing techno economic scenario.
- 5 Define 'Job evaluation' and narrate the various steps involved for evaluating jobs.
- 6 a) Define TQM. What are the essential elements of TQM?  
b) Explain the benefits of TQM.
- 7 What do you mean by value engineering? Discuss the phases involved in conducting a value engineering study.
- 8 Consider a project consisting of nine jobs with the following precedence relations and average time estimates.

Job	Predecessor	Time (days)
A		30
B		20
C	A,B	20
D	A,B	20
E	B	10
F	D,E	10
G	C,F	40
H	D,E	20
I	G,H	30

Draw the project network; identify the critical path and total duration for the project.

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