Register Number: …….

M.E.DEGREE EXAMINATIONS: JANUARY 2011

First Semester

INDUSTRIAL ENGINEERING

IEE503: Facilities Location and Design

Time: Three Hours **Maximum Marks: 100**

Answer ALL Questions: -

PART A (10 x 2 = 20 Marks)

1. How does facility location is different from plant location?
2. Classify the factors affecting plant locations?
3. Compare functional layout with line layout
4. List the steps in ALDEP algorithm
5. Is group technology a philosophy? If so why?
6. What is OPITZ code system?
7. What is the principle of unit load?
8. Mention the guidelines used to select a material handling equipment
9. What do you mean by a put away principle?
10. How will you benchmark warehouse performance?

PART B (5 x 16 = 80 Marks)

11. a) State the factores governing the choice of site for a manufacturing plant in a city or a sub-urban part of a country. Give the advantages of a multi storey buliding over a single storey building for a factory.

(OR)

b) Explain the selection procedure of single facility location from the network of location. Use suitable example.

12. a) Describe in detail the CRAFT algorithm for designing a layout.

(OR)

b) Explain the procedure for systematic layout planning with neat sketch.

13. a) Define PFA. Explain the procedure of PFA

(OR)

b) What is meant by line balancing? Explain the ROC method of line balancing

14. a) Give a classification of material handling equipments. Explain them in brief with suitable illustrations.

(OR)

b) Explain about containers and packaging

15. a) What are the various warehouse operations? How does Pallet storage and Retrievel system helps to improve them?

(OR)

b) Describe computerizing warehouse operations with suitable illustrations.

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