

FACULTY OF ENGINEERING**B.E. 4/4 (EEE/Inst.) II – Semester (Old) Examination, April / May 2014****Subject : Industrial Administration and Financial Management****Time : 3 hours****Max. Marks : 75****Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.****PART – A (25 Marks)**

- 1 State two main differences between private limited company and public limited company.
- 2 Sketch the Taylor types of functional organization structure.
- 3 What are therbligs? Explain any three of them.
- 4 Define the term performance rating factor and state any two methods of merit rating.
- 5 What are chance causes and assignable causes?
- 6 State the functions of "Follow up" in P.P.C.
- 7 Where do you use assignment problem.
- 8 State the various elements of cost.
- 9 Define the term depreciation and state the causes of it.
- 10 What is a 'payback period', explain?

PART – B (50 Marks)

- 11 State the importance of organization structure in a manufacturing industry. Explain any of structures along with advantages and limitations. 10
- 12 a) List different methods of apportioning of overheads and explain any two of them. 5
b) A Lathe is purchased for Rs.1,00,000/- and its salvage value after its life of 20 years is estimated to be Rs.20,000/- Determine by straight line method
(i) the rate of depreciation (ii) Its book value after 12 years. 5
- 13 a) Explain the various steps in purchasing material for an industry. 4
b) Maximise $Z = 10x + 5y$ 6
Subject to $4x + 5y \leq 100$
 $2x + 4y \leq 80$
 $X, y \geq 0$ use graphical method
- 14 Draw the network for the following project and compute the critical path time and total float in each activity. 10

Activity	A	B	C	D	E	F	G	H	I
Duration (days)	5	4	6	2	1	7	8	4	3
Immediate predecessor	-	-	A	B	C	C,D	E	F	G,H

- 15 a) What is job evaluation? Explain the point method of job evaluation. 6
b) Explain Halsey plan of wage incentives. 4
- 16 a) Explain a typical operating characteristic curve used in Inspection by Attributes. 6
b) Distinguish between types of production 4
- 17 Write short notes on the following :
a) Principles of Motion Economy b) Break even analysis 5 + 5

FACULTY OF ENGINEERING**B.E. 4/4 (EEE/Inst.) II – Semester (New) (Main) Examination, April / May 2014****Subject : Industrial Administration and Financial Management****Time : 3 hours****Max. Marks : 75****Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.****PART – A (10 x 2.5 = 25 Marks)**

- 1 State two main differences between private limited company and public limited company.
- 2 Define management, administration and organization.
- 3 What are the contributions of F.W. Taylor?
- 4 Define motion study and method study.
- 5 What are the different kinds of Inspection?
- 6 What are manufacturer's risks and purchaser's risk?
- 7 What are the differences between PERT and CPM?
- 8 What are the functions of materials management?
- 9 What are the various types of overheads?
- 10 What is break even point.

PART – B (50 Marks)

- 11 a) Explain in detail functions of management. 6
b) What are the objectives of a scientific layout. 4
- 12 a) Explain various types of principles of motion economy. 6
b) Explain stop watch procedure for collecting time study data. 4
- 13 a) Explain double sampling plan. 5
b) Draw 'C' chart for the following data pertaining to the number of foreign threads (considered as defects) in 15 pieces of cloth. 7, 12, 3, 20, 21, 5, 4, 3, 10, 8, 0, 9, 6, 7, 20 plot the values and draw the inferences.
- 14 Determine critical path for the following project and calculate total float, free float and independent float. 10

Activity	a	b	c	d	e	f	g	h	i
Duration	1	5	2	1	1	2	3	1	1
Predecessor	-	a	a	b, c	a, b	d	e, f	g	h

- 15 a) Describe ABC classification of materials. 5
b) Derive an equation for economic order quantity. 5
- 16 a) A factory produces only one kind of item, which is sells for for Rs.12.50 per unit. It has a fixed cost equal to Rs.60,000/- and variable cost Rs.7.50/- per unit. Calculate the B.E.P. 5
b) A machine costing Rs.24,000/- was purchased. The installation and erection charges were Rs.1000/- and its useful life is expected to be 10 years. The scrap value of the machine after 10 years was Rs.5000/- calculate the annual rate of depreciation. 5
- 17 Write short notes on :
a) Wage incentive plans b) Job evaluation 5 + 5