

**B.TECH SEM – VIII (2007 COURSE) (PRODUCTION ENGG.)
: WINTER - 2017**

SUBJECT : MATERIAL & FINANCIAL MANAGEMENT

Day : Monday
Date : 20/11/2017

W-2017-2695

Time : 02.30 PM TO 05.30 PM
Max. Marks : 80

N.B.

- 1) **Q.1 and Q.5 are COMPULSORY.** Out of the remaining attempt any **TWO** questions from each Section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.
- 4) Use of non-programmable calculator is allowed.

SECTION – I

- Q.1**
- a) State different objectives of materials management. (05)
 - b) State various costs associated with inventory. (05)
 - c) Define logistic. State different activities of the logistic function. (04)
- Q.2**
- a) What factors should be considered while evaluating potential vendors? (07)
 - b) Define value and value analysis. Explain with example different types of values. (06)
- Q.3**
- a) Explain the concept of strategic storage in warehouse management. (07)
 - b) Explain with example, the inventory model with one price break. (06)
- Q.4**
- a) Explain in detail the concept of supply chain. Also explain the need of supply chain management. (07)
 - b) State the different design options for a distribution network. Explain manufacturing storage with direct shipping and in transit merge. (06)

SECTION – II

- Q.5**
- a) What is capital budgeting? Explain its importance. (05)
 - b) What is Job costing? Draw a simplest form of a job cost sheet. (05)
 - c) What is allocation and apportionment of overhead? (04)
- Q.6**
- a) Explain the following discounted cash flow: (06)
 - i) Net present value method
 - ii) Internal rate of return method.
 - b) ABC Ltd. Company furnishes you with the following details: (07)

	Rs.
Opening Stock	50,000
Closing Stock	70,000
Sales	
Credit	2,10,000
Cash	1,50,000
Gross Profit	60,000
Year end debtors	35,000
Less Provision for doubtful debts	2,000

A year may be taken to be of 360 days work out:

- i) Stock turnover ratio
- ii) Debtors turnover ratio.

P.T.O.

- Q.7 a)** From the following information, prepare process account and normal loss account. (07)

Input of raw material	1000 units @ Rs. 6 per unit
Direct material	Rs. 5,200
Direct wages	Rs. 4,000
Production overheads	@ 100% of direct wages
Actual output to process	950 units
Normal loss	5%
Value of scrap/unit	Rs. 4 per unit

- b)** Calculate LCV, LRV, and LEV from the following information. (06)

Operator	Standard		Actual	
	Hours	Rate/Hr. (Rs.)	Hours	Rate/Hr. (Rs.)
Skilled	90	20	44	25
Semiskilled	60	10	66	5
	Output 135 kg		Output 90 kg	

- Q.8 a)** Draw the figures for the following operations and calculate machining time for each operation. (06)
- External relief
 - Facing of solid and hollow shaft
 - Blind hole drilling.

- b)** Blue Star company has two production department and two service department and provides you the following data: (07)

	Production Department		Service Department	
	P1	P2	S1	S2
Direct material	40,000	30,000	20,000	10,000
Direct wages	15,000	20,000	5,000	10,000
Floor area (Sq. Ft.)	5,000	4,000	3,000	2,000
Value of Plant and Machinery	50,000	60,000	20,000	10,000
Value of Stock	35,000	25,000	5,000	5,000
No. of workers	100	50	25	25
No. of light points	200	50	25	25
H.P. of machines	50	25	15	10

The indirect expenses for the period were:

	Rs
Factory Rent	14,000
Depreciation, repair of machinery	28,000
Insurance of stock	700
Supervision and staff welfare expenses	2,000
Stores overheads	1,000
Lighting and heating	3,000
Power	1,000

Prepare a statement showing the apportionment of overheads.

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