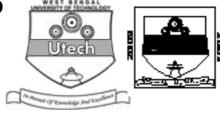
# **MATERIALS MANAGEMENT (SEMESTER - 4)**

# CS/BBA (H), BIRM, BSCM/SEM-4/BBA-402/09



1.	Signature of Invigilator					Œ.	~	Ennish	, sales	" <u>-</u>	===	<u>*</u>	<u>_</u>
2.	Reg. No Signature of the Officer-in-Charge												
	Roll No. of the Candidate												
	CS/RDA (H) RIDM	 TD	 CO	 	 П Л	 	 409			 			

CS/BBA (H), BIRM, BSCM/SEM-4/BBA-402/09 **ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE - 2009** MATERIALS MANAGEMENT (SEMESTER - 4)

Time: 3 Hours] [Full Marks: 70

#### **INSTRUCTIONS TO THE CANDIDATES:**

- This Booklet is a Question-cum-Answer Booklet. The Booklet consists of 32 pages. The questions of this 1. concerned subject commence from Page No. 3.
- 2. In Group - A, Questions are of Multiple Choice type. You have to write the correct choice in the box provided against each question.
  - b) For Groups - B & C you have to answer the questions in the space provided marked 'Answer Sheet'. Questions of Group - B are Short answer type. Questions of Group - C are Long answer type. Write on both sides of the paper.
- Fill in your Roll No. in the box provided as in your Admit Card before answering the questions. 3
- 4. Read the instructions given inside carefully before answering.
- You should not forget to write the corresponding question numbers while answering. 5.
- Do not write your name or put any special mark in the booklet that may disclose your identity, which will 6. render you liable to disqualification. Any candidate found copying will be subject to Disciplinary Action under the relevant rules.
- 7. Use of Mobile Phone and Programmable Calculator is totally prohibited in the examination hall.
- You should return the booklet to the invigilator at the end of the examination and should not take any 8. page of this booklet with you outside the examination hall, which will lead to disqualification.
- 9. Rough work, if necessary is to be done in this booklet only and cross it through.

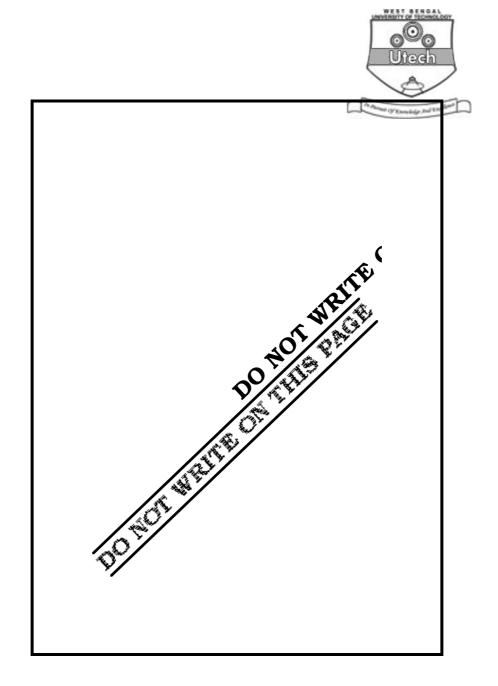
#### No additional sheets are to be used and no loose paper will be provided

#### FOR OFFICE USE / EVALUATION ONLY Marks Obtained Group - A Group - B Group - C Examiner's Question Total Number Marks Signature Marks **Obtained**

Head-Examiner	Co-Ordinator	/Scrutineer

4488 (08/06)





3



# ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE - 2009 MATERIALS MANAGEMENT SEMESTER - 4

Time: 3 Hours [ Full Marks: 70

### **GROUP - A**

# ( Multiple Choice Type Questions )

l .	Choo	se the	e correct alternatives for any ten	of the	following:	10 × 1 = 10
	i)	The s	system of purchasing from one's	s custo	mer preferred to others is l	known as
		a)	Forward Buying	b)	Tender Buying	
		c)	Reciprocal Buying	d)	Blanket Order.	
	ii)	The o	classification of inventory based	on an	nual consumption and ann	ual value is
		know	n as			
		a)	ABC classification	b)	VED classification	
		c)	PSN classification	d)	HML classification.	
	iii)	Fixed	l order quantity system of inven	tory m	anagement is also known a	s
		a)	Max-min system	b)	Q-system	
		c)	re-order point system	d)	all of these.	
	iv)	The o	document prepared on receipt o	f matei	rials in store is known as	
		a)	MRN	b)	GRN	
		c)	Challan	d)	Bill of materials.	
	v)		h of the following cost is not sion?	taken	into consideration for Ma	ake or Buy
		a)	Fixed Cost	b)	Variable cost	
		c)	Semi-variable cost	d)	None of these.	



vi)	JIT	contributed to the		AMERICA OF TROMOLOGY	
	a)	reduced inventory and WIP	b)	reduced suppliers and vend	ors
	c)	reduced manpower planning	d)	reduced information flows.	
vii)		time interval between placing wn as	; an oi	der and the actual replenis	hment is
	a)	delivery time	b)	order time	
	c)	lead time	d)	none of these.	
viii)	The	key benefit of codification is			
	a)	to prevent duplication	b)	to have accurate identification	n
	c)	both of these	d)	none of these.	
ix)		evice to move materials along erials over long distances is kno		nite path and used for mo	ving bulk
	a)	fork-lift trucks	b)	elevator	
	c)	hoists	d)	conveyor.	
x)	Wor	k-in-progress is a			
	a)	procedure	b)	method	
	c)	value addition process	d)	none of these.	
xi)	into	type of purchasing where the p 2 transactions — a purchase es fluctuate is known as		-	O
	a)	hedging	b)	speculative buying	
	c)	forward buying	d)	blanket order.	
xii)	Crite	eria of VED analysis is			
	a)	unit price of the materials	b)	annual value of consumption	1
	c)	critical nature of the item	d)	none of these.	



#### 5 **GROUP – B**

## (Short Answer Type Questions)

Answer any three of the following questions

 $3 \times 5 = 15$ 

2. Medical Aids Co. manufactures a special product A. The following particulars were collected for the year 2008:

a) Monthly demand of A: 1000 units

b) Cost of placing an order : Rs. 100

c) Annual carrying cost per unit : Rs. 15

d) Normal usage : 50 units per week

e) Minimum usage : 25 units per week

f) Maximum usage : 75 units per week

g) Re-order period : 4 to 6 weeks

Compute from the above :

- i) Re-order level ii) Re-order quantity
- iii) Minimum level iv) Maximum level
- v) Average stock level.  $5 \times 1$
- 3. What is the *Q*-system of inventory? In a *Q*-system of inventory what is called to be ROP? How is it calculated?  $1 + 1\frac{1}{2} + 2\frac{1}{2}$
- 4. Differentiate between forward buying and speculative buying. 5
- 5. What is Economic Order Quantity? How is it calculated?
- 6. Define the terms 'Obsolescence', 'Surplus', 'Defective and Scrap' in storage control.

  Briefly state their disposal technique.
- 7. What are the benefits of scientific store-keeping?



#### 6 **GROUP – C**

# (Long Answer Type Questions)

Answer any three of the following questions

 $3 \times 15 = 45$ 

- 8. a) Describe the various methods of valuation of stock.
  - b) Prepare a ABC plan from the following data of 'Metro Works'.

Item	1	2	3	4	5	6	7
Unit	1,800	500	1,500	1,200	2,000	1,000	2,000
Cost p.u.	33.5	300	10	34	5	200	12.5

8 + 7

- 9. a) Briefly discuss the various methods of purchasing practiced by various organizations.
  - b) Discuss the purchase procedure of materials department with the help of a diagram. 8+7
- 10. a) The following information is available in respect of material X & Co. Ltd:

Re-order quantity 12,000 unit, Lead time 4 to 8 weeks, Maximum consumption 4,000 units per week, Normal consumption 3,000 units per week, Maximum consumption 1,550 unit per week.

#### Ascertain:

- i) Re-order level
- ii) Minimum stock level
- iii) Maximum stock level.
- b) Product A consists of three B types subassemblies and one C type subassembly. The subassembly B consists of one D, one E subassemblies and one F. The subassembly C consists of a G and an F. The subassembly E consists of a D and a K.
  - i) Prepare a product tree.
  - ii) Prepare the number of each subassembly / components required to produce fifty units of item A. 8 + 7



11. Discuss the advantages and disadvantages of Centralized & Decentralized Purchasing. Suppose you are working in a steel plant. It has several unitable Ore mines, Coal mines, very big township, hospital etc. All such units use various types of materials. Many items are common. Explain how you would organize your purchase department.



5 + 10

- 12. a) What is matrials requirement planning?
  - b) Discuss the inputs, processing and outputs of MRP system.
  - c) Classify the following items into *A*, *B* & *C* category.

Sl. No.	Items	Annual Usage	
			( <b>Rs.</b> )
1.	Graphite	4,000 kg	10 per kg
2.	Toluene	800 kg	5 per kg
3.	Wax	600 kg	10 per kg
4.	Cap	2,000 kg	6 per kg
5.	Drums	1,000 nos.	18 each
6.	Oil	150 kg	9 per kg
7.	Carton	3,000 nos.	0·2 each
8.	Powder	200 kg	0·5 per kg
9.	Spirit	400 kg	1 per kg
10.	Hydrochloric acid	2,500 kg	6 per kg
11.	Carbon	700 kg	15 per kg
12.	Nail	5,000 nos.	0·10 each

4 + 6 + 5

- 13. State the key elements of JIT System. Explain the salient features of JIT system. Explain the differences between JIT & MRP Approach. What are the advantages of JIT system? 5+2+5+3
- 14. What is vendor rating and evaluation? Discuss the methods of vendor rating. 5 + 10

**END**