FOUNDATION COURSE EXAMINATION

(SYLLABUS 2008)

SUGGESTED ANSWERS TO QUESTIONS

DECEMBER 2012

Paper-2 : ACCOUNTING

Time Allowed : 3 Hours **Full Marks :** 100

The figures in the margin on the right side indicate full marks.

Section - I

Answer Question No. 1, *which is compulsory and* any two *questions from Section I.*

Q. 1. (a) In each of the following one of the alternatives is correct, indicate the correct one : [1×10=10]

(i) Which one of the following features of a bill of exchange is not appropriate

(A) It is an instrument in writing

(B) It contains a conditional order

(C) It is signed by the maker

(D) It is drawn on a specific person

(ii) Compound journal entry contains

(A) More than one debit entry only

(B) More than one credit entry only

(C) More than one debit entry or more than one credit entry or both

(D) No Narrations

(iii) Which one of the equation is correct

(A) Total Assets – Liabilities = Capital – Profit

(B) Total Assets – Liabilities = Capital + Profit

(C) Total Assets + Liabilities = Capital + Liabilities

(D) Total Assets + Liabilities = Capital – Profit

(iv) Journal is a
   (A) Memorandum record
   (B) Secondary record
   (C) Primary record
   (D) None of the above

(v) Which one of the following is appropriation of profit
   (A) Provision for taxation
   (B) Provision for depreciation
   (C) Provision for doubtful debts
   (D) None of the above

(vi) A cheque of ₹ 5,600 issued by the trader was recorded in debit column of cash book as ₹ 6,500. Assuming that the payment of cheque made by bank, the balance as per pass book of trader should be subtracted from the balance as per bank column of the cash book by
   (A) ₹ 5,600
   (B) ₹ 6,500
   (C) ₹ 12,100
   (D) ₹ 900

(vii) Which of the following errors will affect the trial balance
   (A) Sales Book undercast with ₹ 6,000
   (B) A credit purchase for ₹ 11,000 entered in sales book
   (C) Stationery purchased on credit has been recorded in purchases book
   (D) Goods sold for ₹ 7,000 has been recorded as ₹ 7,900

(viii) The Balance Sheet shows
   (A) Financial position of the business for a particular period
   (B) Financial position of the business as on a particular date
   (C) Balances of ledger accounts of the business for a particular period
   (D) None of the above

(ix) In case of credit sales, a special commission payable to consignee for taking over risk of bad debts is called as
   (A) Over-riding commission
   (B) Ordinary commission
   (C) Del-credre commission
   (D) All of the above

(x) If goods worth ₹ 13,800 are destroyed by fire and the Insurance Company admits the claim for ₹ 10,400, the purchases account will be
   (A) Debited with ₹ 13,800
   (B) Debited with ₹ 3,400
   (C) Credited with ₹ 13,800
   (D) Credited with ₹ 3,400

(b) Fill in the blanks : [1×5=5]

(i) A transaction without immediate cash settlement is known as __________ transaction.

(ii) The Accounting Standard Board was established in year __________ by the Institute of Chartered Accountants of India.

(iii) Joint Venture account is a __________ account in nature.

(iv) Income received in advance is a/an __________ .

(iv) Error of principle will __________ affect trial balance.

(c) State whether the following statements are 'True' or 'False' : [1×7=7]

(i) Written down value method of depreciation is followed to have a uniform charge for depreciation, repairs and maintenance together.

(ii) Error in carry forward of totals of sales journal/book affects two accounts.

(iii) If the closing stock appears in the trial balance, it will be shown on credit side of trading account and assets side of the balance sheet.

(iv) The balance as shown by the Bank pass book and the balance as shown by the bank column of cash book are always same.

(v) A sale is recognised when goods are sent to customer.

(vi) Endowment funds are capital receipts in a non-profit organisation.

(vii) A business transaction is always recorded in terms of money.

(d) In each of the following, one of the alternatives is correct, indicate the correct one (= 1 mark) and give brief workings (= 1 mark) : [2×4=8]

(i) On due date of his acceptance of ₹ 40,000, Murari expressed his inability to meet the bill and offered ₹ 15,000 cash and accepted a new bill for the balance amount plus interest @ 15 percent per annum for two months. The amount of new bill is

(A) ₹ 25,000

(B) ₹ 25,625

(C) ₹ 26,000

(D) ₹ 41,000

(ii) Subscription received for current year ₹ 50,000; Subscription of current year received in the previous year ₹ 5,000; Subscription received in advance in the current year ₹ 2,500 and Subscription of previous year received in current year ₹ 10,000. The amount of subscription to be shown in receipts and payments account is

(A) ₹ 50,000

(B) ₹ 62,500

(C) ₹ 60,000

(D) ₹ 55,000

(iii) Sales ₹ 18,00,000; Purchases ₹ 11,90,000 and Opening stock ₹ 3,30,000. If the rate of gross profit is 50 percent on cost, the value of closing stock will be

(A) ₹ 3,20,000

(B) ₹ 3,15,000

(C) ₹ 5,95,000

(D) ₹ 6,20,000

(iv) Goods costing ₹ 12,60,000 sent out to consignee. Out of it, $^2/_3$ goods were sold by consignee at invoice price. The invoice price determines at cost plus 20 percent in invoice price. The amount of consignee's commission at 4% will be

(A) ₹ 63,000

(B) ₹ 42,000

(C) ₹ 40,320

(D) ₹ 60,480

Answer 1. (a)

(i) — (B)

(ii) — (C)

(iii) — (B)

(iv) — (C)

(v) — (D)

(vi) — (C)

(vii) — (A)

(viii) — (B)

(ix) — (C)

(x) — (C)

Answer 1. (b)

(i) Credit

(ii) 1977

(iii) Nominal

(iv) Liability

(v) Not

Answer 1. (c)

(i) **True**

(ii) **False**

(iii) **False**

(iv) **False**

(v) **False**

(vi) **True**

(vii) **True**

Answer 1. (d)

(i) — (B) ₹ 25,625

Remaining amount of old bill = ₹ 40,000 – 15,000 = ₹ 25,000 and interest on it for two months = $25{,}000 \times \frac{15}{100} \times \frac{2}{12}$ = ₹ 625 ; hence amount of new bill = ₹ 25,625

(ii) — (B) ₹ 62,500

(₹ 50,000 + ₹ 10,000 + ₹ 2,500 = ₹ 62,500) to be shown in Receipts & Payments Account

(iii) — (A) ₹ 3,20,000

Memorandum Trading Account

Particulars	₹	Particulars	₹
To Opening Stock	3,30,000	By Sales	18,00,000
To Purchases	11,90,000	By Closing Stock (Balancing fig.)	3,20,000
To Gross Profit (@ 50% on cost or $33\frac{1}{3}$% on sales)	6,00,000		
	21,20,000		21,20,000

(iv) — (B) ₹ 42,000

Invoice Value / Price of goods sold by consignee

= $12{,}60{,}000 \times \frac{2}{3} \times \frac{125}{100}$ = ₹ 10,50,000

Consignee's commission @ 4% on ₹ 10,50,000 = ₹ 42,000.

Q. 2. (a) Find out the accounting equation from the following assets and liabilities of Bholu as on 31st March, 2012 : [3]

Land and Building	₹ 21,00,000	:	Plant and Machinery	₹ 3,60,000
Investment	₹ 1,00,000	:	Prepaid Insurance	₹ 4,000
Stock	₹ 70,000	:	Debtors	₹ 1,50,000
Creditors	₹ 1,30,000	:	Bank loan	₹ 4,50,000
Cash in hand	₹ 30,000	:	Bills payable	₹ 36,000
Outstanding Salary	₹ 10,000			

(b) Pass necessary adjustment entries for the following at the end of the account year on 31st March, 2012. [4]

(i) Fire insurance of building paid ₹ 1,500 on 10.1.2012 for the year 2012.

(ii) During the year 2011-12, office rent paid ₹ 19,000 for 10 months.

(iii) Bank loan taken on 1st May, 2011 for ₹ 3,00,000 @ 15 percent interest per annum. Including interest it was unpaid on 31st March, 2012.

(iv) On 1st October, 2011 ₹ 50,000 deposited in SBI, 5 years fixed deposit scheme, on which Interest would be received on maturity @ 9.5 percent per annum.

(c) Match the following : [3]

I	**II**
(i) AS – 8	(A) Intangible Assets
(ii) AS – 12	(B) Accounting for Government Grants
(iii) AS – 26	(C) Construction contracts
	(D) No matching statements found

Answer 2. (a)

As per Accounting Equation —

Capital + Liabilities = Assets or, Capital = Assets – Liabilities

Assets :	Land & Building		21,00,000
	Plant & Machinery		3,60,000
	Investment		1,00,000
	Stock		70,000
	Debtors		1,50,000
	Prepaid Insurance		4,000
	Cash in hand		30,000
	Total Assets		**28,14,000**
Less : Liabilities :			
	Bank Loan	4,50,000	
	Creditors	1,30,000	
	Bills Payable	36,000	
	Outstanding Salary	10,000	
	Total Liability		6,26,000
	Capital		**21,88,000**

Hence, Accounting Equation

Capital ₹ 21,88,000 + Liabilities ₹ 6,26,000 = Assets ₹ 28,14,000

Answer 2. (b)

In the books of ....

Journal Entries

Date	Particulars		L.F.	*Dr.* ₹	*Cr.* ₹
2012 March, 31					
(i)	Prepaid Fire Insurance A/c	Dr.		1,125	
	To Fire Insurance A/c				1,125
	(Being the Fire Insurance paid in advance for 9 months, now adjusted)				
(ii)	Office Rent A/c	Dr.		3,800	
	To Outstanding Rent A/c				3,800
	(Being the Office Rent outstanding for 2 months, now adjusted)				
(iii)	Interest on Bank Loan A/c	Dr.		41,250	
	To Outstanding Interest on Bank Loan A/c				41,250
	(Being the Interest on Bank Loan is Outstanding for 11 months, now adjusted)				
(iv)	Accured Interest A/c	Dr.		2,375	
	To Interest A/c				2,375
	(Being the Interest on deposit are accrued for 6 months, now adjusted)				

Answer 2. (c)

(i) AS – 8 – (D) — No matching statements found

(ii) AS – 12 – (B) — Accounting for Government Grants

(iii) AS – 26 – (A) — Intangible Assets

Q. 3. (a) Purchase price of machine ₹ 8,90,000; freight and cartage ₹ 7,000; Installation charges ₹ 30,000. Insruance charges ₹ 20,000; Residual value ₹ 40,000 and estimated useful life 5 years. Calculate the annual depreciation under straight line method. [2]

(b) State whether the following itesm will be added or subtracted during the preparation of Bank reconciliation statement, if the pass book's debit balance taken as base : [4]

(i) Bank charges debited by Bank but not recorded in cash book.

(ii) Interest on investment directly collected by Bank but not intimated to customer.

(iii) Interest on overdraft recorded only in pass book.

(iv) Cheques issued to suppliers but not presented into Bank.

(c) Pass journal enttries to rectify the following errors in the books of a trader : [4]

(i) Purchase return day book total in a page for ₹ 945 was carried forward in next page for ₹ 954.

(ii) An amount of ₹ 3,500 was received from Amal but credited to Kamal.

(iii) Goods purchased from Shekhar Stores for ₹ 4,500 was entered in sales day book as ₹ 5,400.

(iv) An amount of ₹ 800 received as commission was credited to interest account.

Answer 3. (a)

Annual Depreciation

$$= \frac{\text{Purchase Price} + \text{Freight} + \text{Installation} - \text{Residual Value}}{\text{Life of Machine}}$$

$$= \frac{₹\,8{,}90{,}000 + ₹\,7{,}000 + ₹\,30{,}000 - ₹\,40{,}000}{5 \text{ years}}$$

= ₹ 1,77,400 per annum.

Answer 3. (b)

Added — (ii) ; (iv)

Subtracted — (i) ; (iii)

Answer 3. (c)

In the book of ....

Journal Entries

	Particulars		L. F.	Dr. ₹	Cr. ₹
(i)	Return out ward or Purchase Return A/c	Dr.		9	
	To Suspense A/c				9
	(Being the Purchase Return Day Book wrongly carried forward, now rectified)				
(ii)	Kamal's A/c	Dr.		3,500	
	To Amal's A/c				3,500
	(Being Kaml account wrongly credited in place of Amal account, now rectified)				
(iii)	Purchase A/c	Dr.		4,500	
	Sales A/c	Dr.		5,400	
	To Shekhar Stores A/c				9,900
	(Being wrongly entered in Sales Day Book in place of Purchase Day Book now rectified)				
(iv)	Interest A/c	Dr.		800	
	To Commisssion A/c				800
	(Being interest account wrongly credited, in place of commission account, now rectified)				

Q. 4. (a) Journalise the following transactions in the books of Mahi : [6]

2012

November 1 : Ashok was declared insolvent and a sum of ₹ 5,600 received instead of ₹ 8,000

" 12 : An old machinery was sold to Mukesh for ₹ 15,000

" 13 : Goods withdrawn from business for personal use ₹ 2,500

" 20 : Purchased furniture from Jatin for shop ₹ 25,000

" 26 : Goods worth ₹ 15,000 burnt by fire

" 29 : Insurance company accepted the fire insurance claim of ₹ 14,000

(b) On 1st January, 2009 the Shiva Transport Company purchased a truck for ₹ 12,00,000. On 1st July, 2010 this truck was involved in an accident and was completely destroyed and ₹ 8,00,000 was received from Insurance company as a claim. On the same date, another truck was purchased by the company for ₹ 15,00,000.

The company write off 20 percent depreciation per annum on written down value method. Prepare the truck account upto 31st March, 2011, when books are closed on 31st March every year. [4]

Answer 4. (a)

In the books of Mahi

Journal Entries

Date	**Particulars**		**L. F.**	***Dr.*** ₹	***Cr.*** ₹
2012					
Nov. 1	Cash A/c	Dr.		5,600	
	Bad Debt A/c	Dr.		2,400	
	To Ashok's A/c				8,000
	(Being the Ashok was insolvent and received a smum of ₹ 5,600)				
" 12	Mukesh's A/c	Dr.		15,000	
	To Machinery A/c				15,000
	(Being the old machinery sold to Mukesh)				
" 13	Drawings A/c	Dr.		2,500	
	To Purchase A/c				2,500
	(Being the goods withdrawn from business for personal use)				
" 20	Furniture A/c	Dr.		25,000	
	To Jatin's A/c				25,000
	(Being the Furniture purchased from Jatin)				

" 26	Loss by fire A/c	Dr.		15,000	
	To Purchase A/c				15,000
	(Being the goods burnt by fire)				
29.	Insurance Company A/c	Dr.		14,000	
	Profi & Loss A/c	Dr.		1,000	
	To Loss by fire A/c				15,000
	(Being the Insurance Company accepted the fire insurance claim and loss adjusted to P/L Account)				

Answer 4. (b)

In the books of Shiva Transport Co.

Dr. **Truck Account** ***Cr.***

Date	Particulars	Amount ₹	Date	Particulars	Amount ₹
01.01.09	To Bank A/c	12,00,000	31.03.09	By Depreciation A/c $(12,00,000\times\frac{20}{100}\times\frac{3}{12})$	60,000
			"	By Balance c/d	11,40,000
		12,00,000			12,00,000
01.04.09	To Balance c/d	11,40,000	31.03.10	By Depreciation A/c $(11,40,000\times\frac{20}{100})$	2,28,000
			"	By Balance c/d	9,12,000
		11,40,000			11,40,000
01.04.10	To Balance b/d	9,12,000	01.07.10	By Insurance Co. [or. on date of Receipt-Bank all]	8,00,000
01.07.10	To Bank A/c	15,00,000	31.03.11	By Depreciation A/c	
				– On Old Truck $(9,12,000\times\frac{20}{100}\times\frac{3}{12})$	45,600
				– On New Truck $(15,00,000\times\frac{20}{100}\times\frac{9}{12})$	2,25,000
			"	By Profit & Loss A/c (Loss on truck destroyed)	66,400
			"	By Balance c/d	12,75,000
		24,12,000			24,12,000

Working :

	₹
W. D. V. on 01.04.2010	9,12,000
Depreciation	
(9,12,000 × 20% × $\frac{3}{12}$)	45,600
Balance on the date of Accident	**8,66,400**
Less : Insurance claim	8,00,000
Loss on Tuck Destroyed	**66,400**

Section - II

Answer Question No. 5, *which is compulsory and* any two *questions from Section II.*

Q. 5. (a) In each of the following one of the alternatives is correct, indicate the correct one : [1×10=10]

(i) Foreman's salary should be classified as
- (A) Variable overhead
- (B) Fixed overhead
- (C) Semi-variable overhead
- (D) None of the above

(ii) Drawing office salaries are included as
- (A) Direct expenses
- (B) Factory overhead
- (C) Office and administrative overhead
- (D) Selling and distribution overhead

(iii) Cost centre may be as
- (A) A Location
- (B) A Person
- (C) An Equipment
- (D) All of the above

(iv) In which of the following methods of pricing, the value of closing stock of material will be represented very closely at current market price
- (A) Weighted average method
- (B) FIFO method
- (C) LIFO method
- (D) Simple average method

(v) Which of the following is not included in cost
- (A) Donation
- (B) Cash discount
- (C) Transfer fee
- (D) All of the above

(vi) In which of the following, fixed overheads are not included in the cost of inventory
- (A) Absorption costing
- (B) Direct costing
- (C) Variable costing
- (D) Marginal costing

(vii) With which of the following is the concept of marginal cost closely related?
   (A) Variable cost
   (B) Fixed cost
   (C) Opportunity cost
   (D) Economic cost

(viii) Net result of a manufacturing account is
   (A) Gross profit/loss
   (B) Net profit/loss
   (C) Cost of production
   (D) Cost of sales

(ix) The term 'Notional Profit' is generally used in case of
   (A) Process costing
   (B) Job costing
   (C) Contract costing
   (D) Batch costing

(x) Which of the following costs of management is likely to have least control?
   (A) Wages cost
   (B) Advertisement cost
   (C) Machine break-down cost
   (D) Cost of insurance of building

(b) Fill in the blanks : [1×6=6]

(i) The variable cost per unit is __________ in nature.

(ii) Excess of contribution over profit is equal to __________ .

(iii) Excess of sales over break-even sales is called __________ .

(iv) The rate of change in the average employee strength during a period is termed as __________ turnover.

(v) Sub-contractors charges for getting some operations done through outsourcing is a/an __________ expenses.

(vi) __________ cost vary in direct proportion to the level of output.

(c) State with reasons whether the following statements are True or False (1 mark for T/F & 1 mark for reason) : [2×3=6]

(i) Process costing method is a suitable method for coal industry.

(ii) Profit is equal to contribution on margin of safety.

(iii) Bad debts is an administrative overhead.

(d) In each of the following, one of the alternatives is correct, indicate the correct one (= one mark) and give brief workings (= one mark) : [2×4=8]

(i) If ₹ 5,000 is spent on producing 500 units and ₹ 7,000 for producing 700 units, then the variable cost per unit is

(A) ₹ 7.50

(B) ₹ 10

(C) ₹ 17.50

(D) None of the above

(ii) Time allowed for a job — 40 hours; Time saved by a worker — 12 hours and hourly rate of wages ₹ 25. The earnings under Halsey plan will be

(A) ₹ 850

(B) ₹ 1,000

(C) ₹ 650

(D) ₹ 910

(iii) If the prime cost is ₹ 5,00,000, Factory cost is ₹ 8,00,000 and office overheads are 75 percent of the factory overheads, then cost of production will be

(A) ₹ 19,00,000

(B) ₹ 14,00,000

(C) ₹ 10,25,000

(D) ₹ 11,00,000

(iv) If break-even point is 60 percent of sales and profit is ₹ 4,80,000, then the amount of contribution is

(A) ₹ 7,20,000

(B) ₹ 12,00,000

(C) ₹ 2,88,000

(D) ₹ 1,92,000

Answer 5. (a)

(i) — (C)

(ii) — (B)

(iii) — (D)

(iv) — (B)

(v) — (D)

(vi) — (D)

(vii) — (A)

(viii) — (C)

(ix) — (C)

(x) — (D)

Answer 5. (b)

(i) — Fixed
(ii) — Fixed Cost
(iii) — Margin of Safety Sales
(iv) — Labour
(v) — Direct
(vi) — Variable

Answer 5. (c)

(i) **False** — Coal output measures in tonnes, hence unit of single output costing is suitable for coal industry.

(ii) **True** — Fixed costs are recovered from contribution on break-even sales and after that contribution earned on sales within margin of safety given profit.

(iii) **False** — It is a selling expense. Bad debts arises from credit sales. Hence, it has no relation with administrative. It relates to selling function.

Answer 5. (d)

(i) — (B) ₹ 10

$$\text{Variable cost per unit} = \frac{₹\,7{,}000 - ₹\,5{,}000}{700 - 500}$$

$$= \frac{₹\,2{,}000}{200\ \text{Units}}$$

$$= ₹\,10$$

(ii) — (A) ₹ 850

Normal Wages – 40 – 12 = 28 × ₹ 25	=	₹ 700
Bonus under Halsey Plan		
12× ₹ 25 × 50%	=	₹ 150
Total Earnings		**₹ 850**

(iii) — (C) ₹ 10,25,000

	₹
Prime Cost	5,00,000
Factory overhead (8,00,000 – 5,00,000)	3,00,000
Factory Cost	8,00,000
Office overhead @ 75% of factory overhead (3,00,000 × 75%)	2,25,000
Cost of Production	**10,25,000**

(iv) — (B) ₹ 12,00,000

BEP — 60%, it means margin of safety is 100 – 60 = 40%;

Profit equal to contribution of M.S.

Hence, total contribution = $\dfrac{4,80,000}{40\%}$ = ₹ 12,00,000

Alternatively,

$$\frac{4,80,000}{(100-60)\%}\times 100 = ₹\ 12,00,000$$

Q. 6. (a) Margin of safety, Profit and Fixed costs are ₹ 12,50,000, ₹ 5,00,000 and ₹ 12,00,000 respectively. Calculate the

(i) P/V Ratio; (ii) Sales; and (iii) Break-even point. [3]

(b) Given : [3]

Sales ₹ 18,00,000; P/V Ratio 45%; Profit ₹ 3,60,000.

Calculate the Contribution, Fixed cost and Break-even-point

(c) Using the following details, give the correct unit of cost against each industry : [4]

Industry	***Unit of cost***
(i) Bicycle	(A) Each unit
(ii) Advertising	(B) Each job
(iii) Furniture	(C) Per tonne
(iv) Coal	(D) Per bag
(v) Interior decoration	(E) Per meal
(vi) Canteen	(F) Bed per day
(vii) Cement	(G) Gallon
(viii) Nurshing Home	(H) Each contract

Answer 6. (a)

(i) P/V Ratio $= \dfrac{\text{Profit}}{\text{Margin of Safety}}\times 100$

$= \dfrac{₹\ 5,00,000}{₹\ 12,50,000}\times 100$ = 40%

(ii) Sales $= \dfrac{\text{Fixed Cost}+\text{Profit}}{\text{P/V Ratio}}$

$= \dfrac{₹\ (12,00,000+5,00,000)}{40\%}$ $= \dfrac{17,00,000}{40\%}$ = ₹ 42,50,000

(iii) Break-Even Point (BEP) $= \dfrac{F}{P/V\ Ratio} = \dfrac{₹\ 12{,}00{,}000}{40\%} = ₹\ 30{,}00{,}000$

Answer 6. (b)

(i) Contribution = Sales × P/V Ratio
= ₹ 18,00,000 × 45% = ₹ 8,10,000

(ii) Fixed Cost = Contribution – Profit = ₹ 8,10,000 – ₹ 3,60,000
= ₹ 4,50,000

(iii) Break-Even Point (BEP) $= \dfrac{F}{P/V\ Ratio} = \dfrac{₹\ 4{,}50{,}000}{45\%}$
= ₹ 10,00,000

Answer 6. (c)

(i) — (A) — Each unit
(ii) — (B) — Each job
(iii) — (A) — Each unit
(iv) — (C) — Per tonne
(v) — (B) — Each job
(vi) — (E) — Per meal
(vii) — (D) — Per Bag
(viii) — (F) — Bed per day

Q. 7. (a) From the following information you are required to calculate— (i) Variable cost ratio; (ii) Fixed cost for the whole year; (iii) Break-even sales for the whole year; and (iv) Margin of safety for the whole year : [4]

Period	*First half year* ₹	*Second half year* ₹
Sales	2,50,000	6,00,000
Profit/loss (–)	(–)30,000	1,10,000

(b) Quarterly requirement of material 5000 units, purchase price ₹ 100 per unit, ordering cost ₹ 160 per order, holding cost 10 percent per annum of average inventory

Re-order period (lead time): Average 20 days; Maximum 30 days and minimum 12 days

Consumption : Average 60 units per day; Maximum 80 units per day and minimum 40 units per day.

Calculate — (i) Re-order Quantity (EOQ); (ii) Re-order level (iii) Maximum stock level; (iv) Minimum stock level. [4]

(c) Match the following for the point of apportionment of overhead : [2]

Overhead Item	*Basis*
(i) Material handling	(A) No. of workers
(ii) General lighting	(B) Kilowatt hours
(iii) Depreciation on Machinery	(C) No. of trips made
(iv) Canteen expenses	(D) Floor area
	(E) No matching statements found

Answer 7. (a)

(i) Variable cost ratio = 100 – P/V Ratio

= 100 – 40 = 60%

P/V Ratio $= \dfrac{\text{Increase in Profit}}{\text{Increase in Sales}} \times 100 = \dfrac{1,10,000-(-30,000)}{6,00,000-2,50,000} \times 100$

$= \dfrac{1,40,000}{3,50,000} \times 100 = 40\%$

(ii) Fixed cost for the whole year : F = S × P/V Ratio – P

For first half year = 2,50,000 × 40% - (-30,000) = ₹ 1,30,000

For second half year = 6,00,000 × 40% - 1,10,000 = ₹ 1,30,000

Total Fixed Cost = ₹ **2,60,000**

(iii) Break – even sales for the whole year :

$$\text{BEP} = \frac{F}{P/V\ \text{Ratio}} = \frac{₹\,2,60,000}{40\%} = ₹\,6,50,000$$

(iv) Margin of Safety = Sales – BEP

= ₹ 2,50,000 + ₹ 6,00,000 – ₹ 6,50,000

= ₹ 2,00,000

Answer 7. (b)

(i) Economic order Quantity $= \sqrt{\dfrac{2AO}{C}}$;

$= \sqrt{\dfrac{2 \times 20,000 \times 160}{10}}$

= 800 Units

A = Annual consumption

= 5,000 × 4 = 20,000 Units

O = Ordering Cost = ₹ 160

C = Carrying Cost = 10% Of ₹ 100 = ₹ 10

(ii) Re-order level = Maximum consumption × Maximum Re-order time

= 80 × 30 = 2,400 Units

(iii) Maximum level = (Re-order level + Re-order Qty.) – (Minimum Consumption × Minimum Re-order period)

= 2,400 + 800 – (40 × 12)

= 2,720 Units

(iv) Minimum level = Re-order level – (Average Consumption × Average Re-order period)

= 2,400 – (60 × 20) = 1,200 Units

Answer 7. (c)

(i) — (C) - No. of trips made

(ii) — (D) - Floor area

(iii) — (E) - No matching statements found

(iv) — (A) - No. of workers.

Q. 8. (a) A worker takes 120 hours to complete a job on daily wages and 80 hours on a scheme of payment by results. The worker's day rate is ₹ 30 per hour. The cost of material of the product is ₹ 2,000 and the factory overheads are recovered at 150 percent of total wages. Calculate the factory (works) cost of the product under Rowan Plan. [4]

(b) Give any four methods of absorption of works (factory) overheads. [2]

(c) In a factory opening stock of finished goods was 2,560 units, the production during the period was 52,600 units, closing stock of finished goods was 4,200 units. If company spends ₹ 5 per unit on every unit sold, then find out the total selling expenses. [2]

(d) Fixed expenses ₹ 1,80,000; sales ₹ 6,00,000 and profit ₹ 1,20,000. Calculate P/V Ratio and BEP. [2]

Answer 8. (a)

Cost of Labour :

	₹
Basic Wages — 80 hours @ ₹ 30	2,400
Add : Bonus under Rowan plan	
$\frac{\text{Time Taken} \times \text{Time Saved}}{\text{Time Allowed}}$ × Rate of Wages	
$= \frac{80 \times 40}{120} \times$ ₹ 30	800
	3,200

Calculation of Factory Cost

	₹
Direct Material	2,000
Labour Cost	3,200
Prime Cost	5,200
Factory overhead @ 150% of Labour Cost	4,800
Factory Cost	**10,000**

Answer 8. (b)

Any four of following methods :

(i) Percentage on direct Material Cost

(ii) Percentage on direct Wages

(iii) Percentage on Prime Cost

(iv) Direct Labour Hour Rate

(v) Machine Hour Rate

(vi) Combined Machine Hour Rate and Direct Labour Hour Rate

(vii) Unit of Product Method

Answer 8. (c)

Goods Sold (Units) = Opening stock + Production – Closing stock

= 2,560 + 52,600 – 4,200 = 50,960 Units

Selling expenses = Units sold × Rate Per Unit

= 50,960 × ₹ 5 = ₹ 2,54,800

Answer 8. (d)

$$\text{P/V Ratio} = \frac{\text{C or F+P}}{\text{S}} \times 100 = \frac{1{,}80{,}000 + 1{,}20{,}000}{6{,}00{,}000} \times 100 = 50\%$$

$$\text{BEP} = \frac{\text{F}}{\text{P/V Ratio}} = \frac{₹\,1{,}80{,}000}{50\%} = ₹\,3{,}60{,}000$$

Where, C = Contribution

F = Fixed Cost

P = Profit

BEP = Break-Even Point