AE-148

April-2018

M.Com., Sem.-IV

510-EE : Management Accounting-II

Time : 3 Hours]

[Max. Marks : 70

1. ABC Ltd. is using machine Z for the last two years. Now, the company is thinking to replace this machine either with X or with Y machine. The following information is given : **14**

	Z	X	Y
Book value (₹)	1,00,000	—	—
Resale value now (₹)	1,10,000	—	—
Purchase price (₹)	—	1,80,000	2,15,000
Annual fixed cost including depreciation (₹)	92,000	1,08,000	1,32,000
Variable cost per unit (₹)	3	1.50	2.50
Production per hour (units)	8	8	12
Salvage value (₹)	10,000	15,000	33,000

The following information is given :

Selling price per unit (₹)	20
Cost of material per unit (₹)	10
Annual operating hours	2,000
Working life of all machines (from now) 5 years	

The company charges depreciation using straight line method. It is anticipated that additional cost of ₹ 8,000 p.a. would be required for machine Y, for advertising to sell extra output of machine Y.

Assume tax rate of 50% and cost of capital 10%. The present value of ₹ 1 to be received at the end of year at 10% is as under :

Year	1	2	3	4	5
Present Value	0.909	0.826	0.751	0.683	0.621

You are required to analyse the feasibility of proposal using NPV method.

OR

(a) The company is considering two mutually exclusive projects. The finance director thinks that project with higher NPV should be chosen where as managing director thinks that project with higher IRR should be chosen as both the project have same initial outlay and expected life. The company anticipates cost of capital of 10% and net after tax cash flow of projects are as follows : 10

(Amount in ₹ '000)

Year	0	1	2	3	4	5
Cash flow Project – X (₹)	(400)	70	160	180	150	40
Project – Y (₹)	(400)	436	20	20	8	6

Required :

(i) Calculate NPV and IRR for both projects.

(ii) State, with reasons, which project you would suggest. Trial Rate 10% & 20%.

(b) Discuss pay-back period method. 4

2. **Attempt any two :** 14

(a) Explain effect of inflation on capital budgeting decision with example.

(b) Discuss sensitivity analysis.

(c) X Ltd. is considering one of two mutually exclusive project P and Q which require cash outlay of ₹ 10,00,000 and ₹ 14,00,000 respectively. The risk free rate is 5% and risk premium is 3%. The expected net cash in flows and their certainty equivalents are as follows :

Years End	Project P		Project Q	
	Cash in flow	Certainty equivalent	Cash in flow	Certainty equivalent
1	4,00,000	0.9	6,00,000	0.8
2	6,00,000	0.8	8,00,000	0.7
3	8,00,000	0.7	10,00,000	0.6

Required :

(i) Which project should be accepted ?

(ii) Which project is risky and why ?

(d) Determine risk adjusted net present value of the following projects :

	A	B	C
Net cash outlay (₹)	2,00,000	2,40,000	4,20,000
Project life	5 years	5 years	5 years
Annual cash in flow (₹)	60,000	84,000	1,40,000
Coefficient of Variation (C.V.)	0.4	0.8	1.2

The company selects the risk adjusted rate of discount based on coefficient of variation.

C.V.	Risk Adjusted discount rate	Present value factor 1 to 5 years
0	10%	3.791
0.4	12%	3.605
0.8	14%	3.433
1.2	16%	3.274
1.6	18%	3.127

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3. The XYZ Ltd. has 3 divisions whose information is given below : 14

	Div. X	Div. Y	Div. Z
Sales (₹)	5,00,000	?	?
Operating income (₹)	25,000	30,000	?
Operating assets (₹)	1,00,000	?	2,50,000
Turnover	?	?	0.4
Margin	?	0.4%	5%
ROI	?	2%	?

Required :

(1) Calculate missing data and summarized the results.

(2) Comment on relative performance of each division.

OR

(a) The operating performance of 3 divisions of X Ltd. is as follows : 10

	Division A (₹)	Division B (₹)	Division C (₹)
Sales	38,00,000	1,70,00,000	2,00,00,000
Operating Profit	2,00,000	5,00,000	10,00,000
Investment	20,00,000	62,50,000	80,00,000

(i) Using operating profit margin percentage which is the most profitable division ?

(ii) Using rate of return on investment, which is the most profitable division ?

(iii) Which of the above two measures give better indication of overall operating performance ?

(b) Explain responsibility centres. 4

AE-148 10

4. ABC Ltd. has two divisions, A and B. Division A manufactures product X which it sells in an open market as well as to division B, which process it to manufacture Z. The manager of Division B has expressed the opinion that the transfer price is too high. **14**

Division A is selling 40,000 units in open market and 10,000 units to division B, all at ₹ 20 per unit. It is not anticipated that these demands will change. The variable cost per unit is ₹ 12 and fixed cost are ₹ 2 lakh.

The manager of division A anticipates that division B will want a transfer price of ₹ 18. If he does not sell to division B, ₹ 30,000 of fixed cost and ₹ 1,75,000 of assets can be avoided. The manager of division A would judge primarily on his rate of return assets. The firm's existing assets are of ₹ 8 lakhs.

(a) Should the manager of division A transfer its product at ₹ 18 to division B ?

(b) What is the lowest price that the division A should accept ?

OR

(a) What is transfer pricing ? Explain cost based transfer pricing.

(b) Explain objectives of transfer pricing alongwith dual pricing method. **7**

5. (A) Choose the correct option : **7**

(1) A company's ROI would generally increase when

(a) Asset increase (b) Selling price decrease

(c) Cost decrease (d) Cost increase

(2) Which pricing method is useful when the selling division is operating below capacity ?

(a) Variable cost (b) Standard cost

(c) Actual full cost (d) None of above

(3) Division under transfer pricing system is treated as

(a) Cost centre (b) Profit centre

(c) Investment centre (d) None of above

(4) To take capital budgeting decision is _____ decision.

    (a) future   (b) past

    (c) present   (d) (a) and (c)

(5) Internal rate of return is _____.

    (a) cut off rate   (b) hurdle rate

    (c) weighted average cost of capital (d) All of above

(6) Which formula is used to calculate present value ?

    (a) $\dfrac{1}{(1+r)^n}$ (b) $\dfrac{1}{(r+1)^n}$

    (c) $\dfrac{1}{(1+n)^r}$ (d) None of above

(7) With increase in discounting rate, there is _____ in present value.

    (a) increase   (b) decrease

    (c) no change   (d) None of above

(B) State True or False :

7

(1) Payback period method has no relation with cash flow to determine time period.

(2) Internal rate of return is always greater than cost of capital.

(3) Two projects having same payback period, for selection of best project sensitivity analysis can be used.

(4) Decision tree approach is technique which deals with risk measurement.

(5) Responsibility Accounting is linked with planning and control function.

(6) Under responsibility accounting, on non-achievement of goals, respective person is penalized.

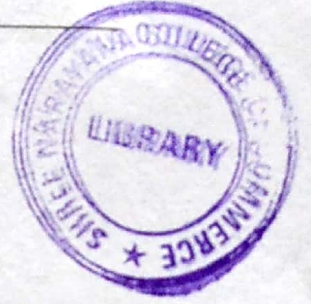(7) A transfer price is considered on the basis of actual value rather than notional value.

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Seat No. : _____

AB-108

April-2018

M.Com., Sem.-IV

508 : Risk Management

Time : 3 Hours]

[Max. Marks : 70

Instruction :   **All** questions are compulsory.

1.   (a)   Define Risk management and discuss its objectives.   7

    (b)   Explain the methods of managing risk.   7

OR

    (a)   Explain the stages of the risk management process.

    (b)   Discuss the concept of cost of risk.

2.   (a)   Distinguish between the internal risk exposures and external risk exposures.   7

    (b)   Explain the concept of Value At Risk (VAR).   7

OR

    (a)   Explain various methods of risk identification and evaluation of risk management.

    (b)   Explain the concept of risk control.

3.   (a)   Explain the meaning and techniques of risk financing.   7

    (b)   Explain transfer of activity and transfer of risk in corporation.   7

OR

    (a)   Discuss the external factors affecting risk financing.

    (b)   Evaluate insurance as a risk transfer tool.

4.   (a)   Explain the concept of risk retention with its advantages.   7

OR

    Discuss the concept of disaggregated risk management with its limitation.

    (b)   Write note on the following : (Any **one**)   7

        (1)   Determinants of Risk Retention Policy

        (2)   Enterprise Risk Management

5. Select the correct option from the following questions : 14

(1) _____ is not included in the business risk.
   (a) Natural events   (b) Price risk
   (c) Credit risk   (d) Financial risk

(2) _____ is not a part of the Risk Management activity.
   (a) Risk creation   (b) Risk transfer
   (c) Risk avoidance   (d) Polling arrangement

(3) _____ is not a cause of Business risk.
   (a) Standard of living   (b) Natural calamities
   (c) Change in fashion   (d) Competition

(4) _____ is first step in the Risk Management process.
   (a) Risk identification   (b) Risk financing
   (c) Risk control   (d) None of them

(5) _____ is the simplest form of listing the risk exposures and operative causes.
   (a) Check-list   (b) Threat analysis
   (c) Event Analysis   (d) Flow-chart

(6) Retention takes place in case of _____ severity and _____ frequency.
   (a) High-High   (b) Low-Low   (c) High-Low   (d) Low-High

(7) The Insurance business is regulated by _____ in India.
   (a) IDBI   (b) IRDA   (c) IFCI   (d) SIDBI

(8) The risk retention policy saves the firm from _____.
   (a) Interest payment   (b) Payment of Insurance premium
   (c) Losses   (d) Third party risk

(9) Aggregated risk management is essential in _____ sector.
   (a) Agriculture   (b) Industry   (c) Service   (d) All of them

(10) The majority of risks lies _____ the organization.
   (a) near   (b) within   (c) outside   (d) None of these

(11) Risks which are caused by changes in the economy are known as _____ risk.
   (a) Natural   (b) Social   (c) Dynamic   (d) All of these

(12) Risk Retention is also known as _____.
   (a) Risk control   (b) Risk transfer
   (c) Self insurance   (d) Risk reduction

(13) _____ is the human oriented external risk exposure.
   (a) Weather change   (b) Cyclone   (c) Terrorism   (d) Earthquake

(14) Compulsory seat belt for four-wheeler drivers is a loss _____ measures.
   (a) Prevention   (b) Minimization
   (c) Both prevention and minimization   (d) None of these
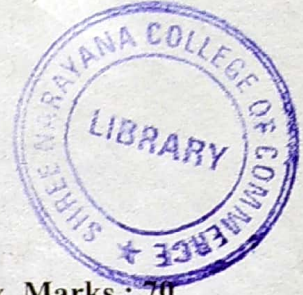
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AA-108

April-2018

M.Com., Sem.-IV

507 : Operational Research
New Course

Time : 3 Hours]　　　　　　　　　　　　　　　　　　[Max. Marks : 70

Instructions : (1) Figures to the right indicate marks.
　　　　　　　　 (2) Use of calculator is permitted.
　　　　　　　　 (3) Statistical tables and graph will be provided on request.

1. (A) Define 'Model'. State its types in detail.　　　　　　　　　　　7

OR

What is Decision Theory ? Discuss decision making under certainty, under uncertainty and under risk.

(B) What is Operation Research ? Explain its phases in short.　　　　4

OR

Determine the best act for the following pay-off matrix by applying (i) Maxi-Min Principle (ii) maxi-max principle (iii) Mini-max principle (iv) Laplace principle.

Acts	Events		
	E_1	E_2	E_3
A_1	11	6	2
A_2	7	1	8
A_3	4	5	0
A_4	1	9	7

(C) Find the value of EVPI from the following pay-off matrix :　　　3

Types of Events	Prob.	Acts		
		A_1	A_2	A_3
S_1	0.5	30,000	22,000	17,000
S_2	0.3	20,000	18,000	17,000
S_3	0.2	15,000	19,000	17,000

OR

The cost price of an item is ₹ 15 and its setting price is ₹ 20. The unsold item can be returned at ₹ 13 at end of the day. Prepare pay-off matrix from the following :

Demand in (units)	30	40	50	60
Days	30	40	20	10
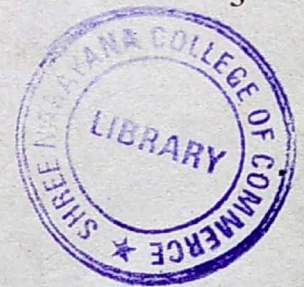
2. (A) Maximize $z = 4x_1 + 3x_2 + 6x_3$. Subject to following constraints by using simplex method

$$2x_1 + 3x_2 + 2x_3 \leq 440$$
$$4x_1 + 3x_3 \leq 470$$
$$2x_1 + 5x_2 \leq 430$$

7

OR

(i) Obtain solution of the following transportation problem by using Vogel's method :

Godowns	Sales Depots			Supply
	x_1	x_2	x_3	
A	13	17	11	20
B	12	19	22	30
C	20	12	15	50
Requirement	35	15	50	

Test whether the given below solution obtained by Vogel's method is optimal or not ?

Origins	Destinations				Availability
	A	B	C	D	
x	40		20		60
	2	3	2	5	
y		40	40	20	100
	4	4	3	2	
z		40			40
	5	5	6	10	
Requirement	40	80	60	20	–

(B) Explain Hungarian method for solving assignment problem :

4

OR

Give assignment in the following problem for maximum profit :

Person	Job		
	A	B	C
I	6	9	10
II	7	8	8
III	8	8	8
IV	10	6	7

(C) Explain slack variables and surplus variables.

3

OR

State the difference between Assignment problem and Transportation problem.

3. (A) Solve the following game : 7

Player - B

(i) **Player – A**

	B_1	B_2	B_3
A_1	1	2	1
A_2	0	-4	-1
A_3	1	3	-2

Player - B

(ii) **Player – A**

	B_1	B_2	B_3
A_1	2	-1	3
A_2	-2	4	3
A_3	4	2	6

OR

There are seven jobs, each of which have to go through machines A and B in order AB. Processing time in hours is given in the table. Calculate optimal sequence, total elapsed time, idle time of both machines.

Job	1	2	3	4	5	6	7
Machine – A	3	12	15	6	10	11	9
Machine – B	8	10	10	6	12	1	3

(B) Attempt any **two** : 4
   (1) State the steps of obtaining saddle point.
   (2) State the name of the models of the sequencing problem.
   (3) Write the assumptions for sequencing problem.

(C) Explain the principle of dominance. 3

OR

State following game in the form of L.P.P. :

Player – A

Player – B $\begin{bmatrix} 7 & 3 & 8 \\ 2 & 10 & 4 \end{bmatrix}$

4. (A) A project has the following activities and time estimates : 7

Activity	Job	Optimistic time	Most likely time	Pessimistic time
a	1 – 2	2	2	14
b	2 – 3	2	2	8
c	2 – 4	3	6	15
d	3 – 5	4	10	16
e	3 – 4	4	10	28
f	4 – 6	2	5	14
g	5 – 6	1	4	7

(1) Draw the PERT Network Diagram.
(2) Determine expected time and variance.

(3) Determine the mean project completion time and its variance also.

(4) Find the probability that the project is not completed in 30 days. [Value of z = 1 is 0.3413]

OR

Draw a PERT diagram for the following project and find total float and independent float also find C.P.M.

Activities	a	b	c	d	e	f
Preceding Activities	–	a	b	–	d	c, e
Expected Time	4	6	8	10	4	10

(B) Explain any **two** :

    (i) Total Float   **4**

    (ii) Free Float

    (iii) Independent Float

(C) Explain merits and demerits of PERT.

OR

                                                  3

Distinguish between PERT and CPM.

5. (A) Attempt any **four** :   **8**

    (1) What is EVPI in decision theory ?

    (2) State the merits of 'Model'.

    (3) What is unbounded solution ?

    (4) Explain the types of game in short.

    (5) Explain forward-pass and Backward-pass methods with reference to PERT and CPM.

    (6) Explain following terms in short with reference to L.P.P :

        (i) Objective function

        (ii) Constraints

(B) Do as directed :   **6**

    (1) Draw PERT Chart from the following information :

Path	1 – 2	2 – 3	2 – 4	3 – 5	4 – 7	5 – 6	4 – 9	3 – 7	6 – 9	7 – 9	5 – 10	10 – 11	6 - 11	9 – 11
Time	10	9	7	6	4	12	8	8	5	8	4	7	5	11

    (2) Processing time taken by three machines on six jobs is given below :

Jobs		1	2	3	4	5	6
	M_1	3	12	5	2	9	11
Machines	M_2	8	6	4	6	3	1
	M_3	13	14	9	12	8	13

Determine the optimal sequence of jobs.

Seat No. : _____

AH-112

April-2018

M.Com., Sem.-IV

512 EE : Management Accounting – II
(Essay)

Time : 3 Hours]

[Max. Marks : 70

1. What is Capital Budgeting ? Discuss objectives and importance of capital budgeting decision. Distinguish between techniques based on accounting profit and time value of money. Explain Pay-back period, Net present value and profitability Index method of Capital Budgeting with example. **35**

OR

Explain various methods of Capital Budgeting under risk and uncertainty with example.

2. Responsibility Accounting is very useful method for measuring divisional performance – Do you agree with the statement ? Why ? Explain various responsibility centres and methods of divisional performance measurement in detail with example. **35**

OR

Explain role of transfer pricing for business. Discuss in detail various methods of transfer pricing. Explain International Transfer Pricing.

_____

Seat No. : _____

AC-112

April -2018

M.Com., Sem.-IV

509-EA/ED/EE : International Accounting

Time : 3 Hours]   [Max. Marks : 70

1. (A) What is International Accounting ? Explain its importance.   7
    (B) Explain scope of International Accounting.   7

                                          OR

    (A) Explain characteristics of International Accounting.
    (B) Distinguish between Domestic Accounting and International Accounting.

2. (A) What is scope of IFRS ?   7
    (B) Explain benefits of Convergence.   7

                                          OR

    (A) Discuss challenges to Convergence.
    (B) What is the role of IFRIC in developing IFRS ?

3. (A) An Indian Company purchased goods worth $ 6,00,000 from U.S.A. on 1-5-2017.
         $ 1,50,000 was paid at the time of contract. Balance amount was paid as under :
         1-6-2017 $ 2,00,000 Exchange Rate $1 = ₹ 56.50
         1-7-2017 $ 1,50,000 Exchange Rate $1 = ₹ 58.70
         1-8-2017 $ 1,00,000 Exchange Rate $1 = ₹ 57.90
         Exchange Rate on the date of purchase 1-5-2017 was $1 = ₹ 55.80.
         Pass necessary Journal Entries in the books of Indian Company.   7
    (B) Explain Integral Foreign operations and Non-integral Foreign operations.

   **OR**

    X Ltd. has its head office at Mumbai and its branch is in England. From the trial
    balance of H.O. and branch as on 31-3-2018, Prepare (i) Trial Balance of Branch
    in Indian Rupees and (ii) Final accounts of head office incorporating accounts of
    branch.

                            Trial Balance as on 31-3-2018

Debit Balance	H.O. (₹)	Branch (Pound)	Credit Balance	H.O. (₹)	Branch (Pound)
Purchase	5,00,000	4,800	Sales	10,00,000	9,000
Office Expenses	1,20,000	880	Share Capital	4,60,000	–
Cash and Bank Balance	40,000	1,280	Creditors	70,000	250
Debtors	1,70,000	600	H.O. A/c.	–	1,750
Fixed Assets	8,00,000	–	Goods sent to		
Opening Stock	60,000	240	Branch	1,80,000	–
Cash sent to H.O.	–	1,200	Cash received		
Goods sent to H.O.	–	2,000	from branch	90,000	–
Branch A/c.	1,10,000	–			
	18,00,000	11,000		18,00,000	11,000

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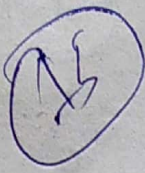
Additional Information :

(i) Closing Stock : H.O. ₹ 70,000, Branch Pound 300.

(ii) Calculate 12 % depreciation p.a. on fixed assets.

Exchange Rate :

(i) 1-4-2017   1 Pound = ₹ 86

(ii) 31-3-2018   1 Pound = ₹ 90

(iii) Average   1 Pound = ₹ 88

4. (A) Give meaning of Business combination and explain business combination in nature of merger.   7

(B) Explain Current Cost Accounting Method.   7

OR

Following are the Balance Sheets of H Ltd. and S Ltd. as on 31-3-2017.

Particulars	H. Ltd. (₹)	S. Ltd. in US ($)
I. Equity and Liabilities :		
1. Shareholder's funds		
Share Capital	20,00,000	7,500
(Each share of ₹ 10 each and $ 10 each)		
General Reserve	4,00,000	2,500
Capital Reserve	80,000	–
Profit and Loss Account	2,40,000	5,000
2. Non-current Liabilities :		
Long term borrowings	4,00,000	10,000
3. Current Liabilities :		
Creditors	2,40,000	2,500
Outstanding Expenses	1,60,000	2,500
Total :	**35,20,000**	**30,000**
II. Assets :		
1. Non-current Assets		
Investment in S. Ltd. (10,000 shares)	5,00,000	–
Fixed Assets	16,00,000	15,000
Other Investments	7,80,000	7,500
2. Current Assets :		
Stock	1,60,000	4,000
Debtors	3,00,000	1000
Bank	1,80,000	2,500
Total :	**35,20,000**	**30,000**

Additional Information :

(1) H. Ltd. purchased shares of S Ltd. on 1-10-2016. Balance of General Reserve and Profit and Loss Account in the books of S Ltd. on 1-10-2016 were $ 1,000 and $ 2,000 respectively.
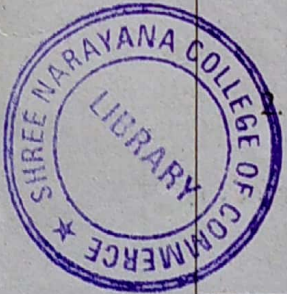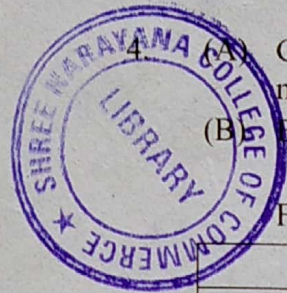
AC-112   6

(2) Exchange rates are as under :

on 1-04-2016 $ 1 = ₹ 62

on 1-10-2016 $ 1 = ₹ 63

on 1-03-2017 $ 1 = ₹ 66

Average $ 1 = ₹ 64

Prepare consolidated Balance Sheet of H Ltd. as on 31-3-2017.

5.   Select appropriate option.   14

    (1)   _____ is included in the International Accounting.

         (A)   Foreign Currency Transactions   (B)   Effect of Inflation

         (C)   Integrated Accounts   (D)   All of these

    (2)   IFRS are developed by _____

         (A)   CICA   (B)   ICAI

         (C)   IASB   (D)   SAIB

    (3)   _____ is not included in financial report prepared under IFRS.

         (A)   Statement of Financial Affairs

         (B)   Fund Flow Statement

         (C)   Statement showing changes in Equity

         (D)   Cash Flow Statement

    (4)   _____ is not included in Indian Entities covered under convergence to IFRS.

         (A)   Listed Entities

         (B)   Banking Entities

         (C)   Insurance Companies

         (D)   Entities having turnover less than 100 crores

    (5)   Exchange of various currencies at forward rate is called as _____

         (A)   Foreign currency   (B)   Forward Rate

         (C)   Forward Exchange Contract   (D)   Foreign Operation

    (6)   Under _____ approach, Profit or Loss arising out of conversion of currency is not recorded in income statement of current year.

         (A)   Non-Deferral   (B)   Partial-Deferral

         (C)   Deferral   (D)   Amortification

    (7)   Under _____ type of amalgamation, assets and liabilities of Vendor company are taken at their market value.

         (A)   Merger   (B)   Purchase

         (C)   Merger and purchase both   (D)   Acquisition

(8) _____ is not a method of consolidation.
   (A) Debt consolidation   (B) Line by line consolidation
   (C) Equity consolidation   (D) Pro-rata consolidation

(9) Conversion factor = _____

   (A) $\dfrac{\text{Index on the date of transaction}}{\text{Index at the end of accounting year}}$

   (B) $\dfrac{\text{Historical Price} \times \text{Index at the end of accounting year}}{100}$

   (C) $\dfrac{\text{Historical Price} \times 100}{\text{Index at the end of accounting year}}$

   (D) $\dfrac{\text{Index at the end of Accounting year}}{\text{Index on the date of transaction}}$

(10) Under Current Cost approach of inflation accounting, Profit is divided into _____.

   (A) Current Operating Profit   (B) Realized Holding Gain
   (C) Unrealized Holding Grains   (D) All of these

(11) _____ approach gives the effect of foreign inflation.
   (A) The Restate – Translate approach
   (B) The Translate Restate approach
   (C) Restate Current value and conversion
   (D) All of these

(12) _____ is ignored in historical accounting.
   (A) Holding gain
   (B) Replacement of asset
   (C) Current value of Non-current assets
   (D) All of these

(13) Under _____ operation is carried out in more than one currencies.
   (A) Non-Integral Operation   (B) Integral Operation
   (C) Domestic Operation   (D) All of these

(14) _____ IFRS is related to business combinations.
   (A) IFRS – 1   (B) IFRS – 2
   (C) IFRS – 3   (D) IFRS – 4