

CTMT

Number of Pages : 6
Number of Questions: 6

Total Marks: 100
Time Allowed: 3 Hrs

Question No. 1 is compulsory. Answer any **four** questions from the rest.
Working notes should form part of the answer.

1a) Computo Ltd manufactures two parts 'P' and 'Q' for computer industry

P: annual production and sales of 1, 00,000 units at a selling price of Rs. 100.05 per unit

Q: annual production and sales of 50,000 units at a selling price of Rs.150 per unit

Direct and indirect costs incurred on these two parts are as follows:

	(Rs. in thousands)		
	P	Q	Total
Direct material cost (variable)	4,200	3,000	7,200
Labour cost (variable)	1,500	1,000	2,500
Direct machining cost (see note)*	700	550	1,250
Indirect costs:			
Machine set-up cost			462
Testing cost			2375
Engineering cost			2250
			16037

*Note:

Direct machining costs represent the cost of machine capacity dedicated to the production of each product. These costs are fixed and are not expected to vary over the long-run horizon.

Additional information is as follows:

	P	Q
Production batch size	1000 units	500 units
Set up time per batch	30 hours	36 hours
Testing time per unit	5 hours	9 hours
Engineering cost incurred on each Product	8.40 lacs	14.10 lacs

A foreign competitor has introduced product very similar to 'p'. To maintain the company's share and profit, Computo Ltd has to reduce the price to Rs.86.25. The company calls for a meeting and comes up with a proposal to change design of product 'P'. The expected effect of new design is as follows:

- ◆ Direct material cost is expected to decrease by Rs. 5 per unit.
- ◆ Labour cost is expected to decrease by Rs. 2 per unit.
- ◆ Machine time is expected to decrease by 15 minutes ; previously it took 3 hours to produce 1 unit of 'p '. The machine will be dedicated to production of new design.
- ◆ Set up time will be 28 hours for each set up
- ◆ Time required for testing each unit will be reduced by 1 hour.
- ◆ Engineering cost and batch size will be unchanged.

Required:

- i. Company management identifies that cost driver for Machine set-up costs is set-up hours used in batch setting and for testing costs is 'testing time'. Engineering costs are assigned to products using a special study. Calculate the full cost per unit of 'p' and 'Q' using activity Based costing.
- ii. What is the Mark-up on full cost per unit of P?

What is the target cost per unit of new design to maintain the same mark-up Percentage on Full cost per unit as it had earlier? Assume cost per unit of cost drivers for the new design remains unchanged

- b)** Determine the selling price per unit to earn a return of 12% net on capital employed (net of taxes @40%).

The cost of production and sale of 80,000 units per annum are:

Material	Rs.4, 80,000	Labour	Rs.1, 60,000
Variable overheads	Rs.3, 20,000	Fixed overheads	Rs.5, 00,000

The fixed portion of capital employed is Rs.12 lacs and the varying portion is 50% of sales turnover.

- c) What are the applications of incremental cost techniques in managerial decision making?

(12+4+4=20 Marks)

- 2 a) Aashish Ltd will produce 3,00,000 kgs of S and 6,00,000 kgs of Y from an input of 9,00,000 kgs of raw material Z. The selling price of S is Rs.8 per Kg and that of Y is Rs.6 per Kg.

Processing costs amounts to Rs.54 lacs per month as under:

Raw material Z 9,00,000 Kgs @ Rs.3 per kg	Rs.27,00,000
Variable processing costs	Rs.18,00,000
Fixed processing costs	<u>Rs. 9,00,000</u>
Total costs	<u>Rs.54,00,000</u>

There is an offer to purchase 60,000 kgs of Y additionally at a price of Rs.4 per Kg. The existing market for Y will not be affected by accepting the offer. But the price of S is likely to be decreased uniformly on all sales. Find the minimum reduced average price for S to sustain the increased sales.

- b) Explain skimming pricing strategy.

- c) Explain main features of ERP.

(12+4+4= 20 Marks)

- 3 a) An advertising firm desires to reach two type of audiences- customers with annual income of more than Rs.40,000 (target audience A) and customers with annual income of less than Rs.40,000 (target audience B) . The total advertising budget is Rs. 2,00,000. One programme of T.V advertising costs Rs.50,000 and one programme of Radio advertising costs Rs.20,000. Contract conditions require that there should be atleast 3 programmes on T.V and number of Programmes on Radio must not exceed 5. survey indicates that a single T.V programme reaches 7,50,000 customers in target audience A and 1,50,000 in target audience B. one radio programme reaches 40,000 customers in Target audience A and 2,60,000 in target audience B.

Formulate this as a linear programming problem and determine the media mix to maximize the total reach.

- b) Distinction between PERT and CPM.

- c) Explain 'back flushing' in JIT system.

(9+6+5=20 Marks)

- 4 a) Division A is a profit centre that produces three products X,Y & Z and each product has an external market. The relevant data is as;

Particulars	X	Y	Z
External Market Price p.u (Rs.)	48	46	40
VC of Div.A (Rs.)	33	24	28
Labour hours p.u – Div. A	3	4	2
Maxi. External sales units	800	500	300

Up to 300 units of Y can be transferred to an internal division B. Division B has also the option of purchasing externally at a price of Rs.45 p.u.

Determine the transfer price for Y if the total labour hours available in division A is;

*3800 hours

*6199 hours

- b) Explain the concept of discretionary costs with examples.

(15+5= 20 Marks)

- 5 (a) A private firm employs typists on hourly piece rate basis for their daily work. Five typists are working in that firm and their charges and speeds are different. On the basis of some earlier understanding, only one job is given to one typist and the typist is paid in for full hours even when he or she works for a fraction of an hour. Find the least cost allocation for the following data

Typist	Rate per hour (Rs.)	Number of pages Typed per hr	Job	No. of pages
A	5	12	P	199
B	6	14	Q	175
C	3	8	R	143
D	4	10	S	298
E	4	11	T	178

- b) Explain the concept of cost drivers with examples.

(15+5=20 Marks)

- 6 (a) The following figures are available. Find out the missing figures, giving appropriate formulae;

			Rs
Budgeted profit			15,000
<i>Less: Adverse variances:-</i>			
Contribution price variance	10,600		
Direct materials variance	1,000		
Fixed overhead variance	<u>600</u>	(12,200)	
			<u>2,800</u>
<i>Add: Favourable variance:</i>			
Contribution quantity variance	1,800		
Direct wages variance	600		
Variable overhead variance	<u>1,800</u>	<u>2,400</u>	<u>4,200</u>
Actual Profit			<u>7,000</u>

There is no inventory

Production unit = sales units for both actual and budget.

Std. selling price Rs.18 / unit
 Std. variable cost Rs.15/unit
 Std. contribution Rs.3/unit
 Actual selling price Rs.17/unit
 Budgeted sales 10,000 units

Std. material cost p.u = Re.1 (which is 5kgs @ 20 paise/kg)
 Material usage variance = 400 (A)
 Actual labour hours @ actual rate = Rs.63, 000
 Actual labour hours @ std. rate = Rs.61, 950
 Variable overhead standard rate = Rs.2
 Std. hours of production = 4 p.u
 Variable overhead at standard rate = Rs.84, 800
 Variable overhead expenditure variance = 400 (A)
 Budgeted fixed overhead = Rs.15000

Find out the following;

- ☐ Actual sales units
- ☐ Actual sales rupees
- ☐ Actual quantity of raw materials used

- o Labour efficiency variance
- o Actual variable overhead in rupees
- o Variable overhead efficiency variance
- o Actual fixed overheads
- o Operating profit variance

- b)** A Pharmaceutical company produces formulations having a shelf life of one year. The company has a opening stock of 30,000 boxes on 1st January,2005. and expected to produce 1,30,000 boxes as was in the just year ended 2004. expected sale would be 1,50,000 boxes. Costing department has worked out escalation in cost by 25% on variable cost and 10% on fixed cost. Fixed cost for the year 2004 is Rs. 40 per unit. New price announced for 2005 is Rs.100 per box. Variable cost on opening stock is Rs.40 per box. Compute breakeven volume for the year 2005.

(14+6=20 Marks)

PRIME ACADEMY
29th SESSION MODEL EXAM
COST MANAGEMENT – OLD SYLLABUS
SUGGESTED ANSWERS

1 a)

Working notes:	Rs	Rs
Particulars	P	Q
(a) production/sales quantity (units)	1,00,000	50,000
(b) Batch Size (units)	1000	500
(c) No of Batches (a/b)	100	100
(d) Set up time per batch (hours)	30	36
(e) Total set up hours (c x d) (hours)	3,000	3,600
(f) Machine set up cost (Rs)		4,62,000
(g) Cost driver per machine set up hour		

$$\frac{4,62,000}{6,600} = \text{Rs.70}$$

(h) Testing time per unit	5 hours	9 hours
(i) Total testing time (a x h) (hours)	5,00,000	4,50,000
(j) Testing cost: Rs. 23,75,000		
(k) Cost driver per testing hour:	$23,75,000/9,50,000 = \text{Rs. 2.50}$	

(a) Computation of full cost per unit using Activity Based costing:

		Rs	Rs
Particulars	Basis	P	Q
Direct material	Direct	42,00,000	30,00,000
Direct labour	Direct	15,00,000	10,00,000
Direct machine cost	Direct	7,00,000	5,50,000

Machine set up cost	3,000 hours @ Rs.70	2,10,000	
	3,600 hours @ Rs.70		2,52,000
Testing cost	5,00,000 hours @ Rs.2.50	12,50,000	
	4,50,000 hours @ Rs.2.50		11,25,000
Engineering cost	Allocated	8,40,000	14,10,000
Total cost (Rs.)		<u>87,00,000</u>	<u>73,37,000</u>
Cost per unit (Rs.)		87.00	146.74

(b) Mark up on full cost basis for product P:

Particulars	per unit (Rs)
Selling price	100.05
Less: Full cost	<u>87.00</u>
Mark up	<u>13.05</u>
Percentage of mark up on full cost	$\frac{13.05}{87.00} \times 100 = 15\%$

(c) Target cost of product P after new design is implemented:
Rs

Target price (given)	86.25
Mark –up $\frac{86.25 \times 15}{115}$	<u>11.25</u>
Target cost per unit (Rs)	<u>75.00</u>

- 1 b)** Return of 12% net (after tax of 40%) on capital employed is equivalent to 12 % / (1-.04)= 20% (gross) on capital employed.

Let the selling price per unit to be 'X'

Since total sales = Total cost+ profit

$$\text{i.e } 80,000 X = 14,60,000 + 20\%(12,00,000 + 0.5 \times 80,000X)$$

$$\text{or } 80,000 X = 14,60,000 + 2,40,000 + 8,000 X$$

$$\text{or } 72,000 X = 17,00,000$$

$$\text{or } X = 17,00,000 / 72,000 = \text{Rs.}23.61$$

Hence selling price per unit will be Rs.23.61.

- 1 c) Incremental cost technique:** It is a technique used in preparation of ad-hoc information in which only cost and income differences between alternative courses of actions are considered. This technique is applicable to situations where fixed costs.

The essential pre-requisite for making managerial decisions by using incremental cost technique, is to compare the incremental costs with incremental revenues. So long as the incremental revenue is greater than incremental costs, the decision should be in favour of the proposal.

Applications of incremental cost techniques in managerial decision making:

The important areas where the incremental cost analysis could be used for managerial decision making are:

- (i) Introduction of a new product.
- (ii) Discontinuing a product, suspending or closing down a segment of business.
- (iii) Whether to process a product or not.
- (iv) Acceptance of an additional order from a special customer at lower than existing price.
- (v) Make or buy decisions.
- (vi) Lease or buy decisions.
- (vii) Equipment replacement decision

- 2 a)** Since S and Y are produced simultaneously from an input or raw material Z, therefore when additional 60,000 kgs of Y is produced then 30,000 kgs of S will also be produced simultaneously. The input of material Z required for these additional 60,000 kgs of Y and 30,000 kgs of S will be 90,000 kgs of material Z. Hence the cost of processing 90,000 kgs of material will be as follows:

	Rs
Cost of Raw material Z (90,000 kgs x Rs.3)	2,70,000
Variable processing cost (90,000 kgs x Rs.2)	1,80,000
Total costs of processing	4,50,000
Less: Sales revenue from 60,000 kgs of Y (60,000 Kgs x Rs.4)	2,40,000
Balance cost to be recovered	2,10,000
Current sales revenue from sale of 3,00,000 Kgs of S (3,00,000 kgs x Rs.8)	24,00,000
Total sales revenue to be earned from sale of S (3,00,000 Kgs + 30,000 Kgs)	26,10,000
Hence minimum price per kg of S to recover Rs.26,10,000 from the sale of 3,30,000 kgs of S (Rs.26,10,000/3,30,000 kgs)	7.91

2 b) It is a policy where price are kept high during early period of products existence. This can be synchronized with high promotional expenditure and in the latter years the prices can be gradually reduced,
The reasons for following such policies are:

- 1) The demand is likely to be inelastic till the products are established in the market.
- 2) The gradual reduction in price in the latter years will tend to increase the sales.
- 3) This method is preferred because in the initial periods when the demand for the product is not known the price covers the initial cost of production.
- 4) High initial capital outlays needed for manufacture, results in high cost of production. In addition to this , the producer has to incur high promotional expenditure resulting in increased cost.

- 2 c)**
- i) It facilitates company wide integrated information systems covering all areas like manufacturing, purchases, payables etc.
 - ii) It bridges information gap across organizations.
 - iii) It eliminates business problems like material shortages, inventory problems etc.
 - iv) It provides complete integration of systems not only within departments but also across organization.
 - v) It performs core activities and increases customer services thereby enhancing the image of the company.

- 3 a)** Let X_1 be number of programmes of T.V advertising and X_2 denotes number of programmes of radio advertising.

One T.V programme reaches 7,50,000 customers in target audience A and 1,50,000 customers in target audience B, whereas one radio programme reaches 40,000 customers in target audience A and 2,60,000 in target audience B. since the the advertising firm wishes to determine the media mix to maximize total reach:

Objective unction is given by:

$$\text{Maximize } Z = (7,50,000 + 1,50,000)X_1 + (40,000 + 2,60,000)X_2$$

$$\text{Or Maximize } Z = 9,00,000 X_1 + 3,00,000 X_2$$

Contract conditions require that there should be atleast 3 programmes on T.V. and number of programmes on radio must not exceed 5.

$$\begin{aligned} \text{Therefore, } X_1 &\geq 3 \\ X_2 &\leq 5 \end{aligned}$$

Now the LPP problem is as follows

$$\text{Maximize } Z = 9,00,000 X_1 + 3,00,000 X_2$$

Subject to the constraints

$$\begin{aligned} 5X_1 + 2X_2 &\leq 20 \\ X_1 &\geq 3 \\ X_2 &\leq 5 \end{aligned}$$

Where $X_1, X_2 > 0$

- 3 b)** The PERT and CPM models are similar in terms of their basic structure, rationale and mode of analysis. However there are certain distinctions between PERT and CPM::
- (1) CPM is activity oriented whereas PERT is event oriented.
 - (2) CPM is deterministic model i.e it will not take into account the uncertainties involved in time estimation in execution of a job whereas PERT is a probabilistic model.
 - (3) CPM places due emphasis on time and cost and evaluates the trade off between project cost and item whereas PERT is primarily concerned with time.
 - (4) CPM is commonly used for those projects which are repetitive in nature and where any person would have a prior experience whereas PERT is used where the time required to complete projects are not known.

3 c) Back flushing in JIT system:

- Traditional accounting system records flow of inventory through elaborate system of accounting procedures.
- JIT system is very useful in modern manufacturing environment characterized by low inventory and low WIP values usually associated with low cost variance.
- back flushing requires no data entry of any kind until a finished product is completed.
- once the finished goods are completed, the total amount finished is entered in to the computer system which is multiplied by all components as per Bill of Material for each item produced. This yields a lengthy list of components that should have been used for the production process and this is subtracted from the opening stock to arrive at the closing stock/ inventory.

4 a) Working notes:(1) *Hours required to meet maximum demand:*

<i>External sales</i>		<i>Hours reqd per unit</i>	<i>Total Hrs</i>
(i)		(ii)	(iii)= (i) x (ii)
X	800 units	3	2,400
Y	500 units	4	2,000
Z	300 units	2	600
		Total	<u>5,000</u>

(ii) *Contribution per unit:*

<i>Product</i>	X	Y	Z
	Rs.	Rs.	Rs.
Selling price	48	46	40
Less: Variable cost	<u>33</u>	<u>24</u>	<u>28</u>
Contribution per unit: (A)	15	22	12
Labour hours required per unit (B)	3	4	2
Contribution per hour (Rs): (A)/ (B)	5	5.5	6
Ranking	III	II	I

(a) If only 3,800 hours are available in Division A:

300 units of Z (maximum), which will consume *	600 hrs
500 units of Y (maximum), which will consume	2,000 hrs
400 units of X to use remaining hrs	<u>1,200 hrs</u>
	<u>3,800 hrs</u>

***Note:** Labour hours required per unit are given in the question. If 300 units of Y are to be transferred to 'B' division, then 1,200 hours will have to be used for production of Y instead of X, which are yielding Rs. 5 per hr. Given above is the optimum mix for Division A for 3,800 hrs. If 300 units of Y are to be transferred to 'B' division with time constraint of 3,800 hours, then additional 300 units of y will have to be produced sacrificing the production of 400 units of X which is yielding contribution.

Transfer price:

	Rs
(i) Variable cost of Y	24.00
Opportunity cost	
(ii) Contribution relating to 'X' foregone for producing additional units of Y (4 hrs x Rs.5*)	20.00
	<u>44.00</u>

*Y takes 4 hours and in each hour production of X would have generated contribution of Rs.5.

(b) If 6,199 hours are available then the labour hours available exceeds the requirement for meeting the entire sales requirement:

Available hours	6199
Less : maximum required hours	<u>5000</u>
Surplus hours available	1199 hours
Less: hours required for producing 300 units of 'Y' (300 units x 4 hrs/unit)	1200 hours
Shortfall in available labour hours	<u>1 hour</u>

Therefore, contribution of 'X' has to be foregone to the extent of 1hour required by 'Y' i.e. Rs.5 per hour. However if one hour is lost, we can't produce one unit of product "X" with the remaining 2 hours. Hence one unit of product "X's contribution is the opportunity loss.

Therefore the transfer price for 'Y' would be:

Variable cost of 'Y'	24.00
Add: Contribution per unit of X (Rs.15 / 300 units)	<u>0.05</u>
Transfer price for Y	<u>24.05</u>

4 b) Discretionary costs can be explained with following important features:

(i) They arise from periodic (usually yearly) decisions regarding the maximum outlay to be incurred.

(ii) They are not tied to clear cause and effect relationships between inputs and outputs.

Examples: advertising, public relations, executive training, management consulting services etc.

5 a) The following matrix gives the cost incurred if the typist (I = A, B, C, D, E) executes the job (j = P, Q, R, S, T)

Typist	<u>Job</u>				
	P	Q	R	S	T
A	85	75	65	125	75
B	90	78	66	132	78
C	75	66	57	114	69
D	80	72	60	120	72
E	76	64	56	112	68

Subtracting the minimum element of each row from all its elements in turn, the above matrix reduces to:

Typist	<u>Job</u>				
	P	Q	R	S	T
A	20	10	0	60	10
B	24	12	0	66	12
C	18	9	0	57	12
D	20	12	0	60	12
E	20	8	0	56	12

Now subtract the minimum element of each column from its entire element in turn, and draw minimum number of lines horizontal or vertical so as to cover all zeros. All zeros can be covered by 4 lines as given below:

2	2	0	4	0
6	4	0	10	2
0	1	0	1	2
2	4	0	4	2
2	0	0	0	2

Since there are only 4 lines (<5) to cover all zeros, optimal assignments cannot be made. The minimum uncovered element is 2.

We subtract the value 2 from all uncovered elements. Add this value to all junction values and leave the other elements undisturbed. The revised matrix to obtained is given below:

2	2	2	4	0
4	2	0	8	0
0	1	2	1	2
0	2	0	2	0
2	0	2	0	2

since the minimum no of lines required to cover all zeros is only 4(<5), optimal assignment cannot be made at this stage also.

The minimum uncovered element is 1. repeating the usual process again, we get the following matrix

2	1	2	3	0
4	1	0	7	0
0	0	2	0	2
0	1	0	1	0
3	0	3	0	3

Since the minimum number of lines to cover all zeros is equal to 5, is this matrix will give optimal solution. The optimal assignment is made in the matrix below:

Typist	P	Q	R	S	T
A	2	1	2	3	0
B	4	1	0	7	0
C	0	0	2	0	2
D	0	1	0	1	0
E	3	0	0	0	3

Cost (Rs.)

Thus Typist A is given Job T: 75
 Typist B is given Job R: 66
 Typist C is given Job Q: 66
 Typist D is given Job P: 80
 Typist E is given Job S: 112

Total Rs. 399

5 b) A cost driver is any factor whose change causes a change in the total cost of a related cost object. In other words, a change in the level of cost driver will cause a change in the level of the total cost of a related cost object.

For example: The cost drivers for business functions: viz Research & development and customer service are as below;

Business functions:	Cost drivers
Customer service	1) Number of service calls 2) Number of products serviced. 3) Hours spent on servicing products.

6 a) (1) Budgeted contribution:

Budgeted profit + Budgeted Fixed cost=	15,000+15,000= Rs.30,000
(+) contribution quantity variance	1,800
Total standard contribution	31,800
Standard contribution per unit	3
Actual sales volume	10,600 units

- (2) Actual sales volume $10,600 \times 17$ 1,80,200
- (3) Actual quantity of raw materials used
 Standard consumption $10,600 \times 5$ 53000 kgs
 Add: Material usage variance $400/2$ 2000 kgs
 Actual consumption 55,000 kgs
- (4) Labour efficiency variance
 Standard labour cost for standard hours $(63,000 + 600)$ 63,600
 Standard labour cost for actual hours 61,950
 Labour efficiency variance 1650 F
- (5) Actual variable overhead
 Selling overhead variable- variable overhead: $\text{Rs. } 84,800 - \text{Rs. } 1,800 = \text{Rs. } 83,000$
- (6) Variable overhead efficiency variance
 Actual hours (AH) $\frac{61,950}{1.5} = 41,300$ hours
 Standard hours (SH) $10,600 \times 4 = 42,400$ hours
 Standard rate per hour (SR) $\frac{63,600}{10,600 \times 4} = \text{Rs. } 1.5$
 Efficiency variance $\text{SR} (\text{SH} - \text{AH}) = 2(42,400 - 41,300) = 2,200 \text{ F}$
- (7) Actual fixed overheads : Budgeted overhead+ Fixed overheads variance=
 $15,000 + 600 = \text{Rs. } 15,600$
- (8) Operating profit variance:
 If budgeted profit is considered $(15,000 - 7,000) = \text{Rs. } 8,000 \text{ A}$
 If standard profit is considered $(16,800 - 7,000) = \text{Rs. } 9,800 \text{ A}$

6 b) a) Shelf life is 1 year hence opening stock of 30,000 boxes to be sold first.

Contribution on these boxes is $30,000(100 - 40) = \text{Rs. } 18,00,000$

Given: production of 2004 is same as in 2005. Hence fixed cost for 2004 is $\text{Rs. } 52,00,000 (1,30,000 \times 40)$. Therefore fixed cost for 2005 is $\text{Rs. } 57,20,000 (52,00,000 + 10\% \text{ of } 52,00,000)$

Variable cost for 2005 = $\text{Rs. } 40 + 25\% \text{ of Rs. } 40 = \text{Rs. } 50$ per unit.

Hence contribution for 2005 is $\text{Rs. } 50 (100 - 50)$.

Breakeven volume is first to recover the fixed costs of Rs.39,20,000 (57,20,000-18,00,000) to be recovered from 2005 production.

Production in 2005 to attain BEP = $39,20,000/50 = 78,400$ units.

Therefore BEP for 2005 is 1,08,400 boxes (30,000+78,400).

b. Shelf life is 1 year hence opening stock of 30,000 boxes to be sold first.

Contribution on these boxes is $30,000(100-40) = \text{Rs. } 18,00,000$

Given: production of 2004 is same as in 2005. Hence fixed cost for 2004 is Rs. 52,00,000(1,30,000*40). Therefore fixed cost for 2005 is Rs.57,20,000 (52,00,000+ 10% of 52,00,000)

Variable cost for 2005= Rs 40+ 25% of Rs.40) = Rs.50 per unit.

Hence contribution for 2005 is Rs50 (Rs100-50).

Breakeven volume is first to recover the fixed costs of Rs.39,20,000 (57,20,000-18,00,000) to be recovered from 2005 production.

Production in 2005 to attain BEP = $39,20,000/50 = 78,400$ units.

Therefore BEP for 2005 is 1,08,400 boxes (30,000+78,400).

MNCS

Number of Pages : 2
Number of questions: 7

Total Marks: 100
Time Allowed: 3 Hrs

Question No.1 is compulsory. Answer **any Four** questions from the rest

- 1 (a)** Define the term client server architecture. What are the advantages of using client server architecture.
(10 Marks)
- (b)** Explain meaning, advantages and disadvantages of various conversion strategies (10 Marks)
- 2 (a)** What are the five fundamental control objectives that an operating system should achieve.
(10 Marks)
- (b)** What are the factors to be considered while evaluating vendor's proposals
(10 Marks)
- 3 (a)** Explain the steps to be taken by an organisation for establishing better information protection.
(10 Marks)
- (b)** Explain in brief the concept of Business process re-engineering.
(5 Marks)
- (c)** Explain as to how an organisation can control denial of service (DoS) attacks.
(5 Marks)
- 4 (a)** "One way to deter fraud is to design adequate controls to make frauds difficult to carry out"- Explain.
(10 Marks)
- (b)** Explain the various output control methods.
(10 Marks)
- 5 (a)** Explain the terms : Asymmetric crypto systems, Key pair, Digital signature as per the IT Act ,2000
(10 Marks)
- (b)** " The audit methods that are effective for manual audits prove ineffective in many IS Audits"- Comment
(10 Marks)
- 6 (a)** Explain the terms CASE Tools, CASE Workbench and CASE environment.
(10 Marks)

(b) Explain the various sources of personnel information system

(5 Marks)

(c) MIS is fraught with myths and misconception- explain

(5 Marks)

7 Write short notes on the following :

(a) Characteristics of DSS

(b) Accounting Information Systems

(c) Operator Intervention Controls

(d) System Stress and System change

(4 x 5 Marks = 20 Marks)

PRIME ACADEMY
29TH SESSION MODEL EXAM
MANAGEMENT INFORMATION AND CONTROL SYSTEMS
OLD SYLLABUS
SUGGESTED ANSWERS

1 (a) MEANING OF CLIENT/SERVER ARCHITECTURE

- A form of shared or distributed computing in which tasks and computing power is split between the clients and servers.
- Servers store and process data common to users across the enterprise. These data are then accessed by the client system.
- In C/S computing, the hardware and software components (i.e. the clients and servers) are distributed across a network.
- Such architecture is versatile, flexible, scalable, and inter-operable.

BENEFITS OF CLIENT/SERVER TECHNOLOGY

- a. Increases productivity of end users & developers
- b. Maintenance is easier compared to mainframes
- c. Hardware and network expenses are less in a C/S environment compared to mainframes.
- d. Better access to data and distribution of applications among users increases their productivity.
- e. The server (**Ex:** data base server) stores the data on behalf of the client. Hence client machines need not have heavy storage capability making them less expensive.
- f. All the software installation and maintenance done centrally at the server. There is no need to maintain individual clients. Hence economical.
- g. Management control over the organization is increased.
- h. Supports rapid application development like object oriented technology.
- i. New hardware add-on like document imaging and video conferencing can be added in C/S which may not be possible in mainframe technology.

1(b)

Conversion method	Meaning	Advantages	Disadvantages
1. Direct change over method (also called Plunge Method)	On a specified date old system is dropped and new system is put to use Can be adopted only if extensive testing done beforehand	Users straight away use the new system-adaptation easy.	1. Risky 2. Long delays if errors occur since this the only system available to do the processing 3. Users resent/resist since unfamiliar system 4. Cannot compare results with the old system(since old system has been discarded)

Conversion method	Meaning	Advantages	Disadvantages
2. Parallel conversion	Running the old system and the new system in parallel at the same time Results of the new system compared with that of the old system and if reliable over a period of time, old system is stopped and new system put to use.	1. Since data available from both old and new systems, any errors in new system can be corrected. 2. Users feel secure as they are not faced with abrupt change	1. Cost of running both systems (old and new) is very high. 2. Employees work load increases during conversion. 3. Unless new system is replacing old manual system, output comparison difficult. 4. If new system is an improvement over existing system, outputs would differ and hence difficult to compare. 5. Users familiar

			with old system and will continue to use only that.
3. Gradual conversion	Attempts to combine the good features of parallel and direct changeover method. Volume of transaction gradually increased → new system is phased in.	Users can use the new system gradually and there is a possibility of detecting and correcting errors without much system downtime.	1. Time consuming as it may take a long time to put the new system in use. 2. Not the best method for small, simple systems.
4. Modular prototype conversion	Involves building of modular, operational prototypes to change from old to new system. Each module is modified, accepted and put to use gradually.	1. Thorough testing of modules before being put to use. 2. User familiarity before model put to use.	1. Too many prototypes and hence may not be feasible. 2. Interfacing of the various modules (so that they work as a system) may be a problem.
5. Distributed conversion (Also called as PILOT run)	Involves full implementation of the system in one branch of the organization (say a bank branch) using any of the above four methods. If successful then carried out at other branches.	Problems if any can be identified and controlled in one location rather than affecting all locations.	Each branch/site may have its own problem that needs to be handled separately. Hence success in one site does not necessarily mean success in other sites.

2(a)

S. No	Control objective	Meaning	Example
1.	O/S to protect itself from users	Applications must not be able to gain control over O/S leading it to malfunction or destroy data	Accounts software should not be able to control O/S.
2.	O/S to protect users from one and other	One user should not be able to damage/destroy/corrupt the data of another user program.	Payroll software should not damage accounts data and vice-versa

3.	O/S to protect users from themselves	One applications may have different modules each containing data residing in various memory locations. One module should not be able to damage information of another module	Pay-roll software may contain tax and overtime hours module. Tax module should not be able to damage data of overtime module and vice-versa.
4.	O/S to protected from itself	O/S also made of various individual modules and no module should be allowed to destroy/corrupt the other modules	
5.	Protecting O/S from its environment	In case of power failure or other disasters, operating system should be able to achieve a controlled closure so that it can restart/recover later without any problem.	

2(b)

Meaning of the term validation: It implies evaluating and ranking the proposals submitted by the various vendors.

1. *Performance of the system (system efficiency) vis-à-vis their cost:*

- The vendor's system should be capable of processing organization data within the time frame stipulated by the management.
- Various indicators of performance are: speed, response time (the time gap in user requesting a query and the system responding to it), number of users the system can support (**Ex:** 5 users' concurrent access) .
- Benchmarking is one of the methods of evaluating efficiency. The vendors system is fed with some data and the outputs analysed for accuracy, consistency and efficiency.

2. *Cost benefit analysis (CBA) of each proposed system:*

- The accountant in the design team will compare the anticipated benefits of the system with its cost.
- They would also evaluate the option of Leasing Vs. Buying
- If system is to be bought, the accountant should draw up a depreciation schedule.

3. *Maintainability of each proposed system:*

- Maintainability implies capability to alter the system to meet changing business requirements.

Ex: A sales software should be capable of being altered to provide for value added tax or any other new taxes as and when introduced by the government.

- Cost of maintaining a system should be factored since it is substantial and may even be greater than the purchase cost over a period of time.

4. *Compatibility of the proposed system with the existing system*

- The proposed system should be compatible with the existing hardware , application software and in some cases compatibility should also be checked for operating system.

Ex. for hardware compatibility: the proposed system may not fit on the existing LAN and hence the network may need to be upgraded.

Ex. for operating system compatibility: the organisation may currently be working in a stand alone environment while the new system may require a network environment and hence may need to move from a standalone O/S to network based O/S (**Ex:** Windows NT)

5. *Vendor support*

Vendor support in the following areas should be evaluated:

- User training for a hands-on experience of the new system.
- System implementation and testing
- System maintenance through a maintenance contract.
- Back-up systems for temporary processing of organisation data if required.
- Support/help-desk facilities. It is better if the vendor offers round the clock support (24 * 7 * 365) rather than support only during office hours.

3(a)

S. No.	Points to be considered	Meaning
1.	Not all data have same value	• Organisation must determine value of different data (relative importance) and then decide on the type of protection. • Ex: Payroll data more sensitive than petty cash expenses data & hence varied degree of protection needs to be applied.
2.	Know where critical data resides	• Refers to company's information systems infrastructure. Each piece of information requires different levels of protection. Identifying information's location helps establish an integrated security solution.

		This approach provides significant cost benefits so as to ensure that cost of protection need not exceed the value of the data.
3.	Develop an access control methodology	- Information loss can happen by mere copying or disclosure of data and need not have to be removed to cause damage. - This can be addressed by providing for adequate access control methods like user-IDs and passwords .
4.	Protect information on stored media	- Data loss/theft can occur if employees have facility to copy data into removable media- floppies, CDs - hence need to be controlled. Magnetic media like hard discs should be controlled to protect programs and data. During migration/change-over from one system to another, all discs and data should be controlled(to prevent loss, duplication, exposure).
5.	Review hard copy outputs	Refers to review of hardcopy output of employee's daily work – like drafts, working papers, papers kept in recycle or trash containers(may be valuable. If falls in wrong hands may be misused)

3(b)

Business Process Re-engineering

- Every company wanting to implement an ERP has to reengineer its processes (activities) in order to suit to the ERP.
- It is a fundamental **rethinking, radical redesign of processes/activities to achieve dramatic improvements in performance like quality and cost saving.**
 - Fundamental rethinking: refers to asking questions like “why do we do a process – what value does it add?”. If a process does not add any value, it may better be dropped rather than simplifying/automating it.
 - Radical redesign: refers to reinventing processes and not just enhancing or improving. It uses methods like “clean slate approach” (similar to zero based budgeting (ZBB))
 - Dramatic improvements: Aims to achieve 80% to 90% reduction in costs. It is possible only through major improvements/breakthroughs and not through small incremental changes.

3(c)

Methods to prevent and limit Exposure a DOS attack

- **Identify the server which is causing the attack** and program the firewall to ignore all messages from that site (similar to if we know the phone number from which missed calls are being received , we can block calls from that number).

Limitation: The attacker uses IP spoofing method to disguise the source of the message and hence makes it appear that message is coming from different sources from the internet. Organisation cannot block all sources.

- **Firewalls must engage in a policy of social responsibility** → Block information from source sites which have no internal addresses. This prevents attackers from disguising /hiding their location and assure management that no attack is launched from its site

Limitation: This method will work only if firewalls screen outgoing transmission from its internal network.

- **Use of security software :**

The targeted site can use this software to scan for half-open (incomplete) connections



Looks for SYN packets not followed by ACK packets



Such clogged /choked ports can be restored to allow legitimate connections to be made.

(Note: the term “ports” used here **refer to logical ports** and **not physical ports** (USB port , LPT1 etc.). Logical ports refer to TCP, UDP ports which run services like HTTP, FTP etc. on the internet)

4(a)

- One way to prevent/deter fraud → systems should have sufficient controls to **make frauds difficult to perpetrate.**
- These controls **help to ensure the accuracy, integrity and safety of system resources.**

<i>S.No.</i>	<i>Method</i>	Meaning
1.	Developing strong system of Internal Controls	• Top management is overall responsible for installing a adequate security system • Managers delegate design of controls to analysts, designers & end users

		Information security officer (ISO) & operations staff responsible for ensuring following of control procedures
2.	Segregation of duties	- Organisational structure & job responsibilities should be such that incompatible functions should not be carried out by the same individual. Ex: End-users and programmers should not be the same set of people
3.	Policy of compulsory vacations & job rotation	These may bring to light frauds committed by an employee.
4.	Access restriction to computer equipment and data files.	Physical access to computers should be restricted. Only legitimate users should be allowed to access after authentication
5.	Data and program encryption	This makes data meaningless to perpetrator
6.	Protection of telephone lines	- Hackers (called as phreakers) attack telephone lines and steal or destroy data and transmit viruses - Methods of protection include attaching electronic locks, changing default passwords and force changing passwords.
7.	Protection of system against viruses	- Install virus protection programs: designed to remain in computer memory and search for viruses. They are recognised when they try to detect executable programs - When infection attempt is detected, it freezes the system and alerts users. It can be programmed to remove the virus. - Virus detection programs:- spot infection as soon as it starts → more reliable than virus protection programs → searches all executable programs for characteristics known strains of viruses (called as footprints/virus like behaviour) and removes them. - Anti-virus programs should be of the latest versions- so that they have the updated data bases of known viruses.
8.	Control laptop computers	- Laptops may contain confidential information → more susceptible to theft as people carry it around to different places - Security measures to be followed include: i. Have laptop security policy : take backup copies before traveling, never leave laptops unattended

		ii. Install boot level password- without which system will not start iii. Data on laptops should be password protected and encrypted so that even if laptop is stolen , data cannot be misused. iv. Employees may be asked to have external discs to store confidential data which should be always kept in their possession.
9.	Control over sensitive data	• First step is to classify data on the basis of confidentiality & importance and then apply access controls. • Paper documents should be shred • Controls should be placed over illegal copying. Employees should be made aware of the consequence of using illegal copies of software • Sensitive data on tapes, discs should be kept locked up in the night and should not be left lying on tables • Servers and PCs should be kept locked when not in use. • Single employee should not be given access to all data. • Monitoring devices (like CCTV) should be used to track sensitive assets / resources. • Information upload directly to the central server should be disallowed as this increase the chances of planting virus • Diskless workstations can act as a preventive mechanism. All data storage and retrieval should take place from central server. This acts as a deterrent against loading viruses from infected discs or illegal copying of sensitive data.

4 (b)

Meaning : Refers to controls that ensure that system outputs are not:

- ❖ Lost
- ❖ Misdirected
- ❖ Corrupted
- ❖ Privacy is not violated

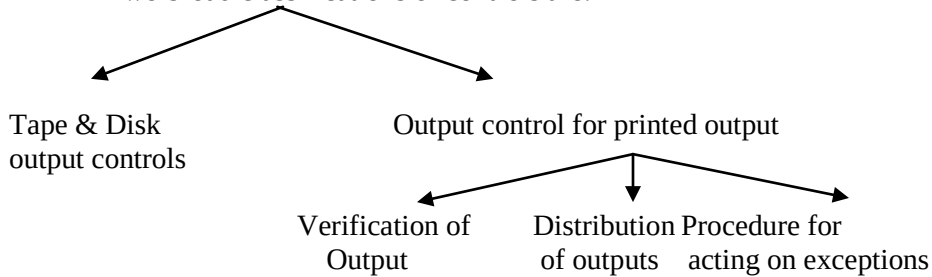
Ex: If the cheques issued by a company are lost, it may loose its credibility. If patient medical records are disclosed, may result in legal liability.

Types of controls to implement

Depends on type of processing used. Batch processing systems are more susceptible to exposures and hence require greater degree of control than real-time systems.

Controls over batch-processing outputs

Two broad classifications of controls are:

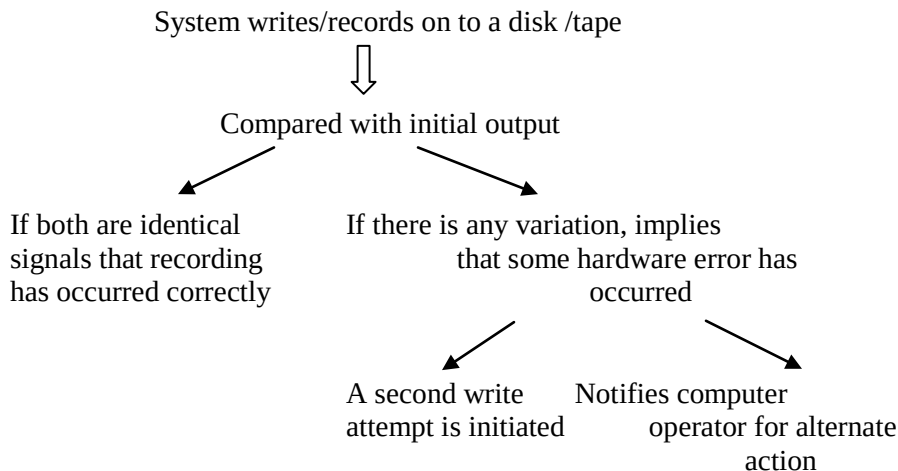


1. *Tape & Disk Output controls*

- Computer outputs on files /tapes not visible to human eye ,unlike printed outputs. Hence require controls to ensure accuracy of encoding / writing of information.

Some **examples** of controls:

- a. Hardware controls like parity bit and software controls like check digits can be carried along with information output. This ensures that no data loss occurs in transmission.
- b. **Echo check:**



c. *File labels:*

- Involves updating of information in trailer records to reflect new status of the file.
- **Ex:** The number of logical records / physical records in the file should be updated in the trailer record. This would be used as a processing control when file later used for input.

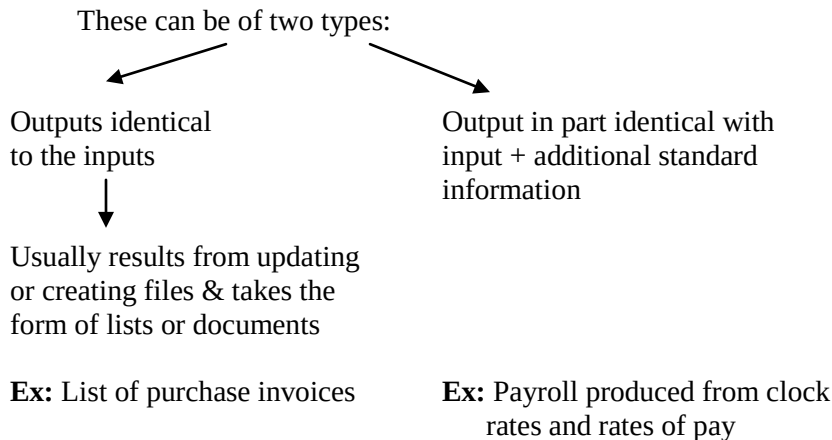
- File retention date should be carefully checked by the program. It should be updated if need to reflect a longer retention period.

2. **Controls over printed output**

A. **Verification of output:**

- It is based on the relationship of the output bears to the input and the processing that is carried out.
- Outputs can be of three types :
 - i. Outputs directly related to inputs
 - ii. Outputs indirectly related to inputs
 - iii. Exception reports.

i. **Outputs directly related to inputs**



ii. **Outputs indirectly related to input:**

These would include output generated by programs taking into account:

- a. Current input data
- b. Previous or latest input data
- c. All input for a given period of time

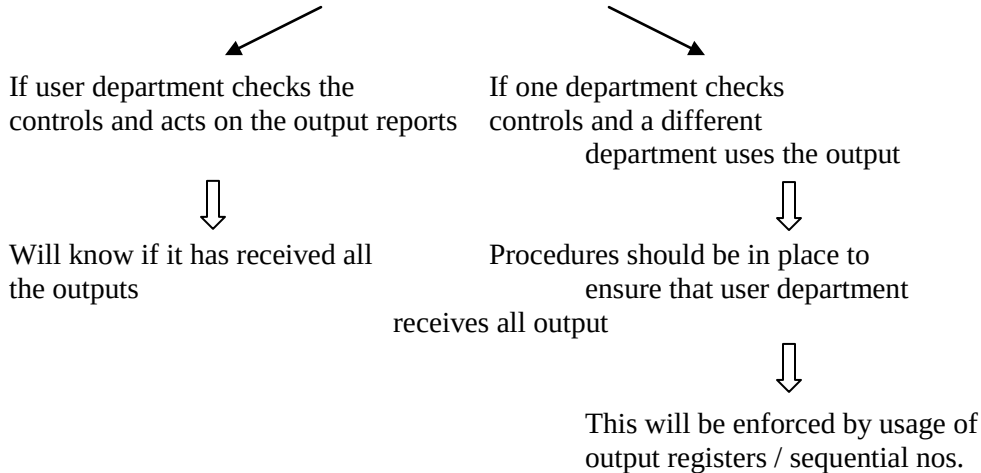
How are these outputs controlled? These outputs are verified manually using cumulative controls established over the input (**Ex:** Control totals) and placing emphasis on correct functioning of computer programs.

iii. **Exception reports:**

- Refers to variations thrown out by the system, when on scrutiny of input data / master files , conditions / validations are not satisfied. (**Ex:** Overtime hours total exceeding the maximum allowable hours)

- It may not be practicable to verify exceptional reports with control totals. It depends on correct functioning of the computer programs.

B. Distribution of output:



C. Procedure for acting on exception reports

- Exceptional reports provide information for important control functions.
- A high degree of control is required over investigation of the exception reports and the resulting action taken. Independent review to be done to ensure that exceptional items are investigated and prompt action taken.

Controlling real-time systems-output

- Real-time systems direct their output to the end-users computer screens, printers etc.
- This reduces the number of intermediaries in the distribution channel and hence reduces the associated risks and exposures.
- Primary threat to real-time system outputs are attack on the communication channel that may lead to data interception, corruption or destruction.

- Primary sources of threats are :
 1. Failure of networking equipments (like switches, bridges, hubs, routers)
 2. Subversive threats where an attacker intercepting message as it moves over the communication channels.

5(a)

Asymmetric crypto system: According to S.2 (f) of the Information Technology Act, 2000, "asymmetric crypto system" means a system of a secure key pair Consisting of a **private key for creating a digital signature** and a **public key to verify the digital signature**.

Key pair "Key pair", in an asymmetric crypto system, means a private key and its mathematically related public key, which are so related that the public key can verify a digital signature created by the private key;

Digital Signature As per S.2 (p) of the IT Act, 2000 "digital signature" means **authentication of any electronic record by a subscriber by means of an electronic method or procedure** in accordance with the provisions of section 3.

5(b)

- The audit approaches used in manual auditing may prove ineffective in IS Audits because :

S.No.	REASONS	MEANING
1.	Electronic Evidence	• Evidence is not physically retrievable and may not be readable in its original form
2.	Terminology	• Tools and techniques used in automated applications are difficult for non-EDP auditor to understand
3.	Automated processes	• Processing is automated. Non-EDP auditor may not grasp the processing concepts and logic
4.	New risks and controls	• Threats and counter measures / controls to threats are new to non-EDP auditors. They may not understand the magnitude of risks and the effectiveness of the controls.
5.	Reliance on controls	• In manual systems , auditors could rely to an extent on hard-copy evidence irrespective of the adequacy of controls. • In computerised environment, electronic evidence is only as valid as the controls (hence very critical to understand controls)

6(a)

TOOLS	WORK BENCHES	ENVIRONMENTS
Support individual process tasks like checking consistency of design, compiling programs, comparing test results	Supports process phases such as specification phase, design phase etc. Consist of a set of tools with various degree of integrations	Support for all or part of software process. Consists of different work benches which are integrated

(Some examples for tools, work-benches to be given)

6(b)

Sources of Personnel Information:

Majority of personnel information is generated in the accounting information system through payroll, human resource accounting and cost estimation for wages negotiations.

Payroll processing: Such systems take inputs from swipe card data, job tickets and clock cards. Some inputs help mapping an employee service to particular project/department for better cost allocation.

The payroll system generates some outputs like pay slips, pay cheques, absenteeism report, overtime reports analysis, total man hours worked. Such statistical analysis provides basis for measuring departmental efficiencies.

Cost estimation for wage negotiations:

This involves decisions on various fronts like pay hike, paid holidays, overtime rates and employee benefit contributions.

The personnel department provides data in the form of personnel files and job specifications. The personnel files would contain information about educational background, past experience, state of health and medical history and physical traits . The job specification details the requirement for each job in terms of training and experience.

Another source of information are departmental heads/supervisors who are in a position to evaluate the performance of their team members based on parameters like personality, attitude, character, leadership and group working ability.

External source of personnel information include manpower agencies, labour unions, government placement cells and HR Consulting firms.

6(c)

S.No.	Myths about MIS	Facts/truths about MIS
1.	Study of MIS is about use of computers	• MIS may or may not be computer based • Computer is only a tool
2.	More data (quantity) means more information to managers	• Quantity does not matter, relevance of data to decision making is what is important • Form & presentation is important-unorganised data creates confusion
3.	Accuracy of reporting is of vital importance	• True at operational level (Ex: Temperature in chemical storage) • Higher levels of accuracy- higher is the cost of obtaining the data • Decision making at higher levels of management are macro decisions where a fairly correct presentation of relevant data is adequate (Ex: Project outlay is around 300 to 320 crores)

7(a) Characteristics of DSS

The DSS bears the following characters:

- a. They support semi-structured and unstructured decision-making.
- b. They are flexible enough to adapt to the changing needs of the decision makers
- c. Ease of use

a. DSS support semi-structured / unstructured decisions

- Unstructured/ semi-structured decisions are those for which information generated from the computers are only a portion of the total information needed to make the decision.

b. Flexible enough to adapt to changing needs

- An MRS generates only specific outputs which are pre-defined and established well ahead of the time they are used. Such applications go through a lengthy process of development where each requirement has to be approved by a committee and then the development plan chalked out.

Any modifications required (say a new report) have to go through the entire process again before the report facility can be made available.

- As compared to MRS, in DSS the designers understood that:
 - Managers don't know their need in advance
 - Also the needs keep changing
- Hence instead of "freezing" on the requirements, capabilities and tools are given in DSS to enable the users to meet their own output needs. Thus flexibility is a critical element of a DSS
- Since the demand for information keeps changing they may also require it in variety of formats- like graphs and charts.
- DSS should also support spontaneous questions of managers.

Ex: DSS may support spontaneous questions like "If price of product 'A' is decreased by 10% and the advertisement expenditure on product 'A' is increased by 5% what will be the likely increase in working capital requirement"?

c. Easy to learn and use

- DSS are often built by users than by computer programmers and are hence user friendly.
- They use some interfaces like 4th generation languages (4GL), natural English which are non-procedure oriented, making it easier for users to use the DSS.

GUIs are also being used in DSS

7(b) Accounting Information Systems

- Basic purpose is to recognise the transaction to be processed by the system
- It processes three broad categories of transactions :
 - Monetary transactions
 - Internal transactions like transfer of assets/stock, depreciation entries

- Other transactions not directly related to financial statements like pay fitment details, extra hours rates, address change

7(c) Operator Intervention Controls

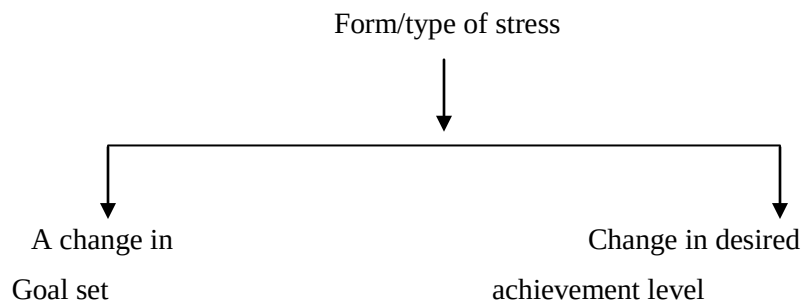
- System may sometimes require operator intervention to initiate some actions like :
 - ❖ Entering control totals for a batch of records
 - ❖ Providing parameter values
 - ❖ Activating program from a different point (other than from start point) while re-entering semi-processed error records.
- Operator intervention increases chances of human errors. Hence systems with limited operator's intervention are less prone to processing error.
- Operator intervention cannot be eliminated. However they can be reduced by logical derivation of parameter values, program start points etc.

7 (d) System Stress and System change

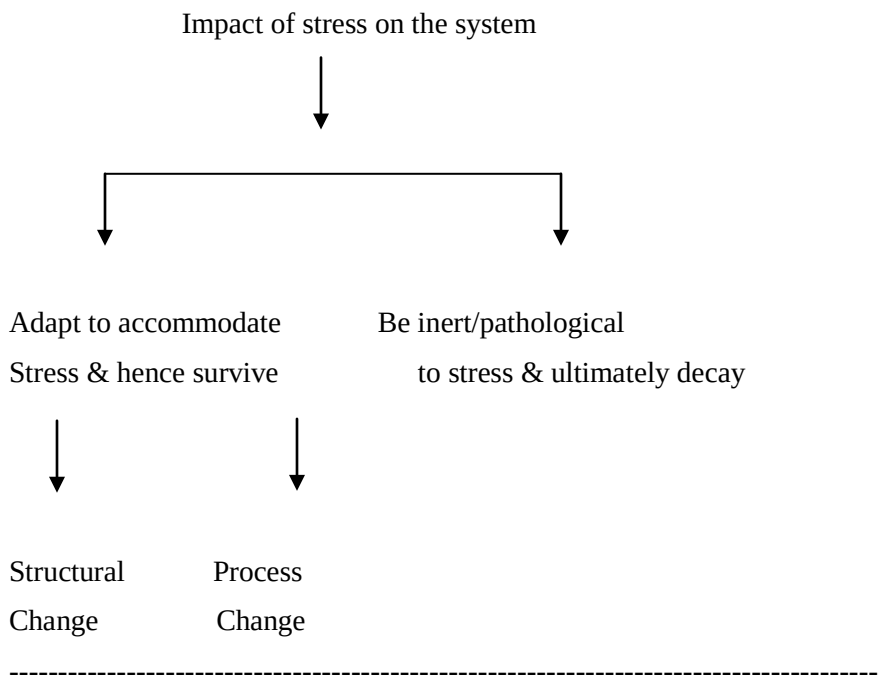
Stress:

- Meaning : Force transmitted by systems' supra-system
- Effect : Causes system to change
- Purpose : To enable supra system to better achieve its goals

Each level of system trying to accommodate stress – may impose stress on its sub-system and so on.....



Impact of Stress on a system: The impact of stress varies depending on whether a system reacts or does not react to stress.



DRTS

Number of Pages : 6
Number of Questions: 6

Total Marks: 100
Time Allowed: 3 Hrs

Answer all questions
All workings should form part of Answers

1. (a) Modern Ltd. is engaged in the manufacture and sale of textiles. Its net profit for the year ending 31.3.2009 after debit/credit of the following items to the Profit and Loss Account was Rs.75, 00,000:

- Payment to two employees of Rs.2, 50,000 each in connection with their voluntary retirement.
- Fringe benefit tax paid Rs.1, 00,000.
- Charges of Rs.2, 00,000 paid for the advertisement in souvenir published by a Political Party registered with the Election Commission of India.
- Retrenchment compensation paid to employees of one of the units closed down during the year Rs.10, 00,000.
- Capital expenditure incurred for the purpose of promoting family planning amongst its employees Rs.3, 00,000.
- Banking cash transaction tax paid Rs.10, 000.
- Interest paid under section 234B for short payment of advance tax pertaining to the assessment year 2008-09 Rs.1, 10,000.
- Loss incurred in transactions of purchase and sale of shares of various companies Rs.3, 00,000.
- Compensation received from supplier for delay in supply of raw materials Rs. 1, 00,000. Dividend received from a foreign company Rs.2, 00,000.
- The total sales of Modern Ltd. for the year was Rs.30 crores out of which export sales amounted to Rs.10 crores.

Compute the total income of Modern Ltd. for the assessment year 2009-10.
Furnish explanations for the treatment of the various items given above.

(12 Marks)

(b) Ranjan Ltd., made a provision on 31.3.05 of Rs.85,500 against a bill of supplier of raw material by charging the amount to profit and loss account and claimed deduction thereof while computing the income chargeable to tax for A.Y. 2005-06. The amount of Rs.40, 000 not paid to the party till 31.3.09 was paid in cash on 11.6.09. The Assessing Officer issued show cause notice to the company to rectify the computation of income for the A.Y. 2005-06 on account of payment made in cash on 11.6.09. Can the Assessing Officer do so?

(4 Marks)

- (c) A co-operative society engaged in the business of banking seeks your opinion in the matter of eligibility of deduction u/s 80P on the following items of income earned by it during the year ending 31.3.2009:

- (i) Interest on investment in Government securities made out of statutory reserves
- (ii) Hire charges of safe deposit lockers

(4 Marks)

2. (a) Discuss the correctness or otherwise of the following statements

- (i) Income deemed to accrue or arise in India to a non-resident by way of interest, royalty and fees for technical services is to be taxed irrespective of territorial nexus.
- (ii) The power of the Settlement Commission to grant immunity from prosecution has now been restricted.
- (iii) Section 2(14) of the Act excludes all items of movable property which are held for personal use of the assessee or any member of his family.
- (iv) The Appellate Tribunal is empowered to grant indefinite stay for the demand disputed in appeals before it.

(4 X 3 = 12 Marks)

- (b) Mr.Nathan, a non-resident, operates an aircraft between Singapore and Chennai. He received the following amounts in the course of the business of operation of aircraft during the year ending 31.3.2009:

- (i) Rs.2 crores in India on account of carriage of passengers from Chennai.
- (ii) Rs.1 crore in India on account of carriage of goods from Chennai.
- (iii) Rs.3 crores in India on account of carriage of passengers from Singapore.
- (iv) Rs.1 crore in Singapore on account of carriage of passengers from Chennai.

The total expenditure incurred by Mr.Nathan for the purposes of the business during the year ending 31.3.2009 was Rs.6.75 crores. Compute the income of Mr.Nathan chargeable to tax in India under the head "Profits and gains of business or profession" for the assessment year 2009-10

(4 Marks)

3. (a) Explain the method for determining the amount of expenditure in relation to income not includible in total income

(5 Marks)

- (b) Asaan Cellular Ltd., to provide telecom services in Mumbai, obtained a license on 11.4.2006 for a period of 10 years ending on 31.3.2016 against a fee of Rs.27 lacs to be paid in 3 installments of Rs.10 lacs, 9 lacs and 8 lacs by April, 2006, April,

2007 and April, 2008 respectively. Explain how the payment made for license fee shall be dealt with under the Income-tax Act, 1961 and work out the amount, if any, deductible in this respect out of income chargeable to tax for Assessment Year. 2009-10 and subsequent years.

(5 Marks)

(c) Examine the obligation of the person responsible for paying the income to deduct tax at source and indicate the due date for payment of such tax, wherever applicable, in respect of the following items.

- (i) Manasi Ltd., the employer, credited salary due for the financial year 2008-09 amounting to Rs.2,40,000 to the account of Dhanya, an employee, in its books of account on 31.3.2009. Q has not furnished any information about his income/loss from any other head or proof of investments/payments qualifying for deduction under section 80C.
- (ii) Vijay, an individual whose total sales in business during the year ending 31.3.2009 was Rs.1.20 crores, paid Rs.9 lakhs by cheque on 1.1.2009 to a contractor, for construction of his business premises, in full and final settlement. No amount was credited earlier to the account of the contractor in the books of Vijay.
- (iii) Bhargav Ltd. credited Rs.18,000 towards fees for professional services and Rs.12,000 towards fees for technical services to the account of Harini in its books of account on 06.10.2008. The total sum of Rs.30,000 was paid by cheque to Harini on 18.12.2008

(3 X 2 = 6 Marks)

4. (a) What is meant by “Reverse Mortgage”? Discuss the tax implications of a transaction of reverse mortgage.

(4 Marks)

(b) Specify all those instances which are generally incorporated in Article 5(2) in all DTA agreements to signify the presence of a permanent establishment

(4 Marks)

(c) The balance sheet of ABC Ltd. as on 30.9.2008, being the date on which Unit C has been transferred by way of slump sale for a consideration of Rs.920 lakh, is given hereunder

Balance sheet as on 30.9.2008.

Liabilities	Rs. in lakh	Assets	Rs. in lakh
Paid up capital	1,800	Fixed assets	
Reserves	650		
Liabilities:		Unit B	250
Unit A	40	Unit C	550
Unit B	120	Other assets	
Unit C	80	Unit A	480
		Unit B	870
		Unit C	390
	<u>2,690</u>		<u>2,690</u>

With the help of further information given below, compute the capital gain on slump sale of Unit C –

- (i) Fixed assets of Unit C includes land which was purchased at Rs.50 lakh in the year 2003 and revalued at Rs.90 lakh as on 31.3.2008.
- (ii) Fixed assets of Unit C reflected at Rs.460 lakh (Rs.550 lakh less land value Rs.90 lakh) is written down value of depreciable assets as per books. However, the written down value of these assets under section 43(6) of the Income-tax Act is Rs.440 lakh.
- (iii) Other assets of Unit C shown at Rs.390 lakh represent book value of non-depreciable assets.
- (iv) Unit C is in existence since May, 2003.

(8 Marks)

- 5. (a)** Can The assessing officer complete the assessment of an income from international transactions in disregard of the order passed by the Transfer Pricing Officer by accepting the contention of the assessee?

(3 Marks)

- (b)** What is the time limit for completion of assessment/re-assessment where a reference is made to the Transfer Pricing Officer under section 92CA(1) in the following cases –

- (i) For completion of assessment under section 143 for the A.Y.2009-10.
- (ii) For completion of assessment/re-assessment/re-computation under section 147, if notice is served under section 148 on 1.7.2008.

- (iii) For completion of assessment in cases where the last of the authorizations for search under section 132 was executed during the financial year 2008-09.

(3 Marks)

(c) Write short notes on any **two** of the following

- (i) Section 92A of the Income Tax Act
- (ii) Section 115JAA of the Income Tax Act
- (iii) Section 281B of the Income Tax Act

(2 X 5 = 10 Marks)

- 6.(a) Compute the net wealth of Udhaya Ltd. (carrying on the business of running cars on hire and also dealing in jewellery) which furnishes the following particulars of its assets and liabilities as on 31.3.2009

Assets	(Rs. in crores) Book value	(Rs. in crores) If valued as per Schedule III
(i) Fixed Assets:		
Plant & Machinery	10	15
Factory Building	25	10
Urban land (450 sq. meters)	40	100
Motor cars	5	10
(ii) Investments		
Jewellery	15	30
Plot of land in Mumbai (480 sq. meters)	10	50
Equity shares in subsidiary companies	20	25
(iii) Current assets		
Inventories (Jewellery)	150	150
Sundry Debtors	10	10
Cash and bank balances		
(Includes cash balance of Rs.1, 00,000)	5	5
Liabilities		
(i) Current Liabilities	40	40
(ii) Loans secured on Fixed Assets (Urban land)	30	30

(8 Marks)

- (b) Explaining the meaning of urban land and also, state whether there are any exclusions from the definition of urban land

(5 Marks)

- (c) Abhishek gifted Rs.2, 00,000 to his wife Aishwarya on 10.4.2008. Aishwarya bought gold jewellery on 31.1.2009 out of the said sum of Rs.2, 00,000. The fair market value of the gold jewellery as on 31.3.2009 was Rs.2, 50,000. Abhishek claims that since his wife has not held on 31.3.2009 the sum of Rs.2, 00,000 which he gifted to her, no amount is includible in his net wealth for the assessment year 2009-10. Examine the claim of Abhishek.

(3 Marks)

PRIME ACADEMY
29TH SESSION MODEL EXAM
DIRTECT TAXES – OLD SYLLABUS
SUGGESTED ANSWERS

1(a)

Computation of total income of Modern Ltd. for the Assessment Year 2009-10

Particulars	Rs.
Net profit as per Profit and Loss Account	75,00,000
Add: Inadmissible expenditure	
4/5th of Rs.5,00,000 paid to employees on voluntary retirement [1/5th is allowable as deduction u/s 35DDA]	4,00,000
Fringe benefit tax u/s 40(a)(ic)	1,00,000
Advertisement charges of souvenir of political party u/s 37(2B)	2,00,000
4/5th of Rs.3,00,000, being capital expenditure incurred for promoting family planning amongst employees [1/5th is allowable as deduction u/s 36(1)(ix)]	2,40,000
Interest paid u/s 234B	1,10,000
Loss incurred in transactions of purchase and sale of shares considered as speculation loss	3,00,000
	88,50,000
Less: Dividend received from a foreign company considered under 'Income from other sources'	2,00,000
Business income	86,50,000
Income from other sources	
Dividend received from a foreign company	2,00,000
Gross total income	88,50,000
Less: Deduction u/s 80GGB	2,00,000
Total income	86,50,000

Explanations for the treatment of the various items in computing the total income of the company are furnished below -

- (i) Section 35DDA provides for amortization of expenditure incurred under voluntary retirement scheme over a period of five years in equal installments. The company is, therefore, entitled to deduction of Rs.1,00,000, being one-fifth of the total sum of Rs.5,00,000 paid to the two employees in connection with their voluntary retirement for the relevant assessment year.
- (ii) Fringe benefit tax paid is not allowable as deduction from business profits as per section 40(a)(i). Hence, fringe benefit tax paid by the company is not deductible.
- (iii) Section 37(2B) prohibits allowance of any expenditure incurred by an assessee on advertisement in any souvenir, brochure, pamphlet or the like published by a

political party. As such, advertisement charges paid in respect of souvenir published by a political party is not allowable as deduction from business profits of the company.

However, under section 80GGB, expenditure incurred by an Indian company on advertisement in any publication, including a souvenir, by a political party is deemed to be a contribution of such amount to the political party and is, therefore, allowable as deduction in the hands of the company. It is logical to presume that Modern Ltd. is an Indian company.

- (iv) Retrenchment compensation paid to employees at the time of closure of one of the units of the business is allowable as per the decision of the Allahabad High Court in CIT (Central) Kanpur vs. JK Cotton Spinning & Weaving Co. Ltd. (2005) 145 Taxman 591.
- (v) Capital expenditure incurred for the purpose of promoting family planning amongst employees is deductible over a period of 5 years as per the first proviso to section 36(1)(ix). Hence, only Rs.60,000 is deductible in the current year in respect of such expenditure incurred by the company.
- (vi) Banking cash transaction tax paid by the company is eligible for deduction in view of section 36(1)(xiii).
- (vii) Interest paid for delayed payment of tax by the assessee is part and parcel of the liability to pay income-tax. When income-tax paid is itself not allowable as a deduction under section 40(a)(ii), the interest paid under section 234B cannot qualify for deduction. Thus, interest paid under section 234B is not deductible.
- (viii) Loss of Rs.3 lakhs incurred by the company in dealing of shares constitutes speculation loss in view of the Explanation to section 73. In the absence of any speculative profit for the year, speculation loss is to be carried forward under section 73(2) for set off against speculation profits of subsequent assessment years. It can be carried forward for a maximum of 4 assessment years.
- (ix) Compensation received from supplier for delay in supplying the raw materials is a trading receipt.
- (x) Dividend received from a foreign company is assessable under the head "Income from other sources".
- (xi) Deduction under section 80HHC in respect of profits from export business is not allowable for and from the assessment year 2005-06.

1(b)

The proviso to section 40A(3) provides that where an allowance has been made in the assessment for any year in respect of any liability for any expenditure incurred by the assessee and subsequently, during any previous year, the assessee makes any payment in respect of such liability in a sum exceeding Rs.20,000 otherwise than by an account payee cheque drawn on a bank or by an account payee bank draft, the allowance originally made shall be deemed to have been wrongly made and the Assessing Officer may re-compute the total income of the assessee for the previous year in which such liability was incurred by making necessary amendment.

The proviso to section 40A(3) is attracted in this case since the company has made a cash payment of Rs.40,000 in respect of a liability incurred and allowed in A.Y.2005-06. Accordingly, Rs.8000/-, being 20% of Rs.40,000, will be added in the computation of income for the A.Y.2005-06.

The action of the Assessing Officer to issue show cause notice to rectify the computation of income for the A.Y.2005-06 is, therefore, correct.

1(c)

- (i) Interest earned on investment in Government securities made out of statutory reserves by a co-operative society engaged in banking business is eligible for deduction under section 80P as per the decision of the Supreme Court in CIT v. Karnataka State Co-operative Apex Bank (2001) 251 ITR 194. In this case, it was held that the placement of such funds being imperative for the purpose of carrying on banking business, the income therefrom would be income from the assessee's business and there is nothing in section 80P which restricts the exemption to only income derived from working or circulating capital.
- (ii) Provision of safe deposit lockers is part of the ordinary banking business. Income from hiring of such lockers is income from banking business and, therefore, eligible for deduction under section 80P. Therefore, the society is entitled to deduction under section 80P in respect of hire charges of safe deposit lockers.

2(a)

- (i) This statement is correct. The Supreme Court, in Ishikawajima-Harima Heavy Industries Ltd. v. Director of Income tax (2007) 288 ITR 408, observed that in order to tax the income of a non-resident assessee under section 9(1)(vii), relating to fee for technical services, the income sought to be taxed must have sufficient territorial nexus with India i.e. the fees paid for technical services provided by a non-resident cannot be taxed in India unless the services were utilized in India and rendered in India.

However, the Finance Act, 2007 has now inserted an Explanation to section 9 with retrospective effect from 1.6.1976 to clarify that such income by way of interest, royalty or fee for technical services which is deemed to accrue or arise in India by virtue of clauses (v), (vi) and (vii) of section 9(1), shall be included in the total income of the non-resident, whether or not the non-resident has a residence or place of business or business connection in India.

- (ii) This statement is correct. Under section 245H, the Settlement Commission may grant immunity from prosecution for any offence under the Indian Penal Code, Income-tax Act and any other Central Act. This power has now been restricted in respect of application made under section 245C on or after 1.6.2007. In respect of such cases, the Settlement Commission shall not grant immunity from prosecution for any offence under the Indian Penal Code or under any Central Act other than the Income-tax Act and Wealth-tax Act. However, in respect of applications pending as on 1.6.2007, the Settlement Commission has the power to grant immunity from prosecution for any offence under the Indian Penal Code and other Central Acts also.
- (iii) Sub-clause (ii) of section 2(14) provides that all movable property including wearing apparel and furniture held for the personal use by the assessee or any member of his family dependent on him are not capital assets as per section 2(14). However, the following movable property held for the personal use by the assessee or any member of his family dependent on him are capital assets –
 - (a) jewellery
 - (b) archaeological collections
 - (c) drawings
 - (d) paintings
 - (e) sculptures, or
 - (f) any work of art

Hence, the statement “Section 2(14) of the Act excludes all items of movable property which are held for personal use of the assessee or any member of his family” is incorrect.

- (iv) Section 254(2A) provides that where an order of stay has been passed and the appeal has not been disposed of within the specified period of 180 days from the date of such order, the Appellate Tribunal may extend the period of stay or pass an order of stay for a further period or periods, as it thinks fit, on an application made in this behalf by the assessee and on being satisfied that the delay in disposing of the appeal is not attributable to the assessee.

However, the aggregate period of stay, including the original stay granted and the extension allowed, cannot exceed 365 days. If such appeal is not disposed of within the period originally allowed or the extended period or periods, the order of stay shall stand vacated after the expiry of such period or periods. Therefore, the Appellate Tribunal cannot grant stay for indefinite period. Hence, the statement is incorrect.

2(b)

Section 44BBA incorporates special provisions for computing profits and gains of the business of operation of aircraft in the case of non-residents. Section 44BBA starts with a non-obstante clause. Therefore, section 44BBA overrides the provisions contained in sections 28 to 43A. As such, the business income of Mr. Q is required to be computed in accordance with the provisions of section 44BBA.

Under section 44BBA(1), a sum equal to 5% of the aggregate of the amounts specified in sub-section (2) is deemed to be the profits and gains chargeable to tax under the head "Profits and gains of business or profession". Sub-section (2) specifies the following amounts –

- (a) the amount paid or payable, whether in or out of India, to the assessee or to any person on his behalf on account of the carriage of passengers, livestock, mail or goods from any place in India; and
- (b) the amount received or deemed to be received in India by or on behalf of the assessee on account of the carriage of passengers, livestock, mail or goods from any place outside India.

Keeping in view the provisions of section 44BBA, the income of Mr. Nathan to tax in India under the head "Profits and gains of business or profession" is worked out hereunder -

	Rs
Amount received in India on account of carriage of passengers from Chennai	2,00,00,000
Amount received in India on account of carriage of goods from Chennai	1,00,00,000
Amount received in India on account of carriage of passengers from Singapore	3,00,00,000
Amount received in Singapore on account of carriage of passengers from Chennai	1,00,00,000

	7,00,00,000
	=====

Income from business under section 44BBA at 5% of Rs.7,00,00,000 is Rs.35,00,000, which is the income of Mr.Nathan chargeable to tax in India under the head “Profits and gains of business or profession” for the A.Y.2009-10

3(a) The CBDT has, vide Notification No.45/2008 dated 24.3.2008, inserted a new Rule 8D which lays down the method for determining the amount of expenditure in relation to income not includible in total income.

If the Assessing Officer, having regard to the accounts of the assessee of a previous year, is not satisfied with –

- (a) the correctness of the claim of expenditure by the assessee; or
- (b) the claim made by the assessee that no expenditure has been incurred in relation to exempt income for such previous year, he shall determine the amount of expenditure in relation to such income in the manner provided hereunder –

The expenditure in relation to income not forming part of total income shall be the aggregate of the following:

- (i) the amount of expenditure directly relating to income which does not form part of total income;
- (ii) in a case where the assessee has incurred expenditure by way of interest during the previous year which is not directly attributable to any particular income or receipt, an amount computed in accordance with the following formula, namely :

$A \times B / C$ Where,

A = amount of expenditure by way of interest other than the amount of interest included in clause (i) incurred during the previous year;

B = the average of value of investment, income from which does not or shall not form part of the total income, as appearing in the balance sheet of the assessee, on the first day and the last day of the previous year;

C = the average of total assets as appearing in the balance sheet of the assessee, on the first day and the last day of the previous year;

- (iii) an amount equal to one-half per cent of the average of the value of investment, income from which does not or shall not form part of the total income, as appearing in the balance sheet of the assessee, on the first day and the last day of the previous year.

3(b) The payment made for acquiring the licence to operate telecom services in Mumbai shall be subject to deduction as per the scheme in section 35ABB. As per section 35ABB, any amount actually paid for obtaining licence to operate telecommunication services shall be allowed as deduction in equal installments during the number of years for which the license is in force. If the payment is made before the commencement of business, the deduction shall be allowed beginning with the year of commencement of business. In any other case, it will be allowed commencing from the year of payment. Deduction shall be allowed up to the year in which the license shall cease to be in force.

The amount of deduction available for A.Y. 2009-10 is Rs.3 lakh as worked out below:-

(1)	(2)	(3)	(4) = (3)/(2)
Previous year of payment	Unexpired period of license	Installment paid (Rs.)	Deduction in respect of each installment (Rs.)
2006-07	10 years	10,00,000	1,00,000
2007-08	9 years	9,00,000	1,00,000
2008-09	8 years	8,00,000	1,00,000
		27,00,000	3,00,000

The deduction under section 35ABB for assessment year 2009-10 onwards till A.Y. 2016-17 will be Rs.3 lakh each year.

Note – It is assumed that the company has commenced business during the P.Y.2006-07.

3(c)

- (i) Section 192 requires deduction of tax from salary at the time of payment. Thus, the employer is not required to deduct tax at source when salary has not been paid but is merely credited to the account of the employee in its books of account. Manasi Ltd, therefore, is not required to deduct tax at source in respect of the salary merely credited to the account of Dhanya and not paid.
- (ii) Section 194C (1) which governs tax deduction on payments to contractor is not applicable where the contract is between an individual and a contractor. Therefore, Vijay, who is an individual, need not deduct tax on payment of Rs.9 lakhs made to the contractor for construction of his business premises.
- (iii) The limit of Rs.20,000 for non-deduction of tax under section 194J has been separately fixed for fees for professional services and fees for technical services. This means that if a person has rendered services falling under both the categories, tax need not be deducted if the fees for each category does not exceed Rs.20,000 even though the aggregate of the amounts credited to the account of such person or paid to him for both the categories of services exceed Rs.20,000. Therefore, Barghav Ltd., is not required to deduct tax at source in respect of the fees either at the time of credit or at the time of payment.

- 4(a) The Reverse Mortgage scheme is for the benefit of senior citizens, who own a residential house property. In order to supplement their existing income, they can mortgage their house property with a scheduled bank or housing finance company, in return for a lump-sum amount or for a regular monthly/quarterly/annual income. The senior citizens can continue to live in the house and receive regular income, without the, botheration of having to pay back the loan. The loan will be given up to, say, 60% of the value of residential house property mortgaged.

Also, the bank/housing finance company would undertake a revaluation of the property once every 5 years. The borrower can use the loan amount for renovation and extension of residential property, family's medical and emergency expenditure etc., amongst others. However, he cannot use the amount for speculative or trading purposes.

The bank will recover the loan along with the accumulated interest by selling the house after the death of the borrower. The excess amount will be given to the legal heirs. However, before resorting to sale of the house, preference will be given to the legal heirs to repay the loan and interest and get the mortgaged property released.

The Finance Act 2008 has inserted clause (xvi) in section 47 to clarify that any transfer of a capital asset in a transaction of reverse mortgage under a scheme made and notified by the Central Government would not amount to a transfer for the purpose of capital gains.

Further, clause (43) has been inserted in section 10 to provide that the amount received by the senior citizen as a loan, either in lump sum or in installments, in a transaction of reverse mortgage would be exempt from income-tax.

4(b) In order to determine the taxability of business income of foreign enterprises operating in India, it is important to determine the existence of a Permanent Establishment ('PE'). Article 5(1) of the DTAA provides that for the purpose of this convention the term 'Permanent Establishment' means a fixed place of business through which the business of an enterprise is wholly or partly carried on. According to Article 5(2), various instances of PE, include

- a) a place of management,
- b) a branch,
- c) an office,
- d) a factory,
- e) a workshop,
- f) a sales outlet,
- g) a warehouse,
- h) a mine, an oil or gas well, a quarry or other place of extraction of natural resources (but not exploration).

4(c)

Computation of capital gain on slump sale of Unit C
--

Particulars	Rs. in lakh
Sale consideration for the slump sale of Unit C	920
Less: Net worth of Unit C (Refer note 1 below)	800
Long term capital gain arising on slump sale	120

Working note:

Particulars	Rs. in lakh	
1) Computation of net worth of Unit C		
A) Book value of non-depreciable assets:		
i) Land	50	
ii) Other assets	390	440
B) Written down value of depreciable assets under section 43(6)		440
Aggregate value of total assets		880
Less: Value of liabilities of Unit C		80
Net worth of Unit C		800

Since Unit C is held for more than 36 months, the long term capital gain of Rs.120 lakh is taxable under section 112 at 20% plus surcharge@10% plus education cess@2% and secondary and higher education cess@1%. The indexation benefit is not available in the case of a slump sale.

5(a) Section 92CA(1) provides for a procedure for reference to a Transfer Pricing Officer (TPO) of any issue relating to computation of arm's length price in an international transaction. The procedure is as under -

- (i) The option to make reference to TPO is given to the Assessing Officer. He may make this reference if he considers it necessary or expedient to do so. This option is not available to the assessee.
- (ii) The Assessing Officer has to take the approval of the CIT before making such a reference.
- (iii) Any Joint /Deputy/Assistant Commissioner of Income Tax, authorised by CBDT, can be appointed as TPO.
- (iv) According to section 92A(2) when such reference is made, TPO can call upon the assessee to produce evidence in support of the computation of arm's length price made by him.
- (v) Sec 92A(3) provides that, the TPO has to pass an order determining the arm's length price after considering the evidence, documents, etc. produced by the assessee and after considering the material gathered by him. He has to send a copy of his order to Assessing Officer as well as the assessee.
- (vi) Sec 92A(4) provides that the order of the Transfer Pricing Officer determining the arm's length price of an international transaction is now binding on the Assessing Officer and the Assessing Officer shall proceed to compute the total income in conformity with the arm's length price determined by the Transfer Pricing Officer

Therefore, the Assessing Officer cannot complete the assessment in disregard of the order of Transfer Pricing Officer and on the basis of contention raised by the assessee.

5(b)

- (i) 33 months from the end of the assessment year in which the income was first assessable i.e. by 31.12.2012.
- (ii) 21 months from the end of the financial year in which notice under section 148 is served i.e. by 31.12.2010.
- (iii) 33 months from the end of the financial year in which the last of the authorizations for search under section 132 was executed i.e. by 31.12.2011.

5(c)

(i) Associated Enterprise – Section 92A

Section 92A defines the term “associated enterprise”. Section 92A(1) defines the term “associated enterprise” in very generic terms. Under section 92A(1) an “associated enterprise” in relation to another enterprise means an enterprise

- which participates directly or indirectly or through one or more intermediaries in the management or control or capital of the other enterprise or
- in respect of which one or more person's who participate directly or indirectly or through one or more intermediaries in its management or control or capital are the same

persons who participate in directly or indirectly or through one or more intermediaries in the management or control or capital of the other enterprise

Section 92A(2) prescribes that two enterprises shall be deemed to be associated enterprises if at any time during the previous year,

- One enterprise holds directly or indirectly shares carrying not less than 26 percent of voting power in the other enterprise or
- any person or enterprise holds directly or indirectly shares carrying not less than 26 percent of voting power in each of such enterprises or
- a loan advanced by one enterprise to the other enterprise constitutes not less than 51 percent of the book value of the total assets of the other enterprise or
- one enterprise guarantees not less than 10 percent of total borrowings of the other enterprise or
- more than half the Board of Directors or members of the Governing Board or one or more executive directors or executive members of the Governing Board of one enterprise are appointed by the other enterprise or
- more than half the directors or members of the Governing Board or one or more of executive directors or members of the Governing Board of each of the two enterprises are appointed by the same person or persons or
- the manufacture or processing of goods or articles or business carried out by one enterprise is wholly dependent on the use of know-how, patents, copyrights, trademarks, licenses, franchises or any other business or commercial rights of a similar nature or any data, documentation, drawing or specification relating to any patents, invention, model, design, secret formula or process of which, the enterprise is the owner or in respect of which the other enterprise has exclusive rights or
- 90 percent or more of raw materials and consumables required for the manufacture or processing of goods or articles carried out by one enterprise are supplied by the other enterprise or by persons specified by the other enterprise and the prices and other conditions relating to supply are influenced by such other enterprise or
- the goods or articles manufactured or processed by one enterprise are sold to the other enterprise or to persons specified by the other enterprise and the prices and other conditions relating thereto are influenced by such other enterprise or
- where one enterprise is controlled by an individual the other enterprise is also controlled by such individual or his relative or jointly by such individual and relative
- where one enterprise is controlled by a Hindu undivided family the other enterprise is controlled by a member of such Hindu undivided family or by a relative of a member of such Hindu undivided family or jointly by such member and his relative
- where one enterprise is a firm, association of persons or body of individuals the other enterprise holds not less than 10 percent interest in such firm, association of persons or body of individuals
- there exists between the two enterprises any relationship of mutual interest as may be prescribed

(ii) Credit for tax paid under MAT - Section 115JAA

Where any amount of tax is paid u/s.115JB in excess of the tax payable under the normal provisions, such excess shall be treated as credit available to the assessee company. The amount

of such credit shall be carried forward to the subsequent years and set off against the excess of tax payable under the normal provisions over the tax payable under section 115JB. It can be so carried forward and set off within the period of 7 years immediately succeeding the assessment year in which the tax credit is determined. If in the subsequent 7 years, the company continues to pay minimum alternate tax and the credit is not set off, it shall lapse.

Note: The provisions of minimum alternate tax shall not apply to any income accrued or arising after March 31, 2005 to an entrepreneur or a Developer in a unit or Special Economic Zone from any business carried on or services rendered.

(iii) Provisional Attachment to Protect Revenue in Certain Cases - Section 281B

Where, during the pendency of any proceeding for the assessment of any income or for the assessment or reassessment of any income which has escaped assessment, the Assessing Officer is of the opinion that for the purpose of protecting the interest of the revenue it is necessary so to do, he may, with the previous approval of the Chief Commissioner or Commissioner by order in writing, attach provisionally any property belonging to the assessee in the manner provided in the Second Schedule.

The attachment will be for a period of 6 months unless it is extended by an order of the Commissioner or Chief Commissioner for reasons to be recorded in writing. The maximum period of extension cannot exceed 2 years.

6(a)

Computation of Net Wealth of ABC Limited as on the valuation date 31.03.2009		
Particulars	Reasons	Value (Rs. in crores)
Assets:		
(i) Fixed Assets:		
Plant & machinery	Not an asset u/s 2(ea)	Nil
Factory building	Commercial property. Hence, not an asset u/s 2(ea)	Nil
Urban land	(300 sq. meters) It is an asset u/s 2(ea) – Refer Note below	70
Motor cars	Used for running them on hire. Hence, not an asset u/s 2(ea)	Nil
(ii) Investments:		
Jewellery	Not stock-in-trade. Hence, an asset u/s 2(ea)	28
Plot of land in Bangalore	An asset u/s 2(ea). Refer Note below	60
Equity shares in subsidiary companies	Not an asset u/s 2(ea)	Nil
(iii) Current assets:		
Inventories (Jewellery)	Stock-in-trade. Hence, not an asset u/s 2(ea)	Nil
Sundry Debtors	Not an asset u/s 2(ea)	Nil
Cash and bank balances (includes cash balance of Rs.1,00,000)	Bank balance – not an asset under section 2(ea)	Nil
	Cash in hand – recorded in books – hence, not an asset under section 2(ea).	Nil
Value of assets as per Schedule III of the Wealth-tax Act, 1957 (A)		158
Liabilities:		
(i) Current Liabilities	Not incurred in relation to an asset under section 2(ea). Hence, not eligible for deduction.	Nil
(ii) Secured loan taken for purchase of urban land	Since the loan is taken for purchase of urban land, which is included in the net wealth, it is eligible for deduction.	50
Liabilities eligible for deduction (B)		50
Net wealth [(A) – (B)]		108

6(b) Urban land is an “asset” as per section 2(ea)(v) of the Wealth Tax Act and it means (i) land situated in any area comprised within the jurisdiction of a municipality or cantonment board and which has a population of not less than 10,000 according to the last preceding census; (ii) land situated in any area not being more than 8 kms from the local limits of any municipality or cantonment board. However, in spite of fulfilling the above conditions, the following are not treated as urban land:-

- (i) land on which construction of a building is not permissible under any law for the time being in force in the area in which such land is situated;
- (ii) land occupied by any building which has been constructed with the approval of the appropriate authority;
- (iii) unused land held by the assessee for industrial purposes for a period of 2 years from the date of its acquisition by him; and
- (iv) any land held by the assessee as stock-in-trade for a period of 10 years from the date of its acquisition by him.

6(c) Section 4(1)(a) of the Wealth-tax Act, 1957 provides that the value of assets which are transferred, directly or indirectly, otherwise than for adequate consideration or in connection with an agreement to live apart, by a husband to his wife or vice versa, are to be clubbed in the hands of the transferor, whether the assets are held in the form in which they were transferred or otherwise. The Supreme Court has, in CWT v. Kishan Lal Bubna (1993) 204 ITR 600, held that where the assessee transfers money and the transferee utilises that money to acquire an asset, it is the value of that asset on the valuation date which is relevant for the purposes of computing the net wealth of the assessee. Where what is transferred by the assessee is an asset and the transferee disposes of the asset and acquires with the consideration received another asset, it is the value of that acquired asset on the valuation date which is relevant for the purposes of computing the net wealth of the assessee. In view of this legal position, the claim of Abhishek is not valid. The value of gold jewellery as per Schedule III on the valuation date 31.3.2009 is includible in the net wealth of Abhishek for A.Y.2009-10. Therefore, Rs.2,50,000, being the fair market value of gold jewellery as on 31.3.2009 is includible in the net-wealth of Abhishek under section 4(1)(a).