

**PRIME ACADEMY  
29 th SESSION PROGRESS TEST  
FINAL – COST MANAGEMENT**

**No.of.pages: 4**

**Total Marks: 75  
Time Allowed: 2Hrs**

**PART A**

**25 MARKS**

- 1 Which of the following items would NOT be considered in cost-volume-profit analysis? **(1 Mark)**
- a. units of production
  - b. fixed costs
  - c. product mix
  - d. gross profit margin
- 2 The break-even point **(1 Mark)**
- a. the volume of activity where all fixed costs are recovered.
  - b. where fixed costs equal total variable costs.
  - c. where total revenues equal total costs.
  - d. where total costs equal total contribution margin.
- 3 Lewis Production Company had the following projected information for 2004: **(1 Mark)**
- |                        |            |
|------------------------|------------|
| Selling price per unit | Rs.150     |
| Variable cost per unit | Rs.90      |
| Total fixed costs      | Rs.300,000 |
- What is the profit when one unit more than the break-even point is sold?
- a. Rs. 150
  - b. Rs. 60
  - c. Rs.1,500,150
  - d. Rs. 600,060
- 4 The overhead absorption rate for product T is Rs.4 per machine hour. Each unit of T requires 3 machine hours. Inventories of product T last period were: **(2 Marks)**
- |                   | <b>Units</b> |
|-------------------|--------------|
| Opening inventory | 2,400        |
| Closing inventory | 2,700        |
- Compared with the marginal costing profit for the period, the absorption costing profit for product T will be:
- a. Rs.1,200 higher
  - b. Rs.3,600 higher
  - c. Rs.1,200 lower
  - d. Rs.3,600 lower
- 5 Which of the following equations is TRUE? **(1 Mark)**
- a. Contribution margin = Sales revenue × Variable cost ratio
  - b. Contribution margin ratio = Contribution margin/Variable costs
  - c. Contribution margin = Fixed costs
  - d. Contribution margin ratio = 1 – Variable cost ratio

- 6 In a period, a company had opening inventory of 31,000 units and closing inventory of 34,000 units. Profits based on marginal costing were Rs.850,500 and on absorption costing were Rs.955,500. If the budgeted total fixed costs for the company was Rs.1,837,500, what was the budgeted level of activity in units? **(2 Marks)**
- 32,500
  - 52,500
  - 65,000
  - 105,000
- 7 A company has the following budgeted information for the coming month:  
 Budgeted sales revenue Rs.500,000  
 Budgeted contribution Rs.200,000  
 Budgeted profit Rs. 50,000  
 What is the budgeted break-even sales revenue? **(1 Mark)**
- Rs.125,000
  - Rs.350,000
  - Rs.375,000
  - Rs.450,000
- 8 Dirth Company sells only one product at a regular price of Rs.7.50 per unit. Variable expenses are 60 percent of sales and fixed expenses are Rs.30,000. Management has decided to decrease the selling price to Rs.6.00 in hopes of increasing its volume of sales. **(2 Marks)**
- What is the contribution margin ratio when the selling price is reduced to Rs.6 per unit?
- 25%
  - 40%
  - 75%
  - 60%
- 9 Which of the following is a TRUE statement about sales mix? **(1 Mark)**
- Profits may decline with an increase in total Rs.s of sales if the sales mix shifts to sell more of the high contribution margin product.
  - Profits may decline with an increase in total Rs.s of sales if the sales mix shifts to sell more of the lower contribution margin product.
  - Profits will remain constant with an increase in total Rs.s of sales if the total sales in units remains constant.
  - Profits will remain constant with a decrease in total Rs.s of sales if the sales mix also remains constant.
- 10 On a profit-volume graph, the profit line intersects the horizontal axis at **(1 Mark)**
- the origin.
  - the break-even point.
  - a volume of 1,000 units.
  - a point where profit is greater than zero.

- 11 H Limited manufactures and sells two products A and B. Following are some information about A and B **(2 Marks)**

	A	B
Expected sales ratio	1	3
Contribution to sales ratio	40%	50%
Total annual sales	Rs.420000	
Total Fixed Costs	Rs.120000	

The budgeted break-even sales value (rounded to nearest Rs.1000)  
Rs.196000

- a. Rs.200000  
b. Rs.253000  
c. Rs.255000
- 12 A closed path has all the following characteristics except **(1Mark)**  
a. It links an unused square with itself.  
b. Movements on the path may occur horizontally, vertically or diagonally.  
c. The corners of the path must all be stones, except for the corner at the unused square being evaluated.  
d. The path may skip over unused squares or stones.
- 13 A degeneracy may occur when: **(1 Mark)**  
a. At optimality, the total cost is zero.  
b. In finding an initial solution, a row and a column rim requirements are simultaneously satisfied.  
c. There are two or more stones with the same smallest negative value in a closed path for an incoming stone.  
d. Both *b* and *c*.
- 14 Suppose you had an assignment problem where 5 jobs are to assigned to 5 people but there are in fact 7 people available to do the 5 jobs. You could solve the problem in the same manner as an unbalanced transportation problem is solved by: **(1 Mark)**  
a. Creating two dummy jobs with zero costs and solve a  $7 \times 7$  problem.  
b. Arbitrarily eliminating two of the people and solve a  $5 \times 5$  problem.  
c. Solving the assignment problem as a  $5 \times 7$  problem.  
d. All of the above.
- 15 Which of the following is true for the assignment problem? **(1 Mark)**  
a The number of rows equals the number of columns.  
b All circled values in a stone are 1.  
c All rim requirements are 1.  
d All of the above.
- 16 Total contribution margin is calculated by subtracting **(1 Mark)**  
a cost of goods sold from total revenues.  
b fixed costs from total revenues.  
c total manufacturing costs from total revenues.  
d total variable costs from total revenues.

- 17 The contribution margin at the break-even point **(1 Mark)**  
a equals total fixed costs.  
b is zero.  
c plus total fixed costs equals total revenues.  
d is greater than variable costs.

- 18 M Company projected the following information for next year: **(2 Marks)**

Selling price per unit	Rs.	75
Contribution margin per unit	Rs.	30
Total fixed costs	Rs.	120,000
Tax rate		40%

How many units must be sold to obtain an after-tax profit of Rs.67,500?

- a. 3,750 units  
b. 7,750 units  
c. 5,625 units  
d. 5,167 units
- 19 In 2004, A Ltd had variable costs of Rs.27,000, fixed costs of Rs.18,000, and a net loss of Rs.4,500. **(2 Marks)**

A Ltd's 2004 break-even sales volume was

- a. Rs.36,000  
b. Rs.37,500  
c. Rs.49,500  
d. Rs.54,000

**PART B**  
**Answer all questions**

**50 MARKS**

1. The Manager of a small business has received enquiries about printing three different types of advertising leaflet. Information concerning these three leaflets is shown below:

Leaflet type	A	B	C
	Rs.	Rs.	Rs.
Selling price, per 1000 leaflets	100	220	450
Estimated Printing costs:			
Variable per 1000 leaflets	40	70	130
Specific fixed costs, per month	2,400	4,000	9,500

In addition to specific fixed costs a further Rs.4,000/- per month would be incurred in renting special premises if any or all of the above three leaflets were printed. The minimum printing order would be for 30,000 of each type of leaflet per month and the maximum possible order is estimated to be 60,000 of each leaflet per month.

Required: (i) Examine and comment upon the potential profitability of leaflet printing. Make whatever calculations you consider appropriate.

(ii) Assuming that orders have been received to print each month 50,000 of both leaflet A and leaflet B calculate the quantity of leaflet C which would need to be ordered to produce an overall profit, for all three leaflets of Rs.1, 800/- per month.

It is possible that a special type of paper used in printing leaflets will be difficult to obtain during the first few months. The estimated consumption of this special paper for each type of leaflet is:

Leaflet	A	2 packs per 1,000 leaflets
Leaflet	B	6 packs per 1,000 leaflets
Leaflet	C	16 packs per 1,000 leaflets

- a) Advise the manager on the quantity of each leaflet which should be printed in order to maximize profit in the first month, if 50,000 of each type of leaflet have been printed there remains unfulfilled order of 10,000 for each type of leaflet and there 170 packs of special paper available for the rest of the month.
- b) What will be your reaction if the printing quantity is to be a pack of 1,000 leaflets?

**(15 Marks)**

2. X Ltd manufactures and sells a special component. It follows a standard Marginal Costing system. For the year ended 31.03.2007, it produced 1400 components against a budgeted capacity of 2000 components. Out of the production 100 components were scrapped. Due to a computer virus most of the financials could not be retrieved. However the Chief Cost Accountant gave the following information.

Particulars	Rs.
Selling Price per component	208
Direct materials total cost	84,000

Direct labour cost per component (Actual efficiency 80%)	?
Variable manufacturing overhead per component	15
Variable selling overhead per component	8
Fixed selling and Administration overheads	40,000
Fixed overhead manufacturing absorption rate per component (on the basis of budgeted capacity)	30
Closing stock (100 units) (Valued at prime cost for financial purpose – on the basis of Budgeted Capacity)	9000

You are required to prepare the actual Profit and Loss statement. Reconcile the standard profit with that of Actual Profit/Loss. **(15 Marks)**

3. A city corporation has decided to carry out road repairs on four main arteries of the city. The government has agreed to make special grant of Rs.50Lakhstowards the cost with a condition that the repairs must be done at the lowest cost and quickest time. If conditions warrant then a supplementary token grant will also be considered favourably. The corporations have floated tenders and 5 contractors have sent their bids. In order to expedite work, one road will be awarded to only one contractor.

Cost of repairs (Rs in Lakhs)

Contractors	R1	R2	R3	R4
C1	9	14	19	15
C2	7	17	20	19
C3	9	18	21	18
C4	10	12	18	19
C5	10	15	21	16

- ( I ) Find the best way of assigning the repair work to the contractors and the costs.  
(ii) If it is necessary to seek supplementary grant , then what should be the amount sought?  
(iii) Which of the five contractors will be unsuccessful in his bid?

**(10 Marks)**

4. Solve the following Transportation problem.

FACTORIES	DESTINATIONS			SUPPLY
	A	B	C	
X	15	9	6	20
Y	21	12	6	20
Z	6	18	9	20
DEMAND	20	20	20	60

**(10 Marks)**

**PRIME ACADEMY  
29 th SESSION PROGRESS TEST  
FINAL – COST MANAGEMENT  
SUGGESTED ANSWERS**

**PART – A**

- |     |   |     |   |
|-----|---|-----|---|
| 1.  | D | 11. | C |
| 2.  | C | 12. | D |
| 3.  | B | 13. | B |
| 4.  | B | 14. | A |
| 5.  | D | 15. | A |
| 6.  | B | 16. | D |
| 7.  | D | 17. | A |
| 8.  | A | 18. | B |
| 9.  | B | 19. | D |
| 10. | B |     |   |

**PART B**

1

<b>Leaflet</b>		<b>A</b>	<b>B</b>	<b>C</b>	<b>TOTAL</b>
Selling Price per 1000	Rs.	100	220	450	
Variable costs per 1000	Rs.	40	70	130	
Contribution per 1000	Rs.	60	150	320	
Specific Fixed Costs	Rs.	2,400	4,000	9,500	
General Fixed Cost	Rs.				4,000
Special Paper per 1000 units	nos	2	6	16	
Contribution per special paper		30	25	20	
RANK (based on limiting factor)		1	2	3	
Break Even point @ sales mix of 1:1:1		General Fixed Cost + Specific Fixed Cost			
		Total Contribution at sales mix			
		4000+(2400+4000+9500)			
		(60+150+320)			
BEP units		37.54	units each of A, B and C		
Any sales above 38000 units of each would be profitable at equal sales mix					
Units of C for a overall profit of Rs.1800					
Required Profit	Rs 1800				
Add : Fixed Costs	Rs 19900				
(Specific + general)					
Contribution required	Rs 21700				
Contribution from A and B	Rs 10500	(60*50+150*50)			
Contribution from C	Rs 11200				
No of Units of C ('000s)	35				
<b>Quantity of leaflet to be produced to maximize profit (when spl paper is in short supply)</b>					
		A	B	C	
Quantity of leaflet ('000s)		10	10	5.625	
Spl paper utilized		20	60	90	
Spl paper available		150	90	0	

2

<b>Cost / Unit</b>	<b>Rs.</b>	<b>Rs.</b>
Selling price		208
Direct Material		60
Direct Labour	(9000/100-60)	30
Variable Man. OH		15
Variable Selling OH		8
<b>Contribution</b>		<b>95</b>
<b>Actual Profit and Loss account</b>		
Sales	1200 x 208	249,600
Closing Stock		9,000
<b>TOTAL REVENUE</b>		<b>Rs 258,600</b>
Material		Rs 84,000
Labour	(30/80%*1400)	52,500
Variable Manufacturing OHs		21,000
Fixed Overheads		60,000
Fixed Selling OHs		40,000
Variable Selling OH s	1200*8	9,600
<b>TOTAL COSTS</b>		<b>Rs 267,100</b>
Loss		Rs 8,500
<b>RECONCILIATION</b>		
Standard Profit	(1200*95)-100000	Rs 14,000
Actual Profit		Rs (8,500)
Difference		Rs 22,500
Labour Efficiency		(10,500)
Scrap Loss		Rs (10,500)
Stock Valuation		Rs (1,500)
		Rs (22,500)

**3.**

The final assignment is as below.

JOB	Assigned to	Cost
C1	R3	19
C2	R1	7
C3	R5	0
C4	R2	12
C5	R4	16
Total		54

Supplementary Grant required is Rs 4 lakhs (Rs.54 – 50)

C3 would be unsuccessful

**4.**

Since this is a square matrix and all the supply and requirement are the same, this can be solved using the assignment technique.

The final assignment is as follows

JOB	Assigned to	Cost
X	B	9
Y	C	6
Z	A	6
Total		21

**PRIME ACADEMY**  
**29 th SESSION PROGRESS TEST FINAL**  
**MANAGEMENT INFORMATION AND CONTROL SYSTEMS**

**Old Syllabus**

**No.of.pages: 3**

**Total Marks: 75**  
**Time Allowed: 2Hrs**  
**25 Marks**

**PART-A**

1. Stage three of SDLC is called as \_\_\_\_\_
2. An application programmer is involved in the \_\_\_\_\_ stage of SDLC
3. If software baselining is absent it increases the risk of \_\_\_\_\_
4. A usable system or a system component built quickly at a lesser cost and with the intention of being modified or replaced with a fully operational system is called as \_\_\_\_\_
5. In the "Bottom up" approach to systems development the first step is identification of \_\_\_\_\_
6. Estimation by the design team of the time involved for making the new system functional is part of \_\_\_\_\_ feasibility study.
7. The expansion of the term CASE is \_\_\_\_\_
8. "Data about Data" is called as \_\_\_\_\_
9. The characteristic of the codes which provide for future growth is called as \_\_\_\_\_
10. \_\_\_\_\_ is the deliverable of the design phase which is a document containing description of the activities carried out with diagrammatic representations like flow charts
11. \_\_\_\_\_ refers to the capability to alter the system to meet the changing business requirements.
12. \_\_\_\_\_ is a method of checking the system using the documents/inputs available without using the system for testing
13. Which of the following is not a conversion strategy:
  - i. Gradual Conversion
  - ii. Debugging
  - iii. Direct change over
14. Which of the following is the sequence as per SDLC
  - a. Preliminary investigation, requirement analysis, design
  - b. Preliminary investigation, testing, requirement analysis
  - c. Preliminary investigation, implementation, testing
  - d. None of the above
15. The steps involved in preliminary investigation are:
  - a. Design, development and testing
  - b. Request clarification, feasibility study, approval of request
  - c. Requirement analysis, design of the system, system testing
  - d. Request clarification, feasibility study, system testing
16. When users donot understand their information needs very clearly and system requirements are hard to define, a suitable approach would be :

- a. Prototyping approach
  - b. Top down approach
  - c. Traditional Approach
  - d. End-user development approach
17. Decline in standards and controls, increase in unrelated and incompatible systems , difficult to access a common database are some of the limitations of:
- a. Prototyping approach
  - b. Top down approach
  - c. Traditional Approach
  - d. End-user development approach
18. \_\_\_\_\_ involves the estimation by the design team of the time involved for making the new system functional/operational and communicating this to the steering committee. **2 Marks**
- a. Schedule feasibility
  - b. Technical feasibility
  - c. Economic feasibility
  - d. Legal feasibility
19. \_\_\_\_\_ captures the characteristics of data elements and their relationships amongst them as well as with external systems
- a. System component matrix
  - b. Data Dictionary
  - c. Entity relationship diagram
  - d. Data flow diagram
20. Expandability as a characteristic of a good coding scheme implies:
- a. Code must identify each object uniquely
  - b. Code must be briefer/concise than the description
  - c. Coding should provide for future growth in number of objects
  - d. The logic behind coding should be readily understood by the users
21. The difference between bench marking problems and test cases are:
- a. Test cases totally disregard the actual job mix/process situation while benchmarking problems reflect at least some portion of the buyer's real work environment
  - b. Bench marking totally disregard the actual job mix/process situation while test problems reflect at least some portion of the buyer's real work environment
  - c. There is no distinction between bench marking problem and test cases
  - d. None of the above
22. A well developed and thoroughly tested system would require minimum of \_\_\_\_\_
- a. Schedule Maintenance
  - b. Operational evaluation
  - c. Rescue Maintenance
  - d. Information evaluation
23. The deliverable of a design phase is called as \_\_\_\_\_
24. The two approaches to data storage are \_\_\_\_\_ and \_\_\_\_\_.

**PART B**

**50 Marks**

**Q. No.1 is compulsory. Answer any 2 questions from the rest**

1. (a) What are the poor project management items associated with failed SDLC projects ?  
Identify some good project management effort ? (10 Marks)
- (b) Write short notes on program debugging, public evaluation reports (6 Marks)
  
2. (a) Discuss the meaning, advantages and disadvantages of various conversion strategies? (10 Marks)
- (b) What are the various costs identified during feasibility study? What are the various benefits? (7 Marks)
  
3. (a) What are the factors to be considered while designing system output? (10 Marks)
- (b) List the contents of a systems manual (7 Marks)
  
4. Write short notes on :
  - a. Windowing capability (5 Marks)
  - b. Data Dictionary (6 Marks)
  - c. Role of accountants in SDLC (6 Marks)

**PRIME ACADEMY**  
**29 th SESSION PROGRESS TEST**  
**MANAGEMENT INFORMATION AND CONTROL SYSTEMS (MICS)**  
**SUGGESTED ANSWERS**

**PART A**

- 1 Systems Design
- 2 Stage4 or development stage
- 3 Scope Creep
- 4 Prototype
- 5 Life Stream Systems
- 6 Schedule Feasibility
- 7 Computer Aided Software Engineering
- 8 Meta Data
- 9 Expandability
- 10 Systems Manual
- 11 Maintainability
- 12 Desk Checking/Paper Walk Through
- 13 .Debugging
- 14 Choice a
- 15 Choice b
- 16 Choice a- Prototyping
- 17 Choice d- End user development approach
- 18 Choice a- Schedule Feasibility
- 19 Choice b- Data Dictionary
- 20 Choice c
- 21 Choice a
- 22 Choice c- Rescue Maintenance
- 23 Systems Manual
- 24 Centralised Storage and Distributed Storage

## PART B

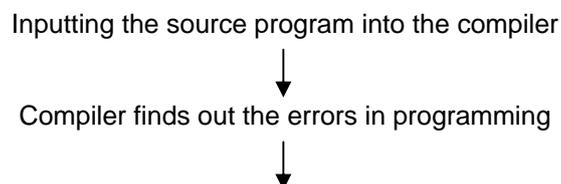
1. (a) Some poor project management issues associated with failed projects
  - a. Underestimation of time for project completion
  - b. Failure of top management to monitor/control the project closely.
  - c. Underestimation of resources (men, computing resources and finance) required to complete the project.
  - d. Size and scope of project underestimation
  - e. Inadequate project control mechanism. (i.e. failure to identify key stages, deliverable dates etc.)
  - f. "Scope Creep" i.e. system specification keeps changing due to non-existence of "Software Baseline"
  - g. Poor planning

***Some good project management techniques include:***

- a. User participation in requirement analysis and user acceptance/sign-off in authorising the system.
  - b. Deputation of appropriate staff for systems development effort with clearly defined job descriptions, responsibilities and authority.
  - c. Clear documentation of scope and nature of the system.
  - d. Feasibility study based on which senior management approves the systems development project.
  - e. A well thought out master plan incorporating realistic time and cost estimate for project control.
  - f. Risk identification and assessment for managing project risk.
  - g. Decomposition of the project into manageable phases
  - h. Approval of each phase before commencing development of the subsequent phase.
  - i. Making quality assurance plan and SDLC methodology as part of the development effort
- (b) **Meaning:** Correcting the syntax errors in programming language and also the diagnostic errors.

**Purpose:** It is carried out so that the program compiles without any problem (called as "clean compile") and can be successfully converted from source code into machine code.

Debugging consists of the following steps :



Correct the errors thrown out



Re-submit the source program to the compiler

**Public evaluation reports:** Some consultancy agencies compare and contrast performance of various software and hardware and publish these reports. These reports are used by companies wanting to invest in new software/hardware and specially useful when company staff donot have much systems knowledge.

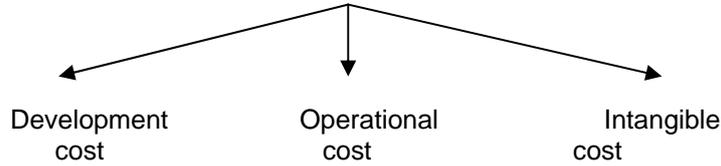
2 (a)

<b>Conversion method</b>	<b>Meaning</b>	<b>Advantages</b>	<b>Disadvantages</b>
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)
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.

(b) Estimation of costs and benefits

**Meaning :** It is a preliminary estimate of the costs and benefits of the various alternate solutions/options.

1.Costs: the costs involved can be broadly divided into



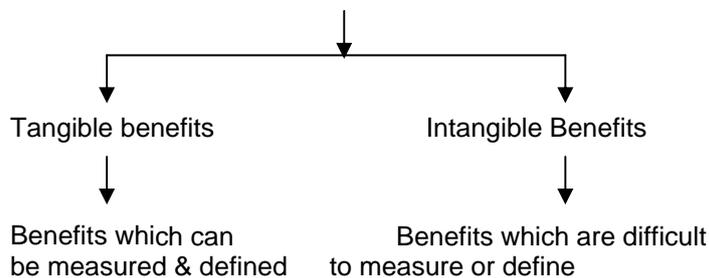
**Various costs involved:**

S.No.	Development costs	Operational costs	Intangible costs
1.	Salaries to analysts, computer programmers	Hardware / software rental / depreciation	Loss in employee productivity due to disruption caused by development work.
2.	Data file creation /conversion costs and documentation charges (systems manual)	Salaries to computers /data entry personnel who will use the new system	Loss of sales/goodwill due to errors in new system.
3.	Cost of new/extended computer facilities.	Salaries to maintenance staff (programmers etc) who maintain the new system	
4.	Cost of testing, training employees and other start up costs	Cost of data input preparation and control	
5.		Cost of maintaining proper operating environment- light, power, temperature, building rental	
6.		Overheads of organisation	

**Note:** Intangible costs are difficult to measure in rupee terms, but can be directly attributed to the introduction/operation of the new system.

**Benefits**

Benefits of introducing a new system can be divided into:



Examples of benefits:

1. Increased sales
2. Decreased operating costs
3. Timely and accurate information
4. Improved customer service
5. Decrease in working capital investment

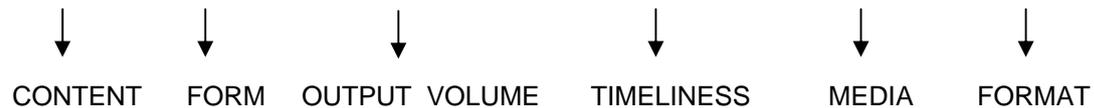
### 3 (a) Meaning of the term output-

The term output refers to any information produced by the information system; whether printed as reports or displayed as messages/on-screen reports.

Systems are judged by the quality of outputs they generate. Without good output the entire system may look waste and may be avoided by users.

#### **Important factors to be considered in output design**

Six important factors to be given importance while designing user outputs :



#### **i. Content :**

**Meaning:** Refers to actual data included in the outputs given in the report.

**Ex:** Content of the stock reports – S.No., Item code, Item description, Quantity etc.

#### **Factor to be considered**

- Too much content → managers waste time in identifying the relevant information needed → reduces the real use/impact of important information → hence only required information should be given in the outputs.  
(Implies that redundancies in data should be reduced)

#### **ii. Form :**

**Meaning:** Refers to way the content is presented to users

**Ex:** quantitative, text, graphs, audio, video etc.

#### **Factor to be considered**

- Form of output should be as per requirement of individual users.
- Departmental managers usually require both summary and detailed information to be presented in **relative terms** (like charts, graphs etc) rather than in **absolute terms**. It helps in easy understanding of the data and hence better decisions.

#### **iii. Output volume:**

**Meaning:** Amount of data required at any one time

#### **Factor to be considered**

- **If volume of data is heavy**, it is preferable to have a high speed printer/rapid retrieval display unit.
- **If unusually high volumes of outputs are to be generated**, printing on paper may cost high. As an alternate organisations should look for other output media like computer output microfiche.

**iv. Timeliness:**

**Meaning:** Refers as to when the users require the output. It may be on **periodic basis** (weekly , monthly ) **or on request**

**Factor to be considered**

- **If rapid/ real-time outputs** are required as in case of say railway/airline ticket booking systems, it is better to use communications-oriented and real-time systems.
- **In DSS or MRS**, user oriented 4GL tools effective as they provide a time sensitive alternate to tackle application back-logs.

**v. Media:**

**Meaning:** Refers to the physical devices used for input, output and storage.

Variety of media is available like paper, video display, and tapes/disks. Organisations should choose the medium best suited to their user requirements.

**Ex:** Banks use CDs/DATS to take back-up of their branch information.

**vi. Format:**

**Meaning:** Refers to the manner in which the data are physically arranged in the output.

Earlier, design tools like printer spacing charts were used to design outputs for managers/users. Currently prototyping 4GLs can be used to develop report prototypes quickly.

**3 (b) Contents of a Systems Manual**

- An overview of the existing system in place
- Information and process flows of the existing system
- The outputs and the intended recipients of the existing system
- A description of the proposed system
- Data and process flows of the proposed system
- Outputs and departments for which they are intended
- Input layout and departments responsible for various inputs
- Description of the various files to be maintained- temporary files, permanent files etc. and the contents of each file
- A program listing which would constitute the new system
- Estimates as regards the probable time involved in development (expressed in terms of computer hours, man days etc.)
- Proposed controls and audit trails to be enabled in the new system

4. a.

- i. Some software allows the windows to be repositioned on the display screen.
- ii. They may allow changing the window size/ hiding a window when not required.
- iii. **Overlapping:** This means that multiple screens/windows are open at the same time. This allows users to move information from back-ground to foreground as and when needed

Such capabilities should be supported by O/S.

**Ex:** Microsoft Windows O/S supports windowing capabilities. We can for example open Word and Excel files together and move them to the background or foreground as and when needed.

***When should windowing capability be considered ?***

- a. It is required to display different data or reports simultaneously  
**Ex:** We may open two different Word documents containing sales reports for two different regions simultaneously.
- b. Switch between different programs, alternatively displaying the output from each  
**Ex:** We may open a Word document containing some reports and tables and also open the Calculator tool and alternate between both.
- c. Move information from one window to the other (either among same programs or between different programs)

Allowing individual users to align/reposition the information on a display screen to suit their specific needs.

b. Data Dictionary

- It contains **data about data** (called as “meta data”)
- Contains descriptive information about data items in the files of the information system.

**Ex:** Date field is a data field. Data dictionary contains information like date field accepts data only in “dd/mm/yyyy” format. It is describing the characteristic of the data field.

**Some information contained in the data dictionary**

- Codes describing data length , data type (numeric, alphabetic etc.)
- Information about the source document used to create the data item.
- Names of the computer files storing data items.

As new data fields are added to the record structure—————> data dictionary is updated.

**Example:** If roll number field is added to a screen, the data dictionary is updated to state that this field will contain a maximum of 8 characters, the first two places will be alphabets, and the next 6 will be reserved for numbers. Like **AB2455**.

As a data field is deleted —> corresponding entries are deleted in the data dictionary.

If new computer programs are created to access the existing data items in the files

————> data dictionary is updated about the data items these programs access.

### ***Use of data dictionary***

- As a document to aid programmers and analyst
- As a security tool to restrict access to certain data fields for specified employees/ programs.

**Ex:** Employees who are in department other than payroll department- would be denied access to data fields containing payroll data.

- Accountants and auditors use it to trace audit trail i.e. for input source identification, the process and the output reports.
- It can also be used by accountants to plan the flow of transaction data through the system when participating in the design of a new system.

Can be used for investigating or documenting internal control procedures since it contains details about edit tests, methods of file security etc.

c.

#### **A. An accountant has domain knowledge in:**

Information technology, business, accounting, controls, organisational structure/behaviour and communication

#### **There by ensuring that new system:**

Meets user needs & has all the required controls built-in

#### **B. They have specialized skills** that can be applied in development effort.

**Ex:** Accountant called in to do a economic feasibility /cost-benefit analysis.  
Accountant may be called in to do a comparison of the various quotations given by vendors.

They provide an unique and independent perspective to the evaluation of the systems development process.

**PRIME ACADEMY**  
**29 th SESSION PROGRESS TEST - FINAL**  
**MANAGEMENT INFORMATION AND CONTROL SYSTEMS**  
**New Syllabus**

**No.of.page:1**

**Total Marks: 75**  
**Time Allowed: 2Hrs**  
**25 Marks**

**PART-A**

1. Stage three of SDLC is called as \_\_\_\_\_
2. An application programmer is involved in the \_\_\_\_\_ stage of SDLC
3. If software baselining is absent it increases the risk of \_\_\_\_\_
4. A usable system or a system component built quickly at a lesser cost and with the intention of being modified or replaced with a fully operational system is called as \_\_\_\_\_.
5. In the "Bottom up" approach to systems development the first step is identification of \_\_\_\_\_
6. Estimation by the design team of the time involved for making the new system functional is part of \_\_\_\_\_ feasibility study.
7. The expansion of the term CASE is \_\_\_\_\_
8. "Data about Data" is called as \_\_\_\_\_
9. The characteristic of the codes which provide for future growth is called as \_\_\_\_\_
10. \_\_\_\_\_ is the deliverable of the design phase which is a document containing description of the activities carried out with diagrammatic representations like flow charts.
11. \_\_\_\_\_ refers to the capability to alter the system to meet the changing business requirements.
12. \_\_\_\_\_ is a method of checking the system using the documents/inputs available without using the system for testing.
13. Which of the following is not a conversion strategy:  
i. Gradual Conversion ii. Debugging iii. Direct change over
14. By implementing controls, management ensures that \_\_\_\_\_ objectives are achieved and \_\_\_\_\_ events are avoided. **2 Marks**
15. The two impacts of implementing controls are \_\_\_\_\_ and \_\_\_\_\_ **2 Marks**
16. Integrity and competency of personnel, segregation of duties, maker-checker concepts are examples of \_\_\_\_\_
17. Correct input and wrong processing will always lead to wrong output. This is termed as \_\_\_\_\_ error.
18. Review of audit logs is an example of \_\_\_\_\_ control
19. Controls which replace a similar control is called as \_\_\_\_\_ and controls which reduce the risk of primary control not being there is called as \_\_\_\_\_ **2 Marks**
20. A methodology of testing the software component's operating effectiveness without regard to any specific internal program structure is called as \_\_\_\_\_
21. Initial set of test case, which are usually very comprehensive are called as \_\_\_\_\_
22. A methodology wherein a set of fictitious records are placed in master file and processing along with record records are called as \_\_\_\_\_

**PART B**

**50 Marks**

**Q. No.1 is compulsory. Answer any 2 questions from the rest**

1. (a) What are the poor project management items associated with failed SDLC projects ? Identify some good project management effort ? (10 Marks)
- (b) Write short notes on audit of error correction process (6 Marks)
2. (a) Explain the impact of computerization on Audit (10 Marks)
- (b) Explain the 3 broad objectives of data controls (7 Marks)
3. (a) Explain the causes of errors and bugs in softwares (10 Marks)
- (b) What is BVA ? Explain the rules for BVA test cases ? (7 Marks)
4. Write short notes on :
  - a. Router based packet filtering firewall and application level firewall (6 Marks)
  - b. SCARF (5 Marks)
  - c. Encryption and its approaches (6 Marks)

**PRIME ACADEMY  
29 th SESSION PROGRESS TEST  
MANAGEMENT INFORMATION AND CONTROL SYSTEMS (MICS)  
SUGGESTED ANSWERS**

**PART - A**

- 1 Systems Design
- 2 Stage or development stage
- 3 Scope Creep
- 4 Prototype
- 5 Life Stream Systems
- 6 Schedule Feasibility
- 7 Computer Aided Software Engineering
- 8 Meta Data
- 9 Expandability
- 10 Systems Manual
- 11 Maintainability
- 12 Desk Checking/Paper Walk Through
- 13 ii. Debugging
- 14 Business objectives are achieved and undesired events are prevented
- 15 i. Involves cost and ii. May slow down business processes
- 16 Preventive Control
- 17 Systematic
- 18 Detective Control
- 19 i. Alternate Controls ii Compensating Controls
- 20 Black box testing
- 21 Base Case
- 22 Integrated Test Facility (ITF)

## PART B

### 1. (a) Some poor project management issues associated with failed projects

- a. Underestimation of time for project completion
- b. Failure of top management to monitor/control the project closely.
- c. Underestimation of resources (men, computing resources and finance) required to complete the project.
- d. Size and scope of project underestimation
- e. Inadequate project control mechanism. (i.e. failure to identify key stages, deliverable dates etc.)
- f. "Scope Creep" i.e. system specification keeps changing due to non-existence of "Software Baseline"
- g. Poor planning

#### ***Some good project management techniques include:***

- a. User participation in requirement analysis and user acceptance/sign-off in authorising the system.
- b. Deputation of appropriate staff for systems development effort with clearly defined job descriptions, responsibilities and authority.
- c. Clear documentation of scope and nature of the system.
- d. Feasibility study based on which senior management approves the systems development project.
- e. A well thought out master plan incorporating realistic time and cost estimate for project control.
- f. Risk identification and assessment for managing project risk.
- g. Decomposition of the project into manageable phases
- h. Approval of each phase before commencing development of the subsequent phase.
- i. Making quality assurance plan and SDLC methodology as part of the development effort

### (b) Audit of error correction

1. Identification of types of probable errors in processing
2. Determining the impact of the errors on processing
3. Identification of error correction methods
4. Random review of error reports
5. Review of action taken to correct errors
6. Review of authorisation process to correct errors and re-submit them for processing
7. Review of response time in error correction
8. Adequacy of documentation detailing the errors corrected
9. Review of any long-pending error transactions awaiting correction.

- 2 (a) As organisations move towards computerisation of their business processes (Information Systems), the internal control mechanisms and audit processes also undergo a change. While the control objectives (purpose to be achieved by implementing a control) in an computerised environment may remain same as in manual environment, the manner in which controls are implement may be different.

For example internal controls as known in manual environment (i.e non computerised environment) like physical verification of documents or two people authorising high value payments by signing the vouchers etc. may not work in a computerised environment. These may be replaced by online authorisation process etc.

The impact of IS on audit process can be classified into:

1. Change in audit trail and audit evidence (i.e moving towards digital evidence)
2. Change in internal control environment
3. High probability for unconventional errors and frauds (i.e cyber crimes)
4. Change in audit procedures

#### 1. Change in audit trail and audit evidence

While in manual environment audit trails were easily visible and traceable, in computerised environment the audit trails are fragmented and difficult to trace. For example a payment voucher manually generated provides sufficient audit trail. If the same payment is made through say electronic clearing system or net banking, audit trails are not very visible and difficult for the auditor to trace. This is called as digital evidence.

#### 2. Change in internal control environment

Some of the basic internal controls in an Organisation pertain to :

- Integrity and competency of personnel
- Segregation of duties in order to ensure that a single person cannot put through a transaction end to end.
- Maker-checker or authorisation procedures
- Control over documents
- Access restrictions over assets and records (ex: cash as an asset can be accessed only by authorised personnel)
- Overall control and supervision by the management

#### 3. High probability for unconventional errors and frauds (i.e cyber crimes)

#### 4. Change in audit procedures

Since most of the audit evidence required to form an opinion is system based, manual audit procedures may not prove to be effective in a computerised environment. For example use of audit tools like ACL, IDEA may be required to query data and obtain sufficient evidence from a computerised environment.

(b) Objective of data controls: There are three broad objectives of data controls:

S.No.	Objective	Meaning	Example
1.	Data Integrity	No unauthorised modification of data should take place.	Financial data like ATM/Internet Banking transactions moving over a network should not be capable of being unauthorisedly modified.
2.	Data Confidentiality	Access to data should be restricted only to authorised personnel- i.e unauthorised person should not be able to access data	An employee not in the payroll department should not have access to payroll data
3.	Data Availability	There should be no data loss or in case of loss, back-up should be available.	Hard disk failure or media failure can lead to data loss

3 (a)

**i. Errors associated with specifications/requirements :**

Specifications form the basis for software development. Following conditions associated with specifications give rise to errors:

- a. Specifications are not documented
- b. Specifications are not comprehensive
- c. Constant change in specifications (shift in baseline/requirements)-lack of proper communication to the development team

**ii. Errors associated with design:**

Design is the stage wherein the specifications are converted into a format understood by programmers. Following conditions associated with design give rise to errors:

- a. Improper design
- b. Constant change in design
- c. Improper/lack of communication

**iii. Errors associated with programming (i.e writing of codes)**

These are errors which creep in while the programmer is involved in the coding- i.e converting the design into a software program by writing lines of codes/instructions.

Following conditions associated with design give rise to errors:

- a. Complexity of the program logic
- b. Lack of or poor documentation
- c. Time and cost pressures associated with delivery schedules (i.e need to deliver the software within a short span of time due to cost, time or business pressures)
- d. Programmers quality

Programming errors may be traced to poor specifications or poor testing processes.

- (b) Boundary Value Analysis (BVA) : This method focuses on test cases at boundary values- i.e edges of a class. This focuses not only on input but also on output.

The rules for BVA test cases are generally as follows :

- i. For range bound input (i.e with a maximum and minimum value set), test cases should *include both maximum and minimum values* and cases *just above and below* the maximum and minimum values  
  
For example if we were to pick test cases for say an income-tax computation software, say for the first slab of 0-150000 income, BVA suggests that we include both 0 and 150000 and some values just above and below 0 and 150000 for testing purposes.
- ii For inputs specifying a number of values, test cases should consider minimum and maximum numbers and values just above and below these limits.
- iii The above two guidelines are to be *applied for outputs as well*.
- iv. If internal data structures have prescribed boundaries, the test case should be designed to test these as well.

4. (a)

1. Router packet filtering firewall:

Has a filtering/screening router which has to program with the filtering rules. It implies that the router should be told which packet from which source IP address should be allowed to which destination IP address - Based on the rules accepts or denies access

They provide low cost, low security access control

2. Application firewall system:

This firewall system *does not permit* direct exchange of information between the internal and external network.

They work on the concept of bastion host- i.e all incoming requests from the internet to the corporate network are handled by the bastion host- which is heavily fortified. If there is a hack attack, only the bastion host is compromised and not the entire network.

Application firewalls are also configured as **proxy servers (a special purpose code)** to act on behalf of some inside the organization's LAN. When someone from the LAN wants to access the internet, a request goes to the proxy server which connects to the internet, obtains information and passes it on to the computer on the LAN. Thus they act as a go-between , examine packets and eliminate known vulnerabilities

b. SCARF

- It **involves embedding audit modules to continuously monitor transaction activities** which the auditor feels is material/significant.
- The data deemed important by auditor (say payments above 20000 in cash)are **recorded in a SCARF file or audit log**
- The auditor takes print outs of the SCARF file to examine whether any transactions require follow-up

Types of information which might be collected using SCARF are :

S.No.	Type of information	Meaning
1.	Application system errors	SCARF audit routines provide an independent check on the quality of system processing- to identify design and programming errors
2.	Policy and procedural variances	SCARF can check whether variations from organisational policies, procedures and standards have occurred. Ex: Organisational policy requires 2 authorisations for say payments above 5 lakhs- if there is a deviation the same can be tracked by SCARF.
3.	System exception/overrides	SCARF can be used to monitor different types of application exceptions- ex: Bank manager may give preferential rate for dollar purchase to a few customers- the SCARF can be used to track the number of times such preferential rates have been provided. (similar thing can be done for say waiver of DD charges as well)
5.	Snapshots and extended records	Snapshots and extended records can also be collected into a SCARF file
6.	User or system profiling	SCARF can be used to collect data to profile or track users/systems. Deviations from the profiles may indicate some errors.
7.	System performance measurement	SCARF can be used to collect system performance indicators.

c. Meaning:

- Encryption refers to a process by which plain text is converted into "cipher text"(scrambling of data)
- An algorithm is used to encrypt selected sensitive and **vital data** (Ex: pay rates, password files etc.) **stored in a database**. Thus even if some body has access to database, he cannot make any sense of the encrypted data without knowing the algorithm.
- Encryption should also be used for **protecting data in transit**. This is to protect data while it moves across the networks and over communication lines.

**Why encryption?** It is used to maintain confidentiality of the information as it is stored in the hard disk or in transmission over networks. Any person viewing the encrypted data cannot make any sense out of it unless he knows the algorithm to break the message. Hence confidentiality is maintained.

#### How does Encryption work ?

Sender converts plain text into cipher text (encryption ) using an encryption algorithm and transmits it over the communication channel ( network). The receiver receives the cipher text and applies the algorithm to convert the cipher text into plain text (decryption). Thus he gets the plain text back which is readable.

Encryption algorithm uses a key ,which is a binary number, typically 56 to 128 bits in length. More bits in the key higher is the strength of the encryption method.

### Approaches to encryption

There are 2 broad approaches to encryption, called as:

Private key encryption	Public key encryption
<p><b>Meaning :</b> Uses a <b>single key for both encryption and decryption</b>. The sender encrypts message with a algorithm ,transmits it and receiver decrypts with the same algorithm.</p> <p><b>(Ex: Data Encryption Standard (DES))</b></p>	<p><b>Meaning:</b> Uses <b>two different keys – one for encryption and other for decryption of the message</b>.</p> <p>Each recipient has a public key which is published and a private key which is kept secret. Sender encrypts the message using the receivers public key and then transmits the message. Receiver decrypts the message using his private key .</p>
<p><b>Limitation :</b> If the perpetrator knows the key, he can decrypt the message. More the number of people who know the key, greater is the risk.</p>	<p><b>Advantage :</b> User need not share his private key and hence reduces chances of misuse</p> <p><b>Limitation:</b> It may be a costly method compared to private key encryption.</p>

**PRIME ACADEMY**  
**29 th SESSION PROGRESS TEST**  
**FINAL**  
**Direct Taxes**

**No.of.pages:2**

**Total Marks: 75**  
**Time Allowed: 2Hrs**

**PART-A**

**25 Marks**

1. Expenses incurred on partly-convertible debenture is .....
  - a. Capital expenditure
  - b. revenue expenditure
  - c. Deferred Revenue expenditure
  
2. Artificial Juridical persons are liable to pay surcharge .....
  - a. If Gross income exceeds Rs.10,00,000
  - b. If Taxable income exceeds Rs.10,00,000
  - c. At all levels of income
  
3. .... means two or more persons joining together for a common purpose and to earn income and not an intention to form partnership.
  - a. AOP
  - b. BOI
  - c. Firm
  
4. u/s 2 (26) of the Income Tax Act, an "Indian Company" means .....
  - a. Domestic Company
  - b. Company formed and registered under the Companies Act,1956
  - c. which is not a Foreign company
  
5. Any compensation received for the loss of future profit is .....
  - a. Capital Receipt
  - b. Revenue Receipt
  
6. During the previous year 2008-09, a sailor has remained on ship for a private company owning ocean going ships as follows;
  - a. outside the territorial waters of India for 183 days,
  - b. Inside the territorial waters of India for 182 daysHe is considered to be ..... For the AY 2009-10
  - a. Resident
  - b. Non-Resident
  - c. Not ordinarily Resident
  
7. Income accruing in USA and received there is taxable in India in the case of .....
  - a. Resident but not ordinarily resident
  - b. Resident & Ordinarily resident
  - c. Both

8. As per section 36 of the Income Tax Act, Securities Transaction Tax paid is .....
- a. allowable deduction to all assesses
  - b. allowable deduction only for company assesses
  - c. Not allowable deduction for all assesses
9. As per section 36 of the Income Tax Act, Commodities Transaction Tax paid is .....
- a. allowable deduction to all assesses
  - b. allowable deduction only for company assesses
  - c. Not allowable deduction for all assesses
10. Where an assessee has a number of units under a single business, the expenditure incurred in the lock out of any one of the units .....
- a. can be claimed as a deduction in the business u/s 37
  - b. Can not be claimed as a deduction in the business u/s 36
  - c. Can be claimed as a deduction in the business u/s 36
11. For the purpose of determining commission to the partner on the basis of net profit, the net profit shall be considered .....
- a. before deduction of Income Tax Liability
  - b. After deduction of Income Tax Liability
12. Payment made in respect of a business expenditure on 16/12/08 for Rs. 24,000 through a cheque duly crossed "as & co." will .....
- a. attract disallowance u/s 40A(3)
  - b. not attract disallowance u/s 40A(3)
13. According to section 44AA, Doctors has maintain the daily case register (Form 3C) for the period of .....

**1 Mark**

PART-B

50 Marks

1. Income derived from saplings or seedlings grown in a nursery would be deemed to be agricultural income, whether or not the basic operations were carried out on land. Discuss the correctness of this statement. 5 Marks
2. Mr.V.Raja, a medical practioner, was illegally manufacturing and selling heroin. The heroin held as stock-in-trade was seized by the CBI. Dr. V.Raja claimed such seizure as business loss while computing his total income. Discuss the correctness or otherwise of Mr.V.Raja's claim. 5 Marks
3. It is incorrect to state that profit do not accrue until actually computed. Justify. 5 Marks
4. X, is Non-resident in India. Only Indian income is taxable in the hands of X in India. During the previous year 2008-09, he receives technical fees on different dates as given below: In par with Sec 9, kindly confirm whether the income deems to accrue or arise in India or not with reasoning:
  - a. on 15/07/2008, Rs.20,000 is received from A Ltd(resident in India) and the receipt pertains to a business or profession carried on by A Ltd, outside in India or earning any income in India
  - b. on 11/08/2008, Rs.50,000, is received from D Ltd (Non resident in India) and receipt pertains to business or profession carried on by D Ltd in India or any income earned outside India

6 Marks

5. X & Co, is engaged in the business of civil constructions (turnover for 2008-09 being Rs. 37,80,000) it wants to claim the following deductions:

	Rs
Salary and interest to partners to be permitted by sec 40(b).	60,000
Salary to employees	4,90,000
Depreciation	2,70,000
Cost of material used	25,90,000
Other expenses	<u>3,45,000</u>
Total	37,55,000
Net profit (Rs. 37,80,000 minus Rs.37,55,000)	25,000

Determine the net income of X & Co for the assessment year 2009-10 assuming that (a) Taxable income from other business is Rs.1,90,000 (b) Long term capital, gain is Rs.40,000 and (c) the firm is eligible for deduction under sec 80G.

5 Marks

6. XY, a partnership firm commenced its business on December 1, 2008. The firm has made the following expenditure on scientific research up to year ending on March 31, 2009:
  1. On Dec 13, 2008 the firm pays Rs.90,000 to the Indian agricultural research institute, New Delhi, being an approved institute under section 35(1)(iii), for the purpose of carrying out scientific research in social or statistical science.
  2. On December 21,2008 the firm pays Rs.60,000 ton the Indian institute of management, Ahmadabad, being an approved institute under Section 35(1)(iii), for the purpose of carrying out scientific research in social or statistical Science.
  3. On January 10,2009, the firm pays rs.40,000 to an approved national Laboratory of scientific research.
  4. on December 23,2008, the firm purchases a plot of land for Rs. 2,00,000. later on a laboratory building is constructed (cost of construction: Rs.1,70,000), date of completion of construction: March 1, 2009 ) to start in house research.

5. Before the commencement of the production, the firm had made the following revenue expenditure for its research laboratory:
- expenditure on salary and perquisites to research personnel and research material during the 12 months ending on Nov 30, 2005: Rs. 20,000
  - Expenditure on salary of research personnel and research material from December 1 to November 30,2008: Rs 61,000 and of which amount certified by prescribed authority is Rs.42,000
  - Expenditure on providing rent free flats and club facility to research personnel, from December 1,2005 to November 30,2008: Rs.8000.
  - expenditure on research material from December 1,2005 to November 30,2008: Rs.46,800(out of which amount certified by prescribed authority is Rs.34,800)

Rs	Expenditure incurred up to Nov 30,2005	Expenditure incurred between Dec 1,2005 and Nov 30,2006
Purchase of land for growing herbals for research	50,000	60,000
Purchase of equipments for research	30,000	40,000
Expenditure of capital nature for cultivation of herbals	2000	4,600

Determine the amount of deduction available under section 35 if the scientific research is not related to business.

12 Marks

7. ABC Ltd is an existing Indian company, which sets up a new industrial unit. It incurs the following expenditure in connection with the new unit;
- Rs. 400,000 for preparation of project report; Rs.500,000 for market survey expenses & Rs.200,000 for legal and other charges for issue of additional capital required for the new unit.

Other information;

Cost of the project is Rs.30,00,000 & Capital Employed in the new unit is Rs. 40,00,000.

Determine the amount of deduction admissible to the company u/s 35 for the AY 2009-10.

5 Marks

- 8 (i) Rs. 500,000 paid as lump sum consideration for acquiring know-how for the year ended 31<sup>st</sup> march 09.

(ii) stock in trade was lost in fire amounting to Rs.50,000 and was debited to profit & loss account.

Discuss with reason the admissibility or otherwise of the following expenditure for an assessee.

7 Marks

PRIME ACADEMY  
29 th SESSION PROGRESS TEST  
Direct Taxation  
SUGGESTED ANSWERS

PART-A

1. b.
2. c
3. a.
4. b.
5. b.
6. a.
7. b
8. a
9. a
10. a
11. a
12. a
13. c

## PART-B

1. The Finance Act, 2008 has inserted Explanation 3 to section 2(1A) to provide that, with effect from A.Y.2009-10, the income derived from saplings or seedlings grown in a nursery would be deemed to be agricultural income, whether or not the basic operations were carried out on land. Madras High Court, in CIT v. Soundarya Nursery (2000) 241 ITR 530, observed that nursing activity involves carrying out of several operations on land before the saplings were transplanted in suitable containers including pots and thereafter kept in shade or green house for further operation and growth. Therefore, **income arising from nursery should be considered as agricultural income**. This amendment ratifies the view taken by the Madras High Court in favour of the taxpayer.
2. The facts of this case are similar to the case of Dr. T.A. Quereshi vs. CIT (2006) 287 ITR 547(SC). In that case, the Supreme Court distinguished between the business expenditure allowable under section 37(1) and the deductibility of business loss suffered in the normal course of business. Explanation to section 37(1) disallows any expenditure incurred by an assessee for any purpose which is an offence or which is prohibited by law. However, business loss cannot be compared with expenditure contemplated under section 37(1) and such loss is allowable on ordinary commercial principles in computing profits and gains of business or profession. Once it is found that stock-in-trade was seized, it tantamount to business loss and accordingly, such seizure shall be allowed as business loss. Such loss does not fall within the ambit of section 37(1) and accordingly, Explanation to section 37(1) would not apply in such a case. Therefore, Dr. V.Raja's **claim is correct**.
3. Unless the right to profit comes in to existence, there is no accrual of profit. If, however, there is right to receive profit, the tax incidence cannot be suspended merely because profits are not actually computed. CIT vs K.R.M.T.T Thiagaraja chetty & co. It is , thus true that **accrual of income does not depend upon its ascertainment** or the accounts furnished by the assessee. The accounts may be made up at a later date.

4.

<i>Date</i>	<i>Nature of Royalty/Technical fees received</i>	<i>Whether deemed to accrue or arise in India</i>	<i>Whether Taxable in India</i>
July 15,2008	Rs.20,000 is received from A Ltd(resident in india) and the receipt pertains to a business or profession carried on by A Ltd, outside in India or earning any income in India	No	No
Aug 11,2008	Rs.50,000, is received from D ltd (Non resident in India) and receipt pertains to business or profession carried on by D Ltd in India or any income earned outside India	No	No

5.

	Rs.
Income from business of civil constructions (8% of Rs. 37,80,000)	3,02,400
Less: expenses	
Salary/ interest paid to partners as permitted by section 40(b)	60,000
Other expenses (except salary/interest to partners in case of a firm, no other Expenditure is deductible)	<u>NIL</u>
Income from civil constructions	2,42,400
Other business income	<u>1,90,000</u>
Profits and gains from business or profession	4,32,400
Capital gains	<u>40,000</u>
Gross total income	4,72,400
Less: deduction under sec 80 C to 80 U	<u>5000</u>
Net income	<u><b>4,67,400</b></u>

6.

	Rs.
1. Payment to an approved scientific research institution for carrying on research in natural science (90,000 x 1.25)	1,12,500
2. Payment to an approved institution for carrying on scientific research in social science (60,000 x 1.25)	75,000
3. Payment to an approved National Laboratory (40,000 x 1.25)	50,000
4. Cost of laboratory building	-
5. Expenditure on salary (excluding perquisite) to research personnel and expenditure on material for scientific research incurred within 3 years before commencement of business is deductible u/s 35(1)(i) if the research is related to business of the assessee.	-
<b>Amount deductible u/s 35 for the AY 2009-10</b>	<b>2,37,500</b>

7.

- i. Actual amount of preliminary expenses = Rs. 11,00,000  
(400,000+5,00,000+2,00,000)
  - ii. a. 5% of cost of the project = Rs.30,00,000 x 5% = Rs. 150,000
  - b. 5% of capital employed = Rs.4000,000 x 5% = Rs. 200,000  
W.e.h = Rs. 2,00,000
- Maximum permissible amount to be amortised = Least of (i) or (ii) ie **Rs 200,000**  
Amount of deduction for AY 2009-10 = 1/5<sup>th</sup> of Rs.200,000 = **Rs.40,000**

8.

- (i) Technical know-how, an intangible asset, which is eligible for depreciation @25% on WDV method.  
Therefore Rs.500,000 x 25% = Rs.125,000 depreciation can be charged against revenue for the year.
- (ii) Loss of stock in trade by fire or natural calamities is an allowable deduction and the assessee can claim the same as deduction.

**PRIME ACADEMY**  
**29 th SESSION PROGRESS TEST**  
**FINAL- INDIRECT TAXES**

**No.of.pages: 2**

**Total Marks: 75**  
**Time Allowed: 2Hrs**

**PART-A**

**10 x 2.5 = 25**

- (1) Excise duty can be levied on those goods which are
- (a) Manufactured in India
  - (b) Sold in India
  - (c) Removed from the factory
  - (d) None of the above
- (2) Dutiable goods means
- (a) goods are subject to Central Excise duty
  - (b) goods which are exempted from excise duty
  - (c) non excisable goods
  - (d) goods not at all mentioned in the Central Excise Tariff
- (3) Which are the goods still under the physical control
- (a) Plastic products
  - (b) Cigarette products
  - (c) Apparel products
  - (d) Glass products
- (4) What percentage should be added to the cost of production in the case of captive consumption
- (a) 15%
  - (b) 10%
  - (c) 0%
  - (d) 20%
- (5) As per Rule 10 of the Central Excise Valuation Rules, the concept of interconnected undertakings means
- (a) Associate companies
  - (b) Group companies
  - (c) Holding and Subsidiary companies
  - (d) None of the above

- (6) Cenvat credit on inputs other than capital goods can be allowed at
- (a) 100%
  - (b) 50%
  - (c) 25%
  - (d) 0%
- (7) The unutilized CENVAT Credit can be carried forward
- (a) Up to 6 months
  - (b) Up to 8 years
  - (c) Without any time limit
  - (d) Up to 10 years.
- (8) Cenvat Credit on capital goods can be claimed in the year in which it is purchased
- (a) Up to 50%
  - (b) Up to 100%
  - (c) Up to 25%
  - (d) Up to 75%
- (9) Cenvat Credit on goods other than capital goods can be utilized
- (a) As soon as goods received into the factory
  - (b) Only after payment actually made
  - (c) Only after the goods actually sold
  - (d) As soon as manufacture taken place
- (10) Cenvat Credit is not applicable if the following goods are purchased
- (a) Light Diesel Oil
  - (b) Steel products
  - (c) Plastic products
  - (d) Wood products

**PART – B**

5 x 10 = 50 Marks

Answer all the questions

- (1) In respect of a capital goods received by the manufacturer in July 2007, input credit was taken in November 2007. The capital goods was installed in January 2008 and was sold after use in July 2008. The duty paid at the time of purchase is Rs 16,480 and the same has been utilized against payment of duty in the year 2007-08 and 2008-09. What is the total amount of excise duty, if any, payable by the manufacturer at the time of removal of capital goods?
- (2) A manufacturer purchased certain inputs from Z. The, assessable value was Rs: 20,000 and the Central Excise duty was calculated at Rs. 3,296 making a total amount of invoice at Rs. 23,296. However, the buyer manufacturer paid only Rs. 20,800 to Z in full settlement of this bill. How much CENVAT credit can be availed by the manufacturer and why?
- (3) A manufacturer manufactures 10,000 Nos. of product 'P', Assessable Value of which is Rs.20, 000 per piece. Duty payable is 10%. Duty paid on raw materials is Rs.2, 00,000. The manufacturer sells 200 pieces in India and 800 pieces are exported. What is CENVAT available and what is the duty payable through PLA?
- (4) Mr. X is a manufacturer of machineries. Selling price of the Machinery is Rs 1, 50,000, which includes the following.

Packing charges	Rs 10,000
Transport from the manufacturer to the buyer place	Rs 15,000
Excise duty	@ 14%
Education Cess	@ 2%
Secondary and Higher Education Cess	@ 1%

Find the Assessable Value and Excise duty payable.

- (5) Explain the MRP provisions under Section 4A of the Central Excise Act, 1944?

**PRIME ACADEMY  
29 th SESSION PROGRESS TEST  
FINAL – INDIRECT TAXES  
SUGGESTED ANSWERS**

**PART –A**

- (1) a) Manufactured in India
- (3) a) goods are subject to Central Excise duty
- (3) b) Cigarette products
- (4) b) 10%
- (5) c) Holding and subsidiary companies
- (6) a) 100%
- (7) c) without any time limit
- (8) a) upto 50%
- (9) a) As soon as goods received into the factory
- (10) a) Light diesel oil

**PART - B**

- (1) **W e f 13.11.2007**, an amount equal to Cenvat credit taken on the said capital goods, reduced by 2.50% for each quarter of a year or part thereof from the date of taking the Cenvat credit.

Financial Year	Number of quarters
2007 – 08	2
2008 – 09	2
<b>Total</b>	<b>4</b>

The total duty is Rs. 16,480

Total amount is required to pay to the department is Rs. 15,244

[i.e. 16.480 – 1,236]

Working note:

First 50% of the duty = 16,480 x 50% x 4 x 2.5% = Rs. 824

Balance 50% of the duty = 16,480 x 50% x 2 x 2.5% = Rs. 412

Total = Rs.1, 236

- (2) Cenvat credit can be availed by the manufacturer is Rs. 3,296.

Cenvat credit can not be reversed just because the supplier of inputs has given some reduction in price after removal of goods or the buyer manufacturer paid only reduced amount than that of invoice [unless supplier of inputs claims and get refund of excise duty paid by him].

[Commissioner of Central Excise vs. Trinetra Texturisers 2004 (CESTAT)].

- (3) CENVAT credit availed on inputs is Rs.2, 00,000. The duty payable on final products is Rs.2, 000 per piece and hence, duty payable on 200 pieces is Rs.4, 00,000. The manufacturer can avail CENVAT credit of only Rs.2, 00,000. He is required to pay duty in cash through PLA is Rs.2, 00,000.

- |                                  |                |
|----------------------------------|----------------|
| (4) <b>Selling Price</b>         | = Rs.1,50,000  |
| Less: Transport charges          | = Rs. 15,000   |
|                                  | -----          |
| Balance                          | = Rs. 1,35,000 |
|                                  | =====          |
| Let assume assessable value be X |                |
| Assessable value                 | = X            |
| Excise duty @ 14%                | = 0.14X        |
| Education Cess @2%               | = 0.0028X      |

SAH Cess @1%	= 0.0014X
	-----
Balance	= 1.1442X
	=====
Assessable value	= 1,35,000 x 1 / 1.1442
Assessable value	= Rs.1,17,986
Education cess @2%	= Rs. 2,360
SAH cess @1%	= Rs. 1,180
Total excise duty	= Rs.1,21,526

(5) As per Section 4A of the Central Excise Act 1944, MRP provisions will be covered only when the following two conditions are satisfied.

- Goods must be specified under Standards of Weights and Measures Act, 1976.
- Those Goods must be mentioned in the notification issued by the Govt. of India along with rate of abatement.

If the product is covered under MRP provisions, then the assessee must affix the MRP on the package, which is normally inclusive of all taxes. Provisions under Section 4A have overriding effect over Section 4 of the Central Excise Act.

Abatement refers to a reduction from MRP for purposes of computing the assessable value.

**Example:**

Suppose the MRP of a refrigerator is Rs 20,000 and the abatement percent is 40%. The Excise duty is the BED rate is 14% will be as under.

Maximum Retail Price	= Rs 20,000
Less abatement (40%)	= <u>Rs 8,000</u>
Assessable Value	= <u>Rs 12,000</u>

Central Excise Duty (14%) = Rs 12,000 x 14/100 = Rs. 1,680/-

Educational Cess (2%) = Rs. 1,680 x 2/100 = Rs. 34/-

Secondary and Higher Education Cess (1%)  
= Rs 1,680 x 1/100 = Rs. 17/-

TOTAL EXCISE DUTY PAYABLE = Rs. 1,731/-