

MHROD / II Sem.

A

Course 627 – COMPUTER APPLICATION – II
(Admissions of 2004 and onwards)

Time : 2 hours

Maximum Marks : 50

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt all questions. Marks are indicated against each question.

1. Write short notes on any four of the following: (2X4=8)
 - a) Lookup concept in MS Access
 - b) Integrity Constraints in database
 - c) Tuple in database
 - d) Validation rule
 - e) Foreign key

2. Attempt the following questions : (7X2=14)
 - a) Write down the procedures to find out and to compare the current ratio, liquid ratio, and debtor turnover ratio on M S Excel Sheet to describe the health of a company on the basis of following information:

Liabilities			Assets		
Particulars	2009 (in RS.)	2010 (in Rs.)	Particulars	2009 (in RS.)	2010 (in Rs.)
Sundry Creditors	220000	325000	Cash	130000	270000
Bills Payable	235000	15000	Marketable Securities	90000	62000
Outstanding Expenses	75000	120000	Accounts Receivables	420000	152000
Long Term Debt	400000	380000	Inventories	140000	191000
Equity Share Capital	500000	500000	Fixed Assets Less: Depreciation	800000 Less: (20000)	830000 Less:(35000)
Share Premium	30000	30000	Net Fixed Assets	780000	795000
Retained Earnings	100000	100000			
Total	1560000	1470000	Total	1560000	1470000

Additional Information:	2009 (in RS.)	2010 (in Rs.)
Sales Revenue	1500000	1550000
Cost of goods sold	1000000	1030000
Net Profit before Taxes	62000	66000
Taxes	0000	12000

- b) "The limitations of hierarchical and network systems led to the development of relational database management system". Discuss. Also explain the Codd's twelve rules which are very useful for evaluating a relational database system.

Or

- c) Write down the procedures to find out the Financial Break Even Point on M S Excel Worksheet in terms of Annual Demand where NPV becomes zero for the following data:

Particulars	Figures	Descriptions
Annual Demand	20000	Units
Initial Investment (Cash Out Flow)	400000000	Rs
Expected Life	5	Years
Variable Cost Per Unit	15000	Rs Per Year
Fixed Cost	4000000	Rs Per Year
Discounting Rate	0.1	% PA
Taxes	0.5	Fixed %
Unit Selling Price	22000	Rs
Depreciation Method	Straight Line	

- d) "Usually the files are organised in three fashions - sequential, direct and indexed sequential". In the light of this statement discuss these file organisation's method.

3. Attempt the following questions :

(7X2 = 14)

- a) Explain the different types of relationship in database. Illustrate with the examples.
- b) Write down the procedures to calculate IRR and MIRR of capital budgeting method on MS Excel for the following data:

Particulars	Project X	Units
Discount Rate	0.12	%
Reinvestment Rate	0.1	%
Cash Outflow	-100000	Rs.
Cash Inflow in 1st Year	30000	Rs.
Cash Inflow in 2nd Year	30000	Rs.
Cash Inflow in 3rd Year	40000	Rs.
Cash Inflow in 4th Year	45000	Rs.

Or

- c) Define DBMS. Also discuss the benefits of Database management system and various types of keys with the help of example.
- d) Project X cost 2500 and is expected to generate cash inflow of Rs 1000, 800, 700, 500, 400. If the discounting rate is 10%, write down the procedures to find out the Net Present Value on MS Excel Sheet.

4. Attempt the following questions :

(7X2 = 14)

- a) Write down the procedures to find out the EOQ and to prepare a graph thereof for the following data on MS Excel Sheet:

Annual Requirement	=	1000	Units
Carrying Cost	=	1	Rs Per Unit
Ordering Cost	=	50	Per Order
Cost of Material	=	5	Per Unit

- b) Write down the procedures to find out the Secular Trend based on method of least square on M S Excel for the following data:

Year	Sales (In Rs Lakhs)
2003	20
2004	30
2005	40
2006	60
2007	50
2008	40
2009	60

Also eliminate the trend by using different model on the same MS Excel sheet for the above data.

Or

4.

- c) Write down the procedures to find out the Consumer Price Index for the year 2002 taking 2001 as base using Family Budget Method for the following data on M S Excel Sheet:

Commodity	2001 Price (Rs.)	2001 Quantity (Kg.)	2002 Price (Rs.)
A	1	6	5
B	2	7	4
C	3	8	3
D	4	9	2

- d) Mr. X borrowed as consumer loan a sum of Rs.4,00,000 @ 12% p.a for a period of 15 year, repayable in equated half yearly instalments. The terms and conditions provide that the loan repayment can rescheduled to yearly basis by reducing the interest at by 1% after 5 years. Mr. X exercised this option of rescheduling and the banker agreed to reduce the rate accordingly. Write down the procedures to develop an appropriate generalised M S Excel sheet to show the repayment with respect to a loan. You are required to prepare the Loan repayment Schedule in the following format:

Loan Repayment Schedule

Period	Opening Balance	Interest Due	Instalment	Closing Balance