



NATIONAL INSTITUTE OF TECHNOLOGY, WARANGAL  
SCHOOL OF MANAGEMENT  
End Examination, April 2018  
MCA I year.  
ACCOUNTING FINANCIAL MANAGEMENT

Date: 28/04/18

Marks: 50

Duration: 3 hours

1. Following are the ledger balances of Mr. Rajendran as on 31/03/2017. Prepare trial balance, open suspense account if required. Prepare final accounts for the year ended 31/3/2017 considering given adjustments. (10M)

Sl. No.	Particulars	Amount Rs.	Particulars	Amount Rs.
1.	Capital	447500	Drawings	52500
3.	Opening Stock	186250	Purchases	1150000
4.	Motor Vehicle	73750	Travelling expenses	11500
5.	Sales	1971250	Bad debts	750
6.	Wages	310250	Returns Inward	5250
7.	Office Lighting	15500	Returns Outward	14500
8.	Machinery	180000	Discount allowed	14250
9.	Insurance Premium expiring on 31/10/2018	55750	Provision for bad debts	17500
10.	Discount Received	15000	Dividend Received	750
11.	Sundry Debtors	696000	Bank Overdraft	48000
12.	Sundry Creditors	246250	Cash in hand	5500

- 30 min

2. An entrepreneur is planning to invest in a venture which requires an initial investment of Rs. 50 Lakhs. The following two alternative investment proposals are available to him. Net cash flows from both the ventures are given below (in lakhs of Rupees). If the opportunity cost of capital is 10% based on NPV and IRR suggest, which venture has to be selected. Show all necessary calculations. (10M)

	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year
Project A	10	9	11	12
Project B	6	7	9	10

- 30 min



III. The Asian industries specialize in the manufacture of small capacity motors. Fixed cost of the company amounts to Rs.2.40 lakhs per annum. Sale price of the motor is Rs.230 each, variable cost is Rs.140 each

- Determine the number of motors that have to be manufactured and sold in a year in order to breakeven
- How many motors have to be made and sold to make a profit of Rs.1 lakh per year
- If the sale price is reduced by Rs.15 each, how many motors have to be sold to breakeven

IV. From the following forecasts of income and expenditure, prepare a cash budget for the months Jan. to April 2011. 10m

Months	Sales (Credit)	Purchase (Credit)	Wages	Manufacturing expenses	Administrative expenses	Selling expenses
2010 Nov.	30000	15000	3000	1150	1060	500
Dec.	35000	20000	3200	1225	1040	550
2011 Jan.	25000	15000	2500	990	1100	600
Feb.	30000	20000	3000	1050	1150	620
March	35000	22500	2400	1100	1220	570
April	40000	25000	2600	1200	1180	710

Additional information as follows :

1. The customers are allowed a credit period of two months.

2. A dividend of \$ 10000 is payable April.

3. Capital expenditure which has to be incurred : 15th Jan. \$ 5000, we will buy a plant and in March, we will buy a building on loan and its payment will be done with in monthly installments of \$ 2000 each.

4. The creditor are allowing a credit of 2 months.

5. Wages are paid on the 1st of the next months.

6. Lag in payment of other expenses is one month.

7. Balance of cash in hand on 1st Jan. 2011 is \$ 15000.

2. i) What are the advantages of budgetary Control ?

ii) What are the applications cost-volume profit relationship?

iii) Explain any five Ratios.

iv) List the various budgets in the order preparation.

v) Define master Budget.

10m





Max.  
Marks

1a) Compare the basic features of HTTP status codes with the HTTPS status codes.

b) Describe the following: (i) Domain Naming Services (DNS), (ii) Multi-tiered architectures.

2 Create a set of HTML reference pages for the subset of HTML elements and attributes. There should first be a page that contains a (short) list of two hyperlinks: (i) to a page with a table of elements, (ii) To a page with a table of attributes. The table of attributes should contain two columns the first listing the elements, and the second listing the attributes that are associated with each element. The attributes should be listed one per table row and each element name should span the rows containing its attributes. Each element and attributes name in the table should be a hyper link to detail page describing that element or attribute. The table of attributes should be similar, except that the attribute names are in the first column and each attribute name will span a set of rows containing element names associated with the attribute.

3a) Design style sheet to overriding a style sheet rule: A single element to adhere to a global style sheet rule except for one or two style properties that are unique to the element.

b) Design a style sheet to change image sizes dynamically: Provide a user option on the web page to enlarge or reduce the dimensions of one or more images, such as enlarging a thumbnail to a more visible size.

4a) Write a JavaScript function to move user-influenced data from one page to another without server intervention using (i) Browser cookies (ii) Framesets.

b) Write a JavaScript for the following. Provide a text box for the user to enter user name. Validate the username for the number of characters (assume some number say 6). Provide a SUBMIT button for the validation to happen. On successful validation display a new page with an image and two text boxes for entering the width and height of the image respectively with a RESIZE button below. On clicking the Resize button validate the width and height numbers and on successful validation display the image with the requested width and height.

5a) Define webserver? Discuss any three webserver.

b) Write the step by step procedure to installation and configuration of Tomcat webserver.

6a) Write PHP code to determine a customer's status with a bank based on their credit rating or existing balance. Use the following table to determine the course of action and the display the result in a table format. Use a list box to allow for the entry of a credit card and a single-line entry box to enter a balance. Also produce a printable form showing the results for an entered customer name and provide a way to return the main entry screen once the results are displayed.

b) Create a guest book application using PHP, which allows the guests to your web pages to enter comments to you about your website. The entries are to be stored in a database called guest\_book and a table called visitors. The visitors table should have the guestid, Fname, visited, city, country, comments and email. Then create report webpage that is password protected that asks you for a date range. Upon receiving the date range, display all the guest book entries that have arrived during that time frame.

c) Write PHP code to fetch rows from the database table and display number of rows fetched along with the content of each row.

--: END :--





**NATIONAL INSTITUTE OF TECHNOLOGY, WARANGAL**  
(An Institution of National Importance)  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**END SEMESTER EXAMINATIONS, APRIL-MAY, 2018**  
**I MCA II- Semester**  
**CS353-OBJECT-ORIENTED PROGRAMMING**

Date: 01-05-2018

Time: :9:30am-12:30pm

Max. Marks: 50

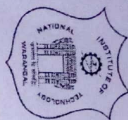
N.B.: Answer ALL questions

Answers to all parts of each question should be at one place

1.	Every house in the colony has at most one pipe going into it and at most one pipe going out of it. Tanks and taps are to be installed in a manner such that every house with one outgoing pipe-but no incoming pipe gets a tank installed on its roof and every house with only an incoming pipe and no outgoing pipe gets a tap. Find the efficient way for the construction of the network of pipes	5
2.	Given $n$ and $k$ , Construct a palindrome of size $n$ using a binary number of size $k$ repeating itself to wrap into the palindrome. The palindrome must always begin with 1 and contain the maximum number of zeros.	4
3.	Given an array $A$ of $n$ integers (always a power of 2) and $q$ queries. Every Query consists of two elements <b>index</b> and <b>value</b> . We need to write a program that assigns the <b>value</b> to $A_{\text{index}}$ and prints the single element which is left after performing the following operations for each query: <ul style="list-style-type: none"><li>At alternate steps perform bitwise OR and bitwise XOR operations to the adjacent elements.</li><li>In first iteration select <math>n/2</math> pairs moving from left to right, and do a bitwise OR of all the pair values. In second iteration select <math>(n/2)/2</math> leftover pairs and do a bitwise XOR on them. In the third iteration select <math>((n/2)/2)/2</math> leftover pairs moving from left to right, and do a bitwise OR of all the pair values.</li><li>Continue the above steps till we are left with a single element.</li></ul>	6
4.	Find the number of ways that a given integer, can be expressed as the sum of the power of unique natural numbers.	4
5.	a) Why is java platform independent? b) There is something called as SOLID principle in java. Which stands for <ul style="list-style-type: none"><li>S - Single-responsibility principle</li><li>O - Open-closed principle</li><li>L - Liskov substitution principle</li><li>I - Interface segregation principle</li><li>D - Dependency Inversion Principle</li></ul> Where S : is for Single Responsibility Principle :- a class or module should do one thing only. O: is for Open/Closed Principle :-code entities should be open for extension, but closed for modification. L: is for Liskov Substitution Principle:-any child type of a parent type should be able to stand in for that parent without things blowing up. I :is for Interface Segregation Principle:- you should favor many, smaller, client-specific interfaces over one larger. D is for Dependency Inversion:-encourages you to write code that depends upon abstractions rather than upon concrete details. Write a program that exhibits the above said properties.	6



6. ✓	Given a stack, write a program to output a sorted stack.	5
7. ✓	A T20 match is going on. You're in Team B. First innings is over, they have scored "teamARuns" runs. Your team has scored "teamBRuns" runs at the end of "balls" balls. A ball can have multiple possibilities like [0, 1, 2, 3, 4, 5, 6, Wicket, No ball, Wide ball]. What is the probability that your team (Team B) will win?	5
8. ✓	<p>Suppose we have a file names as <b>input.txt</b> and in that input file we have some Mobile Number which are mixed with some other data. Our task is to read the input file line by line and if we find any Number in that line we have to write that Mobile Number to an another file, which is <b>output.txt</b>file.</p> <p><b>Mobile Number validation criteria :</b></p> <ul style="list-style-type: none"> <li>▪ The first digit should contain number between 7 to 9.</li> <li>▪ The rest 9 digit can contain any number between 0 to 9.</li> <li>▪ The mobile number can have 11 digits also by including 0 at the starting.</li> <li>▪ The mobile number can be of 12 digits also by including 91 at the starting</li> </ul> <p>The number which satisfies the above criteria, is a valid mobile Number.</p>	5
9. ✓	Create an applet to play the tic-tac-toe application.	5
10. ✓	What are the components of CRC cards for the Interactive Intelligent Kitchen Helper (IIKH) tool? Having identified this, give a complete interaction diagram for one scenario use of the IIKH.	5



**NATIONAL INSTITUTE OF TECHNOLOGY, WARANGAL**  
(An Institution of National Importance)  
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
END SEMESTER EXAMINATION, MAY 2018  
I MCA - II SEMESTER  
**CS5354 : UNIX TOOLS PROGRAMMING**

DATE: 5-05-2018

Time: 9:30 AM - 12:30 PM

ANSWER ALL QUESTIONS

Max Marks: 50M

1. Describe the salient features of the UNIX Operating System. 3M
  2. Interpret the significance of the seven fields of the `ls -l` output. 3M
  3. Explain the three modes of the Vi editor. *normal / command / insert* 3M
  4. With the help of diagram, explain the UNIX file system. 5M
  5. Briefly explain the different ways of addressing used in sed, with an example. 4M
  6. Write a Shell Script for the following problems and consider the input as command line arguments 12M
    - a. Print an input number in reverse order.
    - b. Rename a file/directory replaced by lower to upper case letters.
    - c. Count the number of lines in a list of files.
    - d. Take any number of directories and lists the contents of each of these directories.
  7. Write a note on awk, explain built in variables and solve following problems using awk. 10M
    - i. Print the fields in reverse order on every line from input file.
    - ii. Find the DA, HRA, and Gross pay of employees. DA at 50% of Basic, HRA at 25% of Basic and the Gross pay is sum of Basic pay, DA and HRA, also compute the average Gross pay.
  8. Prepare a make file called `flip` with following files 5M

Rules to compile

`file1.c, file2.c, file3.c, file4.c, file1.h, file2.h and file3.h`

`file1.c` needs `file2.h` and `file3.c`,  
`file2.c` need `file1.h`, `file2.h` and `file3.c`,  
`file3.c` needs `file3.h`
- Constraints:**  
Place all header files into *Header* folder, source files into *Src* folder, and object files into *Obj* folder and target files into *Bin* folder. Target file name should be *End* (single executable file which include all above mention files).
9. Give the structure of the lex program and write a lex program that find the longest string and then reverse it. 5M

1. `include` permission `user` owner group `size` `content` `modification` `time` `file name`