**36**

DE–4698

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

LAB III — ORACLE AND VISUAL BASIC

(Common for all batches)

Time : Three hours Maximum : 100 marks

Examiner should select and give ONE question to each candidate by lot system.

Answer ONE question.

Each question has Two subdivisions.

Cut here

1. (a) Create a table with item code, item name, quantity and unit price. Write a PL/SQL program to display the item whose unit price is greater than 50 and quantity supplied is greater than 2000.
   1. (b) Write a VB program to accept a number and display the sum of digits.

Cut here

1. (a) Create a table with taluk number, name, name of the tashildhar, population of the child labourers. Write a PL/SQL program.
   1. (i) display the taluks with population of the child labourers lies between 100 and 1000.
   2. (ii) display the tahsildhar’s name for all taluks.
   3. (b) Write a VB program to accept two strings in two text box and display the concatenated string in message box.
2. (a) Write a VB program to accept and display the numbers until the given number is a 5 digit number.
   1. (b) Write a PL/SQL program to display all the male and female voters with age > 21. Create the table with necessary fields.

Cut here

1. (a) Create a table with the following particulars.
   1. number, name, sex, age. Write a PL/SQL program.
   2. (i) to display the particulars of all minor boys   
      i.e. age < 21.
   3. (ii) to display the particulars of all minor girls   
      i.e. age < 18.
   4. (b) Write a VB program to accept your name and convert it to upper case.

Cut here

1. (a) Create a table with the following particulars.   
   Ration card number, Card holder name, Number of adults and number of children. Write a PL/SQL program to compute the quantity of sugar to be distributed to each family using the below formula.
   1. Sugar quota = 2.5 × total number of family members
   2. (b) Write a VB program to reverse a given number.

Cut here

1. (a) Create a table with employee number, employee name, designation department and Basic Pay. Write a PL/SQL program to display the appropriate pay slip. The formula for calculating allowances and deduction is given below.
   1. Allowance = 15% of Basic Pay
   2. Deductions = 10% of Basic Pay
   3. (b) Write a VB program to check whether the given word is palindrome or not.
2. (a) Create a table with code, item name, unit price, discount and quantity.
   1. Write a PL/SQL program to calculate and display the selling price for the given item.
   2. Selling price = (unit price  quantity) – discount.
   3. (b) Write a VB program to calculate surface area and volume of sphere
   4. 

Cut here

1. (a) Write a PL/SQL program to compute EB bill for each family. Create a table with necessary fields.
   1. (b) Write a VB program to accept the first, middle and last name of a person and to print the concatenated name.

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DE–4697

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

LAB II — DBASE AND C

(Upto 2002)

Time : Three hours Maximum : 100 marks

Student has to choose ONE question by lot system.

Cut here

1. (a) Write a C program to search for an element in an array containing *n* elements.

* 1. (b) Write a dBase program to accept 10 numbers and print the minimum value.

Cut here

2. (a) Write a C program to arrange *n* numbers in descending order.

* 1. (b) Write a command file to display all ODD numbers from 1 to 100.

Cut here

3. (a) Write a C program to multiply two matrices of different sizes.

* 1. (b) Create a dbase file, which contains the following fields :
  2. Name 25 characters
  3. Regnum 6 digits
  4. Mark1 3 digits
  5. Mark2 3 digits
  6. Mark3 3 digits
  7. Write a dBase program to print number of pass and fail. Condition for pass : 40% in all subjects.

4. (a) Write a C program to find the area of a Rectangle, Square and Cone.

* 1. (b) Develop a dbase program for library management by storing Book-num, Name of author, Title of the Book in file and display the information available in file.

Cut here

5. (a) Write a C program to find the factorial of a given number using a function.

* 1. (b) Given set of 10 numbers. Print the second smallest and second largest number.

Cut here

6. (a) Write a C program to solve the Quadratic equation.

* 1. (b) Develop a dbase program that stores
  2. Name char 25
  3. Percentage Real 8 2
  4. Pick the person who has the highest percentage and rank them.

Cut here

7. (a) Write a C program to generate first 20 Fibonacci series.

* 1. (b) Write a dBase program that accepts 10 numbers and calculate their sum and display the result.

Cut here

8. (a) Write a C program to sort the given set of names in alphabetical order.

* 1. (b) Write a dbase program to check whether the given number in Armstrong number or not.

9. (a) Write a C program to copy the content of one file into another file.

* 1. (b) Write a command file in dbase to prepare mailing label for 20 students.
  2. Name Character 20
  3. Street Character 20
  4. City Character 20
  5. Pin Numeric 6

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DE–4696

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

LAB 1 — FORTRAN AND COBOL PROGRAMMING

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer ONE question from each set student has to be select ONE question from each set by lot system.

Examiner should select ONE question from FORTRAN and ONE from COBOL and give it to the student by lot system.

cut here

(FORTRAN PROGRAMS)

1. Write a Fortran program to check whether the given number is ODD or EVEN.

cut here

2. Write a Fortran program to generate prime numbers between 1 and 100.

cut here

3. Write a Fortran program to find the inverse of a given matrix.

cut here

4. Write a Fortran program to find the area and circumference of a circle.

(COBOL PROGRAMS)

5. Write the program to find the sum of three numbers and find the largest and smallest number among the numbers.

cut here

6. Write a COBOL program to find sum of the first N natural numbers from 1 to 100 i.e 1 + 2+ 3 +....N.

cut here

7. Write a Cobol program to check whether the given year is Leap year (or) not.

cut here

8. Write a Cobol program to solve the Quadratic Equation.

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**35**

DE–4029

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

RDBMS AND ORACLE

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

1. (a) Write on the manipulative capabilities in DBMS.   
 (10)

(b) List and explain the different user interfaces in DBMS. (10)

2. (a) Explain the concept of relational model and its properties. (10)

(b) Explain any two comments on relational model. (10)

3. (a) Write the data definition facilities and data control facilities in relational model. (10)

(b) What are the types of databases? Explain. (10)

4. (a) Explain the benefits of oracle.

(b) Discuss the oracle’s mandatory and optional system processes. (10)

5. Illustrate the oracle database architecture. (20)

6. (a) Explain in detail database objects. (10)

(b) Write about sub queries and multi-part queries with examples. (10)

7. (a) Describe the elements of SQL language. (10)

(b) Explain Joining multiple tables in a query and working with null values in SQL. (10)

8. (a) Elaborate the process of modifying, renaming and creating tables in oracle.

(b) Explain embedded SQL statements with example.

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DE–4028

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

OFFICE AUTOMATION

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. (a) (i) List the purpose of the folders and icons. (5)

* 1. (ii) How to arrange the short cut icons? (5)
  2. (b) Write short notes on
  3. (i) Moving and copying text between windows. (5)
  4. (ii) Working with multiple windows. (5)

2. (a) Discuss the following terms:

* 1. (i) Auto text
  2. (ii) Auto format
  3. (iii) Tab
  4. (iv) Indent
  5. (v) Margin Setup. (10)
  6. (b) Write short notes on
  7. (i) Editing a document (5)
  8. (ii) Insert, move and resizing a picture in a word document. (5)

3. (a) How to insert the table in a word document? Explain. (10)

* 1. (b) How to Rename, Copy, Move and Finding the word document? (10)

4. (a) Explain how the worksheet can be formatted. (10)

* 1. (b) (i) What are the different ways of defining a range? (5)
  2. (ii) Explain the term Autofill. (5)

5. (a) Explain the ways in which the appearance of a graph can be improved. (10)

* 1. (b) Write the steps for moving, copying inserting and deleting rows and columns in a spread sheet. (10)

6. (a) What is primary key? How will you sort data in a table. Write steps. (10)

* 1. (b) Write about creating, saving and editing query in Access with example. (10)

7. (a) What are the steps needed to create a form by using Auto Form? (10)

* 1. (b) Create a database to store the Employee code, Employee Name, Joining date, Designation and Salary for 5 employees. (10)

8. (a) Write the steps for creating an Access report from an Excel list. (10)

* 1. (b) List out the purpose of Power point presentation and slide show. (10)

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DE–4027

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

INTERNET AND JAVA PROGRAMMING

(Upto 2002 onwards)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. (a) Explain network structure and network layers with diagram. (10)

* 1. (b) Explain the various network topologies. (10)

2. Discuss the following :

* 1. (a) Routing. (10)
  2. (b) IP header. (10)

3. (a) What is Web Browser? Describe the various  
functions of browsers. (10)

* 1. (b) Write a short notes on the following : (10)
  2. (i) HTTP
  3. (ii) URL’s and URI.

4. (a) Explain the applications of Internet at an Office and School. (10)

* 1. (b) Discuss about Domain Name server concepts. (10)

5. (a) Explain the datatypes available in JAVA with examples. (10)

* 1. (b) Describe briefly with example about multidimensional arrays in JAVA. (10)

6. (a) Explain the overloadings methods in Java with an example. (10)

* 1. (b) What is an Exception? Explain the exception handling with example. (10)

7. (a) Describe about Dynamic Initialization in JAVA with example. (10)

* 1. (b) Write a short note on the following : (10)
  2. (i) Inheritance
  3. (ii) Constructors.

8. (a) Write a Java Program to read n numbers and arrange them in Ascending and Descending order. (10)

* 1. (b) Write an Applet Program to draw a car. (10)

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DE–4026

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

WINDOWS AND VISUAL BASIC

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.  
 (5 × 20 = 100)

1. (a) Briefly explain the features of windows. (10)

* 1. (b) Discuss the hardware and software requirements for windows. (10)

2. (a) How will you open and close group windows? Discuss. (10)

* 1. (b) What is the purpose of print manager? Explain. (10)

3. (a) Explain the steps for creating and saving a document. (10)

* 1. (b) Discuss some of the drawing tools in paint brush.   
      (10)

4. (a) How will you change system settings with setup? Explain.

* 1. (b) Discuss in detail running windows in a network.

5. (a) Explain the menu system of visual basic.

* 1. (b) Explain the tools used for programming in VB.

6. (a) How will you create executable code for a visual basic program? Explain. (10)

* 1. (b) Discuss various control structures available in visual basic. (10)

7. (a) What do you mean by recursion? How will you create recursive function in visual basic? Explain with example. (10)

* 1. (b) How will you transfer control between forms? Explain with example. (10)

8. (a) How will you draw objects in visual basic? Explain.   
 (10)

* 1. (b) Explain how to import graphics in visual basic. (10)

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DE–4025

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DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

BUSINESS COMMUNICATIONS

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. (a) Explain the need of a business letter.

Or

(b) Discuss the kinds of a business letter.

2. (a) Explain the important points that should be included in a quotation.

Or

(b) Distinguish between offer and quotation.

3. (a) Discuss the circumstances in which you are forced to refuse the execution of an order.

Or

(b) Place an order for certain goods which you reserve the right to reject it delivered after more than 5 days of the date of order. State that they are to be sent by parcel post.

4. (a) Explain the important points that should be kept in mind while drafting a complaint letter.

Or

(b) Explain the functions of each of the collection letters written in a series.

5. (a) What is circular letter? What are the main objectives of writing circular letters?

Or

(b) Drafts a sales letter introducing ‘‘Pocket size torch-batteries’’.

6. (a) Write a letter to opening of bank account.

Or

(b) Draft a letter to enquiring about the surrender value of a policy.

7. (a) Explain the facts should be included in your application for an agency.

Or

(b) Draft the minutes of the Annual general meeting of the Board of Directors.

8. (a) What is report? Explain the important characteristics of a good report.

Or

(b) Write a application for the job of a medical representative.

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**25**

DE–4024

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

COMPUTER GRAPHICS

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. (a) Explain in detail about CRT. (10)

(b) Discuss the functions of graphics system software.   
 (10)

2. (a) Explain any two input devices. (10)

(b) Describe region filling techniques. (10)

3. (a) Write DDA algorithm and explain. (10)

(b) Write procedure and algorithm for drawing ellipse.   
 (10)

4. (a) Explain Bresenham’s circle algorithm. (10)

(b) Discuss the basic transformation concepts involved in 2D transformations. (10)

5. (a) Explain composite transformations in three dimensional transformations. (10)

(b) Write notes on convex polygon clipping. (10)

6. (a) Explain in detail about line clipping. (10)

(b) Describe Z-butter algorithm. (10)

7. (a) Explain parallel projections and perspective projections. (10)

(b) Discuss three dimensional viewing techniques. (10)

8. (a) Explain the components of user interface. (10)

(b) Describe the styles of command language. (10)

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**24**

DE–4023

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

UNIX AND C

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

(5 × 20 = 100)

1. Explain Vi editor with three types of mode in detail. (20)

2. (a) Discuss ls and chmod commands with an example.  
(Atleast 6 options) (12)

(b) How will you identify users working in the system? Explain. (4)

(c) How will you display the top and bottom portions of the file? Explain with example. (4)

2. (a) What is the use of grep command? Discuss it with an example. (8)

(b) How will you change the rights for group, owner and other users of file? Explain. (8)

(c) What is the use of ‘uniq’ command? Discuss it with an example. (4)

3. (a) Discuss if statement with an example (8)

(b) Discuss altering loop execution with an example. (8)

(c) Write a shell program to check whether the given number is odd or even. (4)

4. (a) Discuss splitting of a file with suitable options. (12)

(b) How will you compare two files? Discuss it with an example. (8)

5. (a) Discuss input statement and output statements,   
in C with an example. (10)

(b) Discuss types of operators in C with an example.   
 (10)

6. (a) Discuss

(i) if

(ii) if – else

(iii) nested if control structures with an example.  
 (15)

(b) Compare one dimensional and two dimensional arrays in C. (5)

7. (a) Write a ‘C’ program to generate prime numbers between 1 and n.

(b) Discuss ‘switch’ statement with an example.

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**23**

DE–4022

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

SYSTEM ANALYSIS AND DESIGN

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. (a) Explain various types of system with suitable example. (10)

(b) Discuss the role of systems analyst in system analysis and design. (10)

2. (a) Explain the merits and demerits of questionnaire and record review techniques. (10)

(b) Explain about Operational and Technical feasibilities. (10)

3. Explain the break even and present value cost benefit analysis methods. (20)

4. (a) What is Data flow diagram? Draw the symbols used in DFD and explain. (10)

(b) Compare decision table and decision tree. (10)

5. (a) Explain steps associated with design of printed and audio output. (10)

(b) Explain about the importance of Input validation.   
 (10)

6. (a) Explain sequential and direct file organisation with examples. (10)

(b) Compare hierarchical and network database. (10)

7. (a) Explain about HIPO and Warmer Orr diagram with an example. (10)

(b) What are various system bestings available? Explain. (10)

8. (a) Explain the advantages of parallel conversion over direct conversion. (10)

(b) Explain about post implementation review. (10)

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DE–4021

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

PC SOFTWARE   
(WORDSTAR, LOTUS 1-2-3 AND D BASE III PLUS)

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. (a) (i) List the features of WordStar. (5)

* 1. (ii) What is Mail Merge? Describe the procedure for mail merge. (5)
  2. (b) Describe briefly about the following :
  3. (i) Edit Menu (3)
  4. (ii) Dot Commands (4)
  5. (iii) Block Menu. (3)

2. (a) (i) What is Range? What are the different ways of defining a range? (4)

* 1. (ii) What are the advantages of Using Spread sheet? (5)
  2. (b) (i) Explain in detail about Range, Copy and Move commands in worksheet. (6)
  3. (ii) Describe about the components of a worksheet.  
      (5)

3. (a) Explain in detail about Mathematical functions in Lotus 123 with examples. (10)

* 1. (b) Describe about the following command with example.
  2. (i) Retrieve and Save (6)
  3. (ii) SORT Command. (4)

4. (a) Explain procedure for creating graphs and viewing a graph in Lotus 1-2-3. (10)

* 1. (b) Write short notes on :
  2. (i) What if analysis (5)
  3. (ii) Filling ranges. (5)

5. (a) What is RDBMS? Describe about viewing a data from a database file. (10)

(b) Describe in detail about the following with   
examples :

* 1. (i) Indexing on Multiple Fields (4)
  2. (ii) Editing data in record (3)
  3. (iii) Finding information with SEEK command.  
      (3)

6. (a) Explain briefly about querying the database file using LIST and LOCATE commands. (10)

* 1. (b) (i) How will you modify a database structure? Explain. (5)
  2. (ii) Write the advantages of indexing over sorting.   
      (5)

7. (a) Explain about the Arithmetic operation using Arithmetic functions. (10)

* 1. (b) (i) Explain about creating labels with example. (5)
  2. (ii) Discuss about printing labels with examples.   
      (5)

8. (a) Explain about control structures in Dbase with examples.

* 1. (b) Discuss the following :
  2. (i) Report Generation.
  3. (ii) Memory variables.

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**21**

DE–4020

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

MICRO PROCESSORS AND PERSONAL COMPUTERS

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. (a) Discuss the features and functions of a micro processor based system. (10)

* 1. (b) What is a bus? How many types of buses are there in a micro processor? Explain the functions of each type of   
     bus. (10)

2. (a) Draw and explain the timing diagram for opcode fetch in 8085. (10)

* 1. (b) Neatly sketch the Internal architecture of a 8085   
     microprocessor. (10)

3. (a) What happens when the following instructions are executed in 8085? (10)

* 1. (i) XCHG
  2. (ii) RLC
  3. (iii) RIM.
  4. (b) Explain the Instruction set of 8085 with   
     example. (10)

4. (a) With a flow chart, write a assembly language program for 8085 to convert a two digit BCD number into its binary equivalent. (10)

* 1. (b) Write a assembly language program in 8085 to subtract given two binary numbers. (10)

5. (a) Compare the EPROM with a static RAM as a memory for a microprocessor. (10)

* 1. (b) Explain floppy disk and FDD mechanism. (10)

6. (a) Draw and explain the architecture of any one PMA controller. (10)

* 1. (b) Describe the interrupt driven data transfer mode of 8085 with a suitable example. (10)

7. (a) Discuss about the special registers available in Pentium processor. (10)

* 1. (b) Write brief notes on SIMM and BIOS. (10)

8. (a) Comparison between Active maintenance procedures and passive preventive maintenance procedures. (10)

* 1. (b) Explain the prentive maintenance using data back up systems. (10)

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**15**

DE–4019

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

ACCOUNTING AND FINANCIAL MANAGEMENT

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1 (a) What is Accounting? Explain its nature and scope.

* 1. (b) Explain the uses of Financial Accounting.

2. What are accounting concepts and conventions? Explain.

3. Enter the following transactions in a three Colunm Cash Book 2006

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | Rs. |
| January | 1 | Cash in hand | 410 |
|  |  | Balance at Bank | 8,920 |
|  | 2 | Cash sales | 4,500 |
|  | 3 | Pain into bank | 4,000 |
|  | 5 | Purchased stationary | 100 |
|  | 8 | Paid Mahesh by cheque | 280 |
|  |  | Discount received | 20 |
|  | 12 | Gave a cheque for cash purchases | 1,500 |
|  | 15 | Drew for personal use | 500 |
|  | 18 | Received from Suresh, a cheque for Rs. 1,970 in full settlement of account for Rs. 2,000 and deposited it in Bank |  |
|  | 20 | Drew from bank | 1,000 |
|  | 21 | Paid wages | 800 |
|  | 25 | Bank returned cheque of Suresh dishonoured |  |
|  | 31 | Bank charges as per pass book | 10 |

4. The position of Manohar’s business as on 1st January 2005 was as under: Sundry creditors Rs. 1,70,000; Freehold premises Rs. 5,00,000; Stock Rs. 2,50,000; Sundry debtors   
Rs. 2,00,000; Furniture Rs. 20,000.

* 1. An abstract of the cash book is appended below:

|  |  |  |  |
| --- | --- | --- | --- |
| Receipts | Rs. | Payments | Rs. |
| Sundry debtors | 1,50,000 | Overdraft (1.1.05) | 1,00,000 |
| Cash sales | 8,00,000 | Expenses | 5,00,000 |
|  |  | Drawings | 30,000 |
|  |  | Sundry creditors | 2,00,000 |
|  |  | Cash in hand | 20,000 |
|  |  | Cash at bank | 1,00,000 |
|  | 9,50,000 |  | 9,50,000 |

* 1. The following additional information is available :
  2. Closing stock Rs. 3,00,000; Closing debtors Rs. 2,50,000; Closing creditors Rs. 1,20,000. No additions were made during the year to premises and furniture but they are to be depreciated @10% and 15% respectively. A bad debts provision of 2½ % is to be raised.
  3. Prepare a Trading and Profit and Loss account for the year ended 31st December 2005 and a Balance sheet as on that date.

5. (a) What are Financial statements? Discuss its nature.

* 1. (b) Describe the procedure for analysis and interpretation of financial statements.

6. From the following information make out a statement of properties funds with as many detail as possible:

* 1. (a) Current ratio 2.5
  2. (b) Liquidity ratio 1.5
  3. (c) Proprietary ratio (fixed assets / proprietary fund) 0.75
  4. (d) Working capital Rs. 60,000
  5. (e) Reserve and surplus Rs. 40,000
  6. (f) Bank overdraft Rs. 10,000
  7. (g) There is no long-term loan or fictitious asset.

7. Following are the summarised Balance Sheets of   
A & Co. Ltd., as on 31st December 2004 and 2005.

Balance Sheet

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Liabilities | 2004 |  | 2005 | Assets | 2004 |  | 2005 |
|  | Rs. |  | Rs. |  | Rs. |  | Rs. |
| Share capital | 1,00,000 |  | 1,50,000 | Land and building | 1,00,000 |  | 90,000 |
| General reserve | 50,000 |  | 60,000 | Plant and machinery | 1,00,000 |  | 1,19,000 |
| Profit and loss a/c | 30,500 |  | 30,000 | Stock | 50,000 |  | 24,000 |
| Bank loan | 70,000 |  | – | Debtors | 75,000 |  | 63,000 |
| Sundry creditors | 50,000 |  | 37,200 | Cash | 500 |  | 1,200 |
| Provision for tax | 32,000 |  | 35,000 | Bank | 2,000 |  | 15,000 |
|  |  |  |  | Goodwill | 5,000 |  | – |
|  | 3,32,500 |  | 3,12,200 |  | 3,32,500 |  | 3,12,200 |

* 1. Additional information :
  2. (a) Dividend of Rs. 23,000 was paid during 2005
  3. (b) Depreciation written off on building Rs. 10,000 and machinery Rs. 14,000
  4. (c) Income tax paid during the year ended 31st December 2005 Rs. 28,000.
  5. Prepare a funds flow statement for 2005.

8. From the following balance sheets as on 31st December, prepare a cash flow statement and adjusted P and L a/c

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Liabilities | 31.12.04 |  | 31.12.05 | Assets | 31.12.04 |  | 31.12.05 |
|  | Rs. |  | Rs. |  | Rs. |  | Rs. |
| Share capital | 1,00,000 |  | 1,50,000 | Fixed assets | 1,00,000 |  | 1,50,000 |
| P and L a/c | 50,000 |  | 80,000 | Goodwill | 50,000 |  | 40,000 |
| General reserve | 30,000 |  | 40,000 | Inventories | 50,000 |  | 80,000 |
| 16% bonds | 50,000 |  | 60,000 | Debtors | 50,000 |  | 80,000 |
| Sundry creditors | 30,000 |  | 40,000 | Bills receivable | 10,000 |  | 20,000 |
| Expenses |  |  |  | Bank | 10,000 |  | 15,000 |
| outstanding | 10,000 |  | 15,000 |  |  |  |  |
|  | 2,70,000 |  | 3,85,000 |  | 2,70,000 |  | 3,85,000 |

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**14**

DE–4018

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

FORTRAN PROGRAMMING

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer ALL the questions.

All questions carry equal marks.

1. (a) What are the rules to form integer type variable? Explain. (5)

(b) If I = 2, J = 4 and K = 8, find the value of L in the following expression.

(i) L = I \* 4 + J \*\* 2 + K/J

(ii) L = I/J + K/J \*\*2 + J/K. (6)

(c) Explain PRINT statement with suitable example.(9)

2. (a) Explain hierarchy rules to evaluate an arithmetic expression. (6)

(b) Write FORTRAN expression for the following mathematical expression. (6)

(i) 

(ii) .

(c) Write a FORTRAN program to find the area of the triangle when three sides are given. (8)

3. (a) Explain arithmetic IF statement with suitable example. (10)

(b) Write a FORTRAN program to find the roots of a quadratic equation. (10)

4. (a) Explain While...Do statement with suitable example. (10)

(b) Write a FORTRAN program to find the sum of the series 2 + 4 + 6 + ... + N. (10)

5. (a) Explain the use of DIMENSION statement. (8)

(b) Write a FORTRAN program to find the biggest and smallest number of a set of *n* integers. (12)

6. (a) Explain the format characters I, X and E. (10)

(b) Write a FORTRAN program to multiply two matrices. (10)

7. (a) Explain COMMON and EQUIVALENCE statement. (10)

(b) Write a FORTRAN program to evaluate the series  using function subprogram. (10)

8. Write a FORTRAN program to prepare mark list using files. Assume your own data. (20)

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**13**

DE–4017

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

COBOL AND BUSINESS DATA PROCESSING

(Upto 2002 batch)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. (a) Explain with examples, the various level structure in Cobol. (10)

* 1. (b) Explain with examples, the various level arithmetic verbs used in Cobol. (10)

2. (a) Explain with examples the various picture clause and editing picture clauses in Cobol. (10)

* 1. (b) Explain with examples, the various types of PERFORM statement in Cobol. (10)

3. (a) How a Cobol program is executed and tested? Explain. (10)

* 1. (b) Explain the various control structures used in Cobol with examples. (10)

4. (a) Explain with examples, the various figurative constants in Cobol. (10)

* 1. (b) Write a program in Cobol to convert the given temperature in Celsius to Fahrenheit. (10)

5. (a) Explain the purpose, format and execution of READ and WRITE verbs with examples. (10)

* 1. (b) Write a Cobol program to create a sequential file for EB bill processing contains Customer No, Customer Name, Current Meter Reading, Previous Meter Reading Unit, Amount. (10)

6. (a) Write a Cobol program to sort 10 names in alphabetical order. (10)

* 1. (b) Explain different file organisations supported by Cobol. (10)

7. (a) Explain the different types of codes used in data processing. (10)

* 1. (b) How will you initialize values for arrays in Cobol? Give an example Compare RENAMES and REDEFINES statements. (10)

8. (a) Write down the procedure for insertion and selection sorting techniques. (10)

* 1. (b) Write a Cobol program to print pay slips for all the male employees in an organisation, using a sequential file containing employee data. (10)

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**12**

DE–4016

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

COMPUTER FUNDAMENTALS

(Upto 2002)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. (a) Write about classification of computer. (7)

* 1. (b) Explain the functions of business data processing. (6)
  2. (c) What are the main parts of the computer? Explain.  
      (7)

2. (a) What is the difference between data and information? (3)

* 1. (b) What are the basic data types? Explain with examples. (9)
  2. (c) What is bits, bytes and words? Give examples. (4)
  3. (d) Convert the decimal number 35 into binary   
     number. (4)

3. Write short notes on :

* 1. (a) Magnetic tape
  2. (b) Magnetic disk
  3. (c) Dot matrix printer. (20)

4. (a) Explain the methods of addressing with   
examples. (8)

* 1. (b) Explain RAM and ROM. (7)
  2. (c) Write about instruction set and formats. (5)

5. (a) What is compiler and interpreter? Explain. (10)

* 1. (b) Explain the functions of operating system. (10)

6. (a) Write about the importance of word processing. (10)

* 1. (b) Explain database management systems and its functions. (10)

7. Explain the stages in program development. (20)

8. Write short notes on :

* 1. (a) Structured programming. (7)
  2. (b) Debugging. (6)
  3. (c) Testing and verification. (7)

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**11**

DE–4015

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2008.

First Year

ELECTRONICS DEVICES AND DIGITAL CIRCUITS

(Upto 2002 Batch)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

1. All questions carry equal marks.

1. (a) (i) Explain Gray code with examples. (5)

* 1. (ii) Use 2’s complement to perform M-N with the given binary numbers. (5)

M = 1010100

N = 1000100

* 1. (b) Draw and explain the Circuit diagram for an Adder system using 2’s Complement number. (10)

2. (a) Demonstrate by means of truth tables the validity of the following theorems of Boolean algebra.

* 1. (i) The associative laws.
  2. (ii) De-Morgan’s theorems. (10)
  3. (b) Explain any four logic gates with truth tables. (10)

3. (a) Design a Combinational circuit that accepts a three-bit number and generates an output binary number equal to the square of the input number. (10)

* 1. (b) Explain the half adder with a neat diagram. (10)

4. (a) Show the logic diagram of a clocked D flip-flop with AND and NOR gates. (10)

* 1. (b) Design a 4-bit Ring counter. (10)

5. (a) Explain the operation of JFET with neat diagram.  
 (10)

* 1. (b) Explain the characteristics of operational amplifier.  
      (10)

6. (a) Obtain the logic diagram of a Master slave JK flip flop with AND and NOR gates. (10)

* 1. (b) Explain shift right registers. (10)

7. (a) Implement a full subtractor with two half-subtractors and an OR gate. (10)

* 1. (b) Simplify the Boolean function :
  2.  (10)

8. (a) Obtain the truth table of the function : (10)

* 1. 
  2. (b) Draw the three input exclusive-OR gate with truth table. (10)

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