Bca 2ND Semester

Important Information Assignment -1

(BCA 2nd Semester)

Communicative English

1.Write 35 words and give their antonyms of use both the given word and its antonym in a single sentence.

2.Write 35 words and give their synonyms and use them in sentences.

3.Write 35 Idioms with their meanings and use them in sentences.

4.Write any two paragraphs in not more than 200 words.

5.Make affirmative, Negative , Interrogative of the given sentence (12 tenses) with proper time expression: ***Rahul flies drone cam to take pictures of the city*** 6.Describe communication process and types of Communication.

7.What are the barriers of communication

8.What are the principles of Effective Communication?

9.Explain parts of business letters and Kinds of business letters.

Note: Assignment must be written in neat handwriting.total page not less than (Introduction ,Headings and explanation in 4-5 lines in points).The assignment must have a file cover ,cover page ,index page and content pages . Timely submission of the assignment will be appreciated.

Dronacharya PG College PG College of Education, Rait

Assignment

BCA 2ND SEM (SEC-A & SEC-B)

Prepare your practical file including the following topics and submit it on 3rd-Feb-2025:

1. Classification of Data Structures

2. One-Dimensional Array with a Program 3.

   Two-Dimensional Array with a Program

4. Array Operations:

a) Write an algorithm to insert an element in a one-dimensional array.

b) Write an algorithm and program to delete an element in a one-

   dimensional array.

c) Write an algorithm and program to traverse an array.

5) what is linked list. Explain diff. Types of linked list with example.

6) Write an algorithm to insert a node at the beginning of the link list.

7) Write an algorithm to delete a node at the beginning of the link list.

Note: During the practical file checking, your viva will also be conducted; otherwise, your file will not be checked.

DBMS

Q.1 What is DBMS. Explain DBMS Architecture. Also explain advantages and disadvantages.

MS ACCESS PRACTICAL
QUESTIONS:

1. Create a Student Table in MS-Access with the following features:
   a. Roll Number
   b. Student Name
   c. Class
   d. Marks in Subject 1, Subject 2, Subject 3
   e. Total
   f. Average
   g. Result

2. Create a Personal Information table in MS-Access with the following fields:
   a. First Name
   b. Middle Name
   c. Last Name
   d. Nationality
   e. Gender
   f. Temporary Address
   g. Permanent Address. Generate a Form and Report.

3. Create an Inventory table in MS-Access with fields:
   a. Poduct ID
   b. Product Name
   c. Product Quantity
   d. Product Price

4. Create a database „College" and table „"Student". The following are the details of the table:

Number	Fname	Lname	Address	Home phone	Joining date
101	Ram	Prasad	11-1-963/A, Banjara Hills, Hyderabad	040-23343256	02/06/2016
102	Shyam	Singh	12-1-254/B, Sultan Bazar, Hyderabad	040-23345679	05/06/2016

103	Ankur	Agrawal	11-2-667/A, Vidhya Nagar, Hyderabad	040-23358796	03/06/2016
104	Ramesh	Sharma	10-2-340, Road No.12, Banjara Hills, Hyderabad	040-23389745	04/06/2016
105	Harish	Shekhawat	15-4-633/A, Begum Bazar, Hyderabad	040-23356486	02/06/2016

5. Create a database „Student". Also create table „stud table" and execute the following queries

1

SRollno	Sname	English	SL	FA-I	BE	BOM	IT
101	Rajendra	75	85	90	85	86	90
102	Arvind	88	75	95	80	82	85
103	Krishna	89	77	82	78	82	86
104	Harish	75	72	70	65	60	77
105	Rajesh	86	85	81	80	89	90

a) Sort the data by Sname.
b) Calculate Total Marks of Individual Students.
c) Calculate Percentage Marks of Individual Student.

6. Create a database „Student1". Also create table „stdtable" and execute the following queries

SRollno	Sname	English	SL	FA-I	BE	BOM	IT
101	Rajendra	75	85	90	85	86	90
102	Arvind	88	75	95	80	82	85
103	Krishna	50	52	58	50	53	54
104	Harish	52	55	51	56	57	59
105	Rajesh	86	85	81	80	89	90

a) Display all Students who got >=80 Marks in Any Subject.
b) Display all Students who got >=80% Marks in Total.
c) Display all Students who got <=60% Marks in Total.

7. Create a database „Student2". Also create table „stdmarks" and execute the following queries

SRollno	Sname	English	SL	FA	BE	BOM	FIT

101	Rajendra	22	20	23	20	23	20
102	Arvind	20	21	20	23	20	20
103	Krishna	50	52	58	50	53	54
104	Harish	52	55	51	56	57	59
105	Rajesh	86	85	81	80	89	90

a) Display All the students who got <25 in individual subject.

b) Display all the students who are Failed in individual Subject.

c) Increase marks by adding 5 marks whose marks are <25.

8. Create a database „Student3". Also create table „stdmarks1" and execute the following queries

SRollno	Sname	English	SL	FA	BE	BOM	FIT
101	Rajendra	90	95	92	90	88	90
102	Arvind	48	52	48	50	53	54
103	Krishna	85	88	89	85	95	90
104	Harish	12	10	15	12	10	15
105	Rajesh	60	66	75	77	65	79

a) Update table by adding Grade as per the following:-

i.   Total %age >=90%   Grade "E"

ii.   Total %age >=75%   Grade "A"

iii.   Total %age >=60%   Grade "B"

iv.   Total %age >=50%   Grade "C"

v.   Total %age >=36%   Grade "D"

vi.   Total %age <36%   Grade "F"

9. Create „Employee" database and table „Emp"

Empno	Ename	Designation	Deptno	DOJ	Basic Salary
101	Ajay	Manager	10	12/12/2001	25000
102	Arvind	Dy. Manager	40	20/02/2002	20000
103	Rahul	Programmer	20	22/03/2001	18000
104	Hari	Mktg. Officer	40	01/04/2001	15000

| 105 | Sahil | Accountant | 10 | 20-09-2000 | 12000 |

a) Calculate DA as 40% of Basic Salary.
b) Calculate Hra as 15% of Basic Salary.
c) Calculate PF as 12.67% of Basic Salary
d) Calculate Gross Pay = Basic Salary + DA + HRA
e) Calculate Net Pay = Gross Pay – PF.

10. Create „Employee1" database and table „Emp1"

Empno	Ename	Designation	Deptno	DOJ	Basic Salary
101	Ajay	Manager	10	12/12/2001	25000
102	Arvind	Dy. Manager	40	20/02/2002	20000
103	Rahul	Programmer	20	22/03/2001	18000
104	Hari	Mktg. Officer	40	01/04/2001	15000
105	Sahil	Accountant	10	20-09-2000	12000

a) List all the Employees Who are working in Dept no.10
b) List all the Employees who get less than 20000 Salary.

11. Create „Employee2" database and table „Emp2"

Empno	Ename	Designation	Deptno	DOJ	Basic Salary
101	Ajay	Manager	10	12/12/2001	25000
102	Arvind	Dy. Manager	40	20/02/2002	20000
103	Rahul	Programmer	20	22/03/2001	18000
104	Hari	Mktg. Officer	40	01/04/2001	15000
105	Sahil	Accountant	10	20-09-2000	12000

a) Update Salary by adding the increments as per the following:-

a. 10% Increment in Basic Salary who get < 20000
b. 5% Increment in Basic Salary who get >20000.

12. Create „Employee3" database and table „Emp3"

Empno	Ename	Designation	Deptno	DOJ	Basic Salary
101	Ajay	Manager	10	12/12/2001	25000
102	Arvind	Dy. Manager	40	20/02/2002	20000
103	Rahul	Programmer	20	22/03/2001	18000
104	Hari	Mktg. Officer	40	01/04/2001	15000
105	Sahil	Accountant	10	20-09-2000	12000

Generate the query to find out the following:-
a) Total Salary paid by the Company to Employees
b) Maximum Salary paid by the Company to Employees
c) Minimum Salary paid by the Company to Employees

13. In the following table find out the Followings:
   a. All the Department Nos and Employees Names.
   b. All the Employees who joined in year 2001.

Empno	Ename	Designation	Deptno	DOJ	Basic Salary
101	Ajay	Manager	10	12/12/2001	25000
102	Arvind	Dy. Manager	40	20/02/2002	20000
103	Rahul	Programmer	20	22/03/2001	18000
104	Hari	Mktg. Officer	40	01/04/2001	15000
105	Sahil	Accountant	10	20-09-2000	12000

14. Create „Course" database and „Coursedtl" table having following records:-

SRollno	Sname	Course	Section	Medium	College	Total Fees
101	Rajendra	B.Com	General	English	ABC	5500
102	Arvind	B.Com	General	English	PQR	15000
103	Krishna	B.Com	General	Telugu	ABC	5500
104	Harish	B.Com	General	Telugu	PQR	7500
105	Rajesh	B.Com	Computers	English	ABC	15000
106	Harish	B.Com	Computers	English	PQR	25000

a)   Prepare the report to display lowest course fees with college name.
b)   Prepare the Report to display all students who are pursuing B.Com(Computers).

15. In the following table generate the queries for the followings:-
   a. Display the Course and College having Lowest Course Fees.
   b. Display all the courses pursuing by the PQR College.

SRollno	Sname	Course	Section	Medium	College	Total Fees

101	Rajendra	B.Com	General	English	ABC	5500
102	Arvind	B.Com	General	English	PQR	15000
103	Krishna	B.Com	General	Telugu	ABC	5500
104	Harish	B.Com	General	Telugu	PQR	7500
105	Rajesh	B.Com	Computers	English	ABC	15000
106	Harish	B.Com	Computers	English	PQR	25000

16. Create a Library Database of your college having following fields and enter atleast 30 records in it:-

Field Name	Description
BookCode	Primary Key
BookTitle	Subject Name
Publisher	Book Publisher Name
No.of.Copies	Quantity in one Invoice
No.ofPages	Total Pages in book
Edition	Book Printing Edition

17. From the College Library database find out the following:-
   a. Total no. of copies of books subject wise.
   b. A report displays all books group by Publisher.
   c. A report displays all books group by Book Title.
   d. A report displays all books group by Book Edition

18. Create the „Order" database and a table "Orderdtl" having following records:-

Order No	Order Date	Order Item	Order Qty	Order Price	Client Code	Delivery Type	Order Status
1011	12/02/2015	LED Monitors	100	7500	1025	Road	Delivered
1012	25/02/2015	Printers	75	8500	1025	Road	Delivered

1013	25/03/2015	CPU	100	15000	1045	Road	Delivered
1014	31/03/2015	LED Monitors	75	6500	1045	Road	Not Delivered
1015	31/03/2015	CPU	75	18000	1025	Road	Not Delivered

Generate the following reports from the above table:-

    a)   Display all the Order No. which have not been yet Delivered.

    b)   Display all the Orders of LED Monitor and CPU.

    c)   Display all the Orders of LED Monitor and CPU which are not have been delivered yet.

19. Create a a „Sales" Database and a table „Salesdtl" having following fields and data:-

SalesNo.	Salesman Code	Salesman Name	Branch	Sale Amount
1011	101	Arvind	Jaipur	75000
1012	102	Ashok	Jaipur	80000
1013	103	Harish	Hyderabad	75000
1014	104	Manish	Hyderabad	65000

| 1015 | 105 | Krish | Secunderabad | 78000 |

20. Generate the queries to find out the followings from the above „Sales" Table:

    a)   Total sale of all the Branches.

    b)   Total sale group by Branches.

    c)   Maximum sale of individual branch.

    d)   Maximum sale in all branches.

ASSIGNMENT

DIGITAL ELECTRONICS

➢ EXPLAIN THE FOLLOWING TOPICS BRIEFLY :

➢ Fundamentals of semiconductor physics

➢ Energy bands in solids0 pn0junction diode depletion region, forward and reverse bias

➢ diode as switch, Bipolar Junction Transistor, transistor configurations

➢ bipolar junction transistor (CE configuration) as switch

➢ Saturated and non0saturated logic

➢ Integrated Circuits, characteristics of digital logic families0TTL, ECL, CMOS.

➢ Logic gates: AND, OR, NOT Gates and their Truth Tables   ➢ NOR, NAND & XOR gates

➢ Boolean algebra, Basic Boolean Law's ➢ function and their truth tables

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Assignment

BCA 2ND SEM (SEC-B)

1. Write all the logic gates with truth table ?

2. Solve the 5-5 expression for Canonical SOP and POS ?

3. Laws of Boolean Algebra with example and write 10 expression of Boolean algebra?

4. Define K-map in detail?

BCA 4TH Semester

Accounting

Illustration 3.

Enter the following transactions in the books of Sh. Janak Raj :

2024		₹
April 1	Capital Introduced in business	1,50,000
April 3	Sold goods for cash	20,000
April 4	Purchased goods from Ram Lal	24,000
April 6	Sold goods to Sham Lal	4,800
April 8	Purchased furniture	2,000
April 10	Sold goods for cash	3,000
April 12	Returned goods to Ram Lal	2,000
April 14	Cash Purchases	8,000
April 17	Received from Sham Lal	1,200
April 18	Sundry expenses	500
April 20	Sold goods to Prem Chand for cash	1,200
April 22	Paid to Ram Lal	8,000
April 25	Loan to Mahesh	2,000
April 26	Paid salary	2,800
April 30	Purchased machinery from Steel Sons Ltd.	14,800

Solution :

3. Journalise the following transactions and in the books of Sh. Rahim.

2024		₹
July 1	Rahim commenced business with cash	12,000
July 2	Deposited into bank	9,000
July 3	Purchased goods for cash	500
July 4	Bought furniture for office use	1,400
July 10	Drew from bank for office use	1,000
July 13	Goods sold to Ramzaan	600
July 15	Bought goods of Rafique	410
July 18	Paid trade expenses	100
July 19	Received cash from Ramzaan	600
July 25	Paid wages	50
July 28	Cash Paid to Rafique	410
July 31	Paid rent	100

Illustration 12.

From the following data, calculate the P/V Ratio, B.E.P., and Margin of Safety :

		₹
Sales		80,000
Variable Costs	40,000	
Fixed Costs	24,000	64,000
Profit		16,000

Solution :

₹ 12,00,000

Illustration 14.

From the following data, you are required to calculate :

(a) P/V Ratio

(b) Break-even Sales with the help of P/V Ratio

(c) Sales required to earn a profit of ₹ 4,50,000

Fixed Expenses	₹ 90,000
Variable Cost per Unit :	
Direct Material	₹ 5
Direct Labour	₹ 2
Direct Overheads	100% of Direct Labour
Selling Price per Unit	₹ 12

(H.P.U. B.Com. May, 2023)

Solution.

Statement of Marginal Cost and Contribution

ASSIGNMENT

Section A

IT and Web Designing

PRACTICALS

1. Design a webpage to add heading and paragraph in html document 2. Design a webpage and use all the formatting tags in html

3. Design a webpage to explain Table tag and its attributes.

4. Design a webpage to explain all three types of lists.

5. Design a webpage to add an image in html document and also use image as a link.

Section –B

<u>ASSIGNMENT</u>

IT and Web Designing

PRACTICALS

1. Design a webpage to add heading and paragraph in html document

2. Design a webpage and use all the formatting tags in html

3. Design a webpage to explain Table tag and its attributes.

4. Design a webpage to explain all three types of lists.

5. Design a webpage to add an image in html document and also use image as a link.

Guidelines:

- Deadline: **31 Jan, 2025**

Assignment

BCA 4TH SEM (SEC-A AND SEC-B)

Short Answer Questions:

1. What is personnel management, and how does it differ from human resource management (HRM)?
2. List and explain the main functions of personnel management.
3. Define job analysis. Why is it important in personnel management?
4. What are the key responsibilities of a personnel manager?
5. Explain the significance of performance appraisal in an organization.

Descriptive Questions:

1. Discuss the role of personnel management in improving employee productivity.
2. Explain the recruitment and selection process in detail.
3. How does employee motivation impact organizational success? Discuss two motivation theories.
4. Describe the importance of employee training and development programs.
5. What are the major challenges faced by personnel managers in the modern workplace?

Case Study/Scenario-Based Questions:

1. Imagine you are a personnel manager at a growing tech company. How would you design an employee retention strategy?
2. A software company faces a high turnover rate. As a personnel manager, suggest possible reasons and solutions to reduce turnover.
3. During a company merger, how can personnel management help in smooth integration of the workforce?
4. Develop a recruitment plan for hiring 10 new software developers in a startup environment.
5. How would you handle employee grievances and conflicts in a workplace scenario?

Subject: Assignment on System Analysis and Design (SAD) – Units 1 & 2

Please be informed that an assignment on the first two units of **System Analysis and Design (SAD)** has been assigned to you. Ensure that you cover the key topics discussed in the class, including:

1. **Unit 1**: Introduction to SAD, role of system analysts, systems development life cycle (SDLC), and feasibility study. Initial Investigation: Sources of Requests, User / Analyst interaction, Qualities of a System Analyst.

2. **Unit 2**: Feasibility studies: Technical, Operational, Behavioral and economic feasibilities, cost and benefit analysis.

Guidelines:

- Submit the assignment in **typed format** (Word or PDF) or neatly handwritten.

- Include relevant diagrams and examples for better clarity.

- Deadline: **31 Jan, 2025**

Assignment of **VB.NET** for BCA 4th sem

1. Create notes of all covered syllabus unit wise
2. . Prepare 9 Practical already given with proper cover page and snapshots of output.
3. Deployment process of windows form application setup.

Submission Date - After winter breaks

BCA 3rd year

Semester -6

Computer Graphics Assignment Questions:

(Make a Hand written notes)

Q.1 What is Computer Graphics . What are the applications of Computer Graphics?

Q.2 Explain the difference between raster and vector graphics. Provide examples of where each type is commonly used.

Q.3 Define the following terms: pixel, resolution, aspect ratio, and refresh rate.

Q. 4 Write computer graphics program create a line .

Q.5 using line create different shapes like :

Tree

Table

Rectangle

Square

First Alphabet of your name

ASSIGNMENT

Multimedia Technology

➢ EXPLAIN THE FOLLOWING TOPICS BRIEFLY :

- Introduction to Multimedia
- Needs and areas of use,
- Development platforms for multimedia,
- Identifying Multimedia elements Text, Images, Sound, Animation and Video, ⬚ Making simple Multimedia with PowerPoint.
- Concepts of plain & formatted text, RTF & HTML texts, Object Linking and Embedding concept.

Assignment BCA 6$^{\text{TH}}$ SEMESTER

NUMERICAL METHOD

Question:1. Use the **Bisection Method** to find the root of the equation:

f(x)=x3−4x−9f(x) = x^3 - 4x - 9f(x)=x3−4x−9

within the interval [2,3][2, 3][2,3]. Perform **four iterations** and provide the approximate value of the root.

Q2.

Use the **Bisection Method** to approximate the root of the equation: f(x)=x3−5x+1f(x) = x^3 - 5x +

1f(x)=x3−5x+1

in the interval [1,2][1, 2][1,2]. Perform **five iterations** and calculate the approximate root to four decimal places.

Note Kindly complete the synopsis of project

Assignment Software

Engineering

- Explain system development life cycle?
- Waterfall model in detail ?
- What are the Software myths explain in details ?
- Rules for Building High qualify of software specify in detail according to real world scenario?