

## BCA 3<sup>rd</sup> Year

### PAPER-1 : ORACLE & DEVELOPPER 2000. (MARKS : 100)

- a. SQL**
  - i. Introduction to managing data
  - ii. SQL interactive commands
  - iii. Database objects
  - iv. SQL \*Plus report
- b. PL/SQL**
  - i. Introduction to PL/SQL
  - ii. Stored procedures
  - iii. Stored function
  - iv. Database triggers
- c. Forms (developer 2000 )**
  - i. Working with forms
  - ii. Writing triggers, procedures
  - iii. Working with menus
- d. Reports (developer 2000 )**
  - i. Working with Reports
  - ii. Types of reports
  - iii. Formatting of reports

### PAPER-2 : MULTIUSER OPERATING SYSTEM (UNIX/LINUX) (MARKS: 100)

- i. Introduction
- ii. Structure of UNIX / LINUX
- iii. General commands & redirections
- iv. Shell scripts

### PAPER-3 : COMPUTE BASED NUMERICAL & OPTIMIZATION (MARKS:100 )

- i. Errors & Accuracy
- ii. Calculus of finite differences
- iii. Iterative methods of Solution & Interpolations.
- iv. Basic concepts of probability, Addition theorem, Multiplication theorem conditional probability and independence.
- v. Measure of central tendency, Dispersion, Skew ness, Kurtosis.
- vi. **Differentiation:** Derivatives, Algebra of derivatives, Chain rule, Derivatives of algebraic, trigonometric, exponential, logarithm functions. Derivatives of composite and implicit functions, parametric functions..
- vii. **Integration :** Algebra of integrals, indefinite integral, Standard integration formula, integration by method of substitution, integration by parts, Definite integral, elementary properties of definite integrals.

**PAPER-4 : COMPUTER PROGRAMMING USING JAVA (marks :100)**

- a. Introduction to JAVA.
- b. JAVA applications and Applets
- c. JAVA AWT package
- d. JAVA threads
- e. JAVA Swing and JFC
- f. JDBC
- g. Socket / networking.

**PAPER-5 : MANAGEMENT INFORMATION SYSTEM (MIS) (marks: 100)**

**a) ORGANISATION & MANAGEMENT**

- i. Introduction
- ii. Management
- iii. Planning and decision making
- iv. Organization and staffing
- v. Directing and leading
- vi. Control and co-ordination
- vii. Menus and dialog boxes

**b) MANAGEMENT INFORMATION SYSTEM (MIS)**

- i. Introduction
- ii. Information
- iii. Development of MIS
- iv. Choice of information technology
- v. Application of MIS in Business.

**PAPER-6 : COMPUTER ORIENTED ACCOUNTING SYSTEM (MARKS: 100)**

- i. Book keeping Accounting
- ii. **Accounting** : equations, procedures.
- ii. **Practical system of book keeping** : Journal, Ledger, Cash books, Banking Transaction and -----Statement.
- iii. Trail balance and final accounts.
- iv. Introduction to Financial management goals and key activities, relationship of finance to accounting.
- v. Basics of capital budgeting cost and benefits.
- vi. Investment appraisal criteria, net present value
- vii. Benefit cost ratio, internal rate of return, pay back period and accounting rate of return.
- viii. **Long Term financing**: Retained earnings, equity, preference and debenture capital Term Loan, public issue, rights issue.
- ix. **Elements of Working Capital Management**: Cash & Credit management, Inventory management and working capital financing..

**PAPER-7 : LAB – I (Marks: 100)**

*ORACLE* : SQL & PL/SQL (marks: 50)

Linux / UNIX (marks: 50)

**PAPER-8 : LAB – II (Marks: 100)**

**JAVA Programming**

**PAPER- 9 : PROJECT ( marks : 100 )**

**PROJECT & VIVA**

\* **Third Year Total Marks : 900**