*Revised Syllabus of Courses of B.Com. Programme at Semester III with Effect from the Academic Year 2017-2018*

## 2 Ability Enhancement Courses (AEC)
## 2A * Skill Enhancement Courses (SEC) Group A

# 5. Computer Programming Paper I

## *Modules at a Glance*

| Sr. No. | Modules | No. of Lectures |
|---------|---------|-----------------|
| 1 | Hardware | 15 |
| 2 | Software | 15 |
| 3 | Introduction To C Programming | 15 |
| 4 | C – Decision / Loop Statements | 15 |
| 5 | Laboratory Training | 15 |
| | **Total** | **75** |

| Sr. No. | Modules / Units |
|---|---|
| 1 | **UNIT – I : HARDWARE** |
| | Evolution of Computers – Generations, Types of Computers, Computer System, Characteristics, Basic Components of a Digital Computer – Control Unit, ALU, Input / Output, Functions and Memory, Memory Addressing Capability of a CPU, Binary number system, Binary addition (1's complement, 2's Complement), Binary to decimal and Decimal to Binary Conversion, Octal Number, Hexadecimal System, World length of a computer, processing speed of a computer. |
| 2 | **UNIT – II : SOFTWARE** |
| | Software and its Need, Types of Software – System Software, Application software, System Software – Operating System, Utility Program, Algorithms, Flow Charts – Symbols, Rules for making Flow chart, Programming languages, Assemblers, Compilers and Interpreter, Computer Applications in Business. |
| 3 | **UNIT – III : INTRODUCTION TO C PROGRAMMING** |
| | Structure of C program, Keywords, identifies, constants, variables, data types, type modifier, type conversion, types of operator and expressions, Input and Output functions in C (print(), sancf(), getchar(), putchar(), gets(), puts()). Storage class specifiers Header files(stdio.h,math.j,conop.j) |
| 4 | **UNIT – IV : C – DECISION / LOOP STATEMENTS** |
| | Decision Statement – if-else statement, break, continue, goto, switch() case and nested if statement.<br>Loop control statements – for(), while(), do-while loop() and nested loops. |
| 5 | **LABORATORY TRAINING** |
| | Lab 1 : Writing algorithms and drawing flowcharts (Input-process-output).<br>Lab 2 : Writing algorithms and drawing flowcharts (Input-decision-process-output).<br>Lab 3 : Writing algorithms and drawing flowcharts (Simple Loops).<br>Lab 4 : Loading a C editor program-Entering and compiling a simple C-program.<br>Lab 5 : C-program to input name-and sales & then print name and commission.<br>Lab 6 : C-program to compute commission, discount etc using if() condition.<br>Lab 7 : Computing income tax based on given criterion.<br>Lab 8 : Printing numbers and summing number using loops.<br>Lab 9 : Printing interest and depreciation tables. |

# QUESTION PAPER PATTERN

**Maximum Marks :** 75
**Questions to be set :** 05

**Duration :** $2\frac{1}{2}$ Hrs.

**All Questions are Compulsory Carrying 15 Marks each.**

| Question No | Particulars | Marks |
|---|---|---|
| Q. 1. | **Objective Questions**<br>A.   Sub Questions to be asked 10 and to be solved any 08<br>B.   Sub Questions to be asked 10 and to be solved any 07<br>(\* Multiple choice / True or False / Match the columns) | 15 Marks |
| Q. 2.<br><br>Q. 2. | Full Length Question<br>**OR**<br>Full Length Question | 15 Marks<br><br>15 Marks |
| Q. 3.<br><br>Q.3. | Full Length Question<br>**OR**<br>Full Length Question | 15 Marks<br><br>15 Marks |
| Q. 4.<br><br>Q. 4. | Full Length Question<br>**OR**<br>Full Length Question | 15 Marks<br><br>15 Marks |
| Q. 5.<br><br>Q. 5. | Full Length Question<br>**OR**<br>Short Notes<br>To be asked 05<br>To be answered 03 | 15 Marks<br><br>15 Marks |

**Note :** Full length question of 15 marks may be divided into two sub questions of 08 and 07 marks.

*Revised Syllabus of Courses of B.Com. Programme at Semester IV*
*with Effect from the Academic Year 2017-2018*

## 2 Ability Enhancement Courses (AEC)
## 2A * Skill Enhancement Courses (SEC) Group A

# 5. Computer Programming Paper II

## Modules at a Glance

| Sr. No. | Modules | No. of Lectures |
|:---:|---|:---:|
| 1 | Computer Communication Systems | 15 |
| 2 | Principles Of DBMS | 15 |
| 3 | Case Study Of DBMS Using MS-ACCESS | 15 |
| 4 | MS-ACCESS QUERIES | 15 |
| 5 | Laboratory  Training | 15 |
| | **Total** | **75** |

| Sr. No. | Modules / Units |
|---|---|
| 1 | **UNIT – I :Computer Communication Systems** |
| | The Internet, internet connections, ISO's Open system interconnection reference model, The TCP/IP stack, E-mail, Internet addresses, Internet Protocol, SMTP, MIME POP, IMAP, Domain Name system, Telnet, FTP, WWW, Browsers, HTML, http, JAVA,. Intranet, Intranet Services and their advantages. Extranets. Search Engine and Web Crawlers |
| 2 | **UNIT – II :Principles Of DBMS** |
| | What is a database, Relational databases (Relation, Attribute, Instance, Relationship, Join), Database capabilities (Data definition, data manipulation, Access as an RDBMs) |
| 3 | **UNIT – III : CASE STUDY OF DBMS USING MS-ACCESS** |
| | MS-Office workspace basics, Exploring the Office menu, Working with ribbon, Opening an access database Exploring database objects, Creating database, Changing views. Printing database objects. Saving and closing database file. Working with datasheets, Moving among records, Updating records, adding records to a table, Finding records, sorting records, Filtering records, Using the PIVOT chart View, Saving and closing tables. |
| | Adding a table to a database, Adding fields to a table, adding a Lookup field, setting a Primary key, Using the input mask wizard. Saving design changes, Importing data (From Excel). |
| 4 | **UNIT – IV : MS-ACCESS QUERIES** |
| | What is a Query, Creating a query, working with queries, saving and running a query, creating calculated fields, using aggregate functions, Understanding query properties, Joining Tables. What is a Form, Using the form tool, Creating a form with form wizard, Working in design view, Changing the form layout, Using calculated controls, Working with records on a Form. |
| | What is a report tool, Printing report, saving a report, designing a report, changing report layout, creating mailing labels. |

# QUESTION PAPER PATTERN

**Maximum Marks :** 75
**Questions to be set :** 05

**Duration :** $2\frac{1}{2}$ Hrs.

**All Questions are Compulsory Carrying 15 Marks each.**

| Question No | Particulars | Marks |
|---|---|---|
| Q. 1. | Objective Questions<br>A.   Attempt any eight sub-questions from the following : (True / False) any 08<br>B.   Attempt any seven sub-questions from the following : (Multiple Choice)any 07 | 15 Marks |
| Q. 2. | A.     Attempt any one sub-question from a, b (Unit – I)<br>B.     Attempt any one sub-question from c, d (Unit – I) | 16 Marks |
| Q. 3. | A.     Attempt any one sub-question from a, b (Unit – II)<br>B.     Attempt any one sub-question from c, d (Unit – II) | 14 Marks |
| Q. 4. | A.     Attempt any one sub-question from a, b (Unit – III)<br>B.     Attempt any one sub-question from c, d (Unit – III) | 16 Marks |
| Q. 5. | A.     Attempt any one sub-question from a, b (Unit – IV)<br>B.     Attempt any one sub-question from c, d (unit IV) | 14 Marks |