

Section B: Computer Science

-60 Marks

1 : Introduction of Computer

- 1.1 Introduction and characteristics of computer (Speed, Storage, Diligence, Versality, Electronics, Automatic and Accuracy, Non-intelligent)
- 1.2 Types of computer:
 - 1.2.1 Mainframe computer, minicomputer, microcomputer
 - 1.2.2 Analog, digital and hybrid computer
- 1.3 History and Generation of computer
- 1.4 Computer speed and its measurement unit
- 1.5 Computer hardware and software
- 1.6 Input and output device
- 1.7 Specification of PC

2 : Operating system

- 2.1 Introduction of computer operating system, main function of operating system, single user and multi user operating system
- 2.2 Disk Operating System (DOS), DOS command (internal and external command), system files (Config.sys, IO.sys, MSDOC.sys, autoexec.bat)
- 2.3 Windows Operating System, Windows interface, Desktop, files and folder
- 2.4 Introduction to open source operating system
- 2.5 Computer Memory (ROM, RAM)

3 : Email Internet and Web

- 3.1 Introduction of email and internet, URL, Internet addressing
- 3.2 WWW, Websites and Webpage, web browsers, web searching
- 3.3 Concept internet addressing, URL, DNS, ISP and web hosting
- 3.4 Introduction to HTML
 - 3.4.1 HTML document
 - 3.4.2 HTML tags
- 3.5 Working with text, hyperlinks, Images, Lists, Tables

4 : Number System

- 4.1 Introduction of number system
- 4.2 Decimal, Binary, Octal, Hexadecimal Number System
- 4.3 Conversion from one system to another number system
- 4.4 Binary arithmetic

5: Application Package

5.1 Word Processor

- 5.1.1 Concept and types of Word Processor
- 5.1.2 Formatting and Editing Text, Page number
- 5.1.3 Working with Tables, Charts and Graphics
- 5.1.4 Templates and Styles
- 5.1.5 Mail Merge and Macro
- 5.1.6 Hyperlink
- 5.1.7 Working with Outlines and Long Documents
- 5.1.8 Typing in Unicode

5.2 Spread Sheet

- 5.2.1 Fundamentals of Spread Sheet
- 5.2.2 Workbook and Worksheet
- 5.2.3 Creating and Working with Charts
- 5.2.4 Different Functions and Formulas
- 5.2.5 Data Filter and sorting
- 5.2.6 Data Analysis and PivotTables
- 5.2.7 What-If Analysis Unit

5.3 Presentation

- 5.3.1 Fundamental of Presentation
- 5.3.2 Designing, Formatting and Editing a Presentation
- 5.3.3 Transition of Presentation
- 5.3.4 Animation and Custom Animation
- 5.3.5 Inserting Tables, Charts, Graphics and Hyperlink
- 5.3.6 Working with Multimedia

6: Computer Programming

- 6.1 Concept of computer programming
- 6.2 Algorithm, flowchart and pseudo code
- 6.3 Variable, constant, operator, comment, data type, array and functions
- 6.4 Input/output function, control statement
- 6.5 Programming in QBASIC
- 6.6 Concept of Object Oriented Programming
- 6.7 Structure of C programming
- 6.8 Comparison of QBASIC programming and C programming

7: ICT and Its Social Impact

- 7.1 Social impact of ICT
- 7.2 Digital divide
- 7.3 Intellectual Properties Right
- 7.4 Privacy, Anonymity
- 7.5 Computer ethics
- 7.6 Computer Crime and Cyber law
- 7.7 Cyber Law in Nepal
- 7.8 Computer Crime and Cyber law
- 7.9 Computer ethics

Subjective Question Plan (Specification Grid)

Unit	Scope of Curriculum	Contentwise question weight	Full Marks
1.	Introduction of Computer	10*1	10
2.	Operating system	10*1	10
3.	Email Internet and Web	10*1	10
4.	Number System	10*1	10
5.	Application Package	10*1	10
6.	Computer Programming		
7.	ICT and Its Social Impact	10*1	10
	Total	10*6	60

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