# COMPUTER SCIENCE

## Syllabus

**Full Marks: 100** **Teaching Hrs: 150**

### I. Introduction:

Information Technology has become a part of contemporary society and as a potential tool in the socio-economic development of country. As Information technology manpower is the backbone for the rapid development of ICT sector in the country, government of Nepal has accordingly identified IT as a priority sector. Keeping in view the importance of computer technology in general and indispensability of its knowledge and skill to the society in general and to the students of higher secondary level in particular, the course seeks to introduce computer science to acquaint the learner with the basic skills of computer literacy.

### II. General Objective:

The general objectives of this course are to:

1. help establish a strong foundation for the development of internationally competent human resources in the field of Information Communication and Technology;
2. help decrease the digital divide; and fulfill the middle level ICT Human Resources to the ICT industries.

### III. Specific Objective:

1. After completing this course, the student will be able to:
2. explain the fundamental principle of computer system mechanism and Information and Communication Technology;
3. identify computer recourse for any specific purpose PC based application in the real life situations;
4. solve the office automation related system problems, general skill about network, internet, email and web site design;
5. provide computing knowledge and skill to individuals or organization;
6. engage in higher study of computer science and information technological course in the country or aboard;
7. provide the services as instructor of computer sciences course in schools or institutions;
8. state programming concept and tools;
9. explain the state-of-art information technology and works to change agents for spreading ICT culture in their society; and
10. encourage the student for visit the hardware and software industries, e-communities centers.

### IV. Course Contents:

**Course Contents**

#### UNIT-1 Introduction and Evolution of Computer

1.1 Concept and Characteristics of Computer
1.2 Application of Computers
1.3 History of Computer: Mechanical Calculating era, Electro-Mechanical era, Electronic computers era
1.4 Generation of Computers: First, Second, Third, Fourth and Fifth Generation (AI) and its features
1.5 Computer speed and Measurement Unit

#### UNIT-2 Classification of Computer

2.1 On the basis of working principle - Analog, Digital and Hybrid Computers
2.2 On the basis of size - Super, Mainframe, Mini and Microcomputers
2.3 On the basis of brand - IBM PC, IBM Compatible and Apple/Macintosh
2.4 Mobile Computing

#### UNIT-3 Number System and Their Conversion

3.1 Decimal, Binary, Octal, Hexadecimal Number System & conversion

3.2 9's and 10's complements decimal subtraction
3.3 Calculation in Binary - addition, subtraction, One's and Two's Complement Methods of binary subtraction

## UNIT-4 Logic Function and Boolean Algebra

4.1 Logic Function and Boolean Algebra
4.2 Introduction of Truth Table, Boolean Expression
4.3 Logic Gates -AND, OR, NOT, NAND, NOR, XOR and XNOR - its definition, use, truth table, logic symbol
4.4 Duality Principle
4.5 Laws of Boolean Algebra - Associative, Commutative, Distributive, Identity, Complement Laws
4.6 De Morgan's Theorem: Statement and Logic Expression
4.7 Venn diagram and its represent of logic gates(AND, OR, NOT)

## UNIT-5 Computer Systems

5.1 Concept of Computer Architecture
5.2 Concept of Computer Organization
5.3 Components of Computer System - Input, Output, Processor and Storage
5.4 Microprocessor - Concepts, Components of Processor, Functions
5.5 Concept of System Buses: Data Bus, Address Bus, Control Bus
5.6 Memory - Primary and Secondary, Cache(L1, L2), Buffer, RAM, ROM
5.7 Storage Device - Definition, Use, Types: Hard Disk , Floppy Disk, Magnetic Tape, Flash Memory, Optical Disk(CD,VCD,DVD), External Storage Device
5.8 Input Devices - Keyboard, Mouse, Scanner, Light Pen, OMR, OCR, BCR, Scanner, Touch Pad Kiosk, Microphone and Digital Camera
5.9 Output Devices - Monitor, Printer, Plotter, Speaker
5.10 Computer Peripherals
5.11 Interfaces - Parallel Port, Serial Port, USB Ports, IEEE 1394 and Slots
5.12 Identification of PC Accessories and Peripherals
5.13 Specification of PC
5.14 Software and Classification
5.14.1 System software: OS, Language processor
5.14.2 Application software including Utilities Software
5.14.3 Computer Virus and Antivirus

## UNIT-6 Operating System

**6.1 Fundamental Concept**
6.1.1 Introduction to Operating System
6.1.2 Role of Operating System
6.1.3 Functions of an Operating System
6.1.4 Types of Operating System: Based on Processing Method (Batch, Multitasking, Multiprocessing, Timesharing, Real Time), Based on User Interface (GUI, CUI), Based on Mode of User (Single-user & Multi-user)

**6.2 Disk Operating System (DOS)**
6.2.1 Introduction to CUI and its feature
6.2.2 Common DOS Commands (External and Internal Commands)
6.2.3 Concept of File and Directory
6.2.4 Wildcards and Pathname
6.2.5 System Files: Config.sys, IO. sys, MSDOS. sys, autoexec.bat

**6.3 Windows Operating System**
6.3.1 Introduction to GUI and its features
6.3.2 Working with a Window Environment
6.3.3 Working with a Windows Application Program
6.3.4 Working with Files and Folders
6.3.5 Customizing the Taskbar and Desktop
6.3.6 Customizing Windows

6.3.7 Use of Accessories

**6.4 Concept of Open Sources Operating System**

6.4.1 Introduction to Open Sources Operating System

6.4.2 Introduction to Linux, UNIX

## UNIT-7 Programming Concepts & Logics

7.1 Programming Languages (Low level, High level, 4 GL)

7.2 Compiler, Interpreter and Assembler

7.3 List of high level Programming Language

7.4 Difference between Program and Software

7.5 Concept of Programming Statement

7.6 Syntax and Semantics errors

7.7 Program Control Structures: Sequence, Selection and Iteration.

7.8 Program Design tools- Algorithm, Flowchart and Pseudo code

7.9 Introduction to Data Type

7.10 Codes: Absolute Binary, BCD, ASCII, EBCDIC, Unicode

## UNIT-8 Application Package

**8.1 Word Processor**

8.1.1 Concept of Word Processor

8.1.2 Types of Word Processing

8.1.3 Basic terms of word processing

8.1.4 Working and Editing Text

8.1.5 Formatting Characters and Paragraphs

8.1.6 Formatting Pages

8.1.7 Working with Tables

8.1.8 Working with Templates and Styles

8.1.9 Drawing and Working with Graphics

8.1.10 Performing a Mail Merge

8.1.11 Document Collaboration

8.1.12 Working with Outlines and Long Documents

8.1.13 Working with WordArt and Charts

8.1.14 Project Work on Word Processor

**8.2 Spread Sheet**

8.2.1 Concept and Use of Spread Sheet

8.2.2 Types of Spread Sheet

8.2.3 Basic fundamentals of Spread Sheet

8.2.4 Formatting a Worksheet

8.2.5 Creating and Working with Charts

8.2.4 Managing Workbooks

8.2.5 General Functions and Formulas

8.2.8 Data Filter and sorting

8.2.9 Working with Other objects

8.2.10 Data Analysis and PivotTables

8.2.11 What-If Analysis

8.2.12 Project Work on Spread Sheet

**8.3 Presentation**

8.3.1 Concept of Presentation

8.3.2 Types and use of Presentation Program

8.3.3 Basic fundamental of Presentation

8.3.4 Editing a Presentation

8.3.5 Design and Formatting Presentation

8.3.6 Transition of Presentation

8.3.7 Animation and Custom Animation

8.3.8 Working with Tables, Graphics and WordArt

8.3.9 Working with Graphs and Organization Charts
8.3.10 Working with Multimedia
8.3.11 Project Work on Presentation

**UNIT- 9 Internet and E-mail**

**9.1 Internet**

9.1.1 Introduction of Internet
9.1.2 Uses of Internet:
9.1.3 Concept of Protocols
9.1.4 Web Browser, Web Page, Website, Web Server, URL, DNS
9.1.5 Search Engine, Messenger Services
9.1.6 Setting Browser Properties
9.1.7 Setup Network Connection

**9.2 E-mail**

9.2.1 Concept of E-mail
9.2.2 Uses of E-mail
9.2.3 Different types of E-mail Account
9.2.4 Web Based E-mail and POP E-mail

**Unit- 10 Web Page Designing**

10.1 Introduction to HTML
10.2 Types of Tags
10.3 Basic Structure of HTML
10.4 Character Formatting (Paragraphs, Heading, Text format)
10.5 Create an Ordered and Unordered List
10.6 Insert Images and Objects
10.7 Create Hyper Link
10.8 Create Table
10.9 Design Frames and Form
10.10 Concept of CSS and Script Language
10.11 Webpage Design and Editing Tools
10.12 Project Work on Web Page

**UNIT-11 Final Project Work**

11.1 Project Work on Webpage or Spread Sheet
11.2 Documentation of the Project

**Practical Evaluation**

| S.No. | Unit | Topics | No of Exercise | Mini Projects Evaluation | Remarks |
|---|---|---|---|---|---|
| 1 | 5 | PC Component Identification | 2 | - | Practical Marks Evaluated By: External Examiner: 10 Internal Examiner: 15 Based on Mini Project, Lab Exercise and Final Project |
| 2 | 6.3 | Operating System(Windows) | 4 | - | |
| 3 | 8.1 | Word Processor | 6 | 5 | |
| 4 | 8.2 | Spreadsheet | 5 | 5 | |
| 5 | 8.3 | Presentation | 4 | 5 | |
| 6 | 9 | Internet, Email | 4 | 2 | |
| 7 | 10 | Web Page Designing (HTML) | 6 | 5 | |
| 8 | 11 | Final Project | | | |

Lab exercises are guided by marks distribution and Teaching Manual.

Marks and Teaching Hours Distribution

| Units | Mark Distribution | | Number of Hours | |
|---|---|---|---|---|
| | Theory | Practical | Theory | Practical |
| 1 | 2 | | 3 | |
| 2 | 3 | | 5 | |
| 3 | 5 | | 5 | |
| 4 | 5 | | 10 | |
| 5 | 10 | | 15 | 2 |
| 6 | 10 | 3 | 10 | 20 |
| 7 | 10 | | 10 | |
| 8 | 15 | 15 | 10 | 22 |
| 9 | 10 | 5 | 10 | 16 |
| 10 | 5 | 2 | 5 | 7 |
| 11 | | | | |
| Total | 75 | 25 | 83 | 67 |

**Reference books:**


1. Gurung, J. B.; Baskota, A; Baral, D.S.; Baral, D.; Niroula, R.; Dhakal, T.P. (2008), **A Text Book on Computer Science Part-A** Second Edition, Kathmandu: Bhundipuran Prakashan.
2. Subba, B.R., **Computer Science Grade-XII**, Kathmandu: Taleju Prakashan.
3. Khanal, R. C. (2007), **Computer Practical Volume-I**, Kathmandu: Ekata Publication.
4. Pudasaini, D.Shakar; Adhikari, N., **A Text Book on Computer Science Grade XI**, Kathmandu: Buddha Academic Enterprises Pvt. Ltd.
5. Basandra, S. K. (2008), **Computers Today Updated Edition**, Galgotia Publication.
6. Leon, Alexis and Leon, Mathews, **Fundamental of Information Technology**, New Delhi: Vikash Publishing Houses.
7. Sinha, P. K. (2003), **Computer Fundamentals (CD) 4th Edition**, BPP Publication.
8. Rajaraman, V. (2007), **Fundamental of Computer**, Prentice Hall, Fourth Edition.
9. URL: http://www.w3.org/html/
10. URL: http://en.wikipedia.org/


## New Model Questions- 2067

Time : 3 hrs

F.M. : 75
P.M. : 27

*Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.*

**Group A (Long Answer Questions)**

**Attempt ALL the questions.** **[3×10=30]**

1. Draw a well-labeled diagram of typical architecture of a computer system and explain the main function of Control Unit and ALU. [4+3+3]
2. (a) What is an operating system? Explain any three functions of an operating system. [1+6]
   (b) The 'WiMP' environment is much more user-friendly, why ? [3]

**OR**

   (a) What is cell addressing and explain different types of cell addressing used in spreadsheet. [5]
   (b) Write a tag to design your personal web page to link photo family, background and banner page using frame. [5]
3. (a) Define flow-chart and pseudo-code. Explain their significance in programming. [5]
   (b) Write a pseudo-code to accept any three numbers and output the largest among them. [5]

**Group B (Short Answer Questions)**

**Attempt any NINE questions.** **[9×5=45]**

4. Classify the computers according to their generation based on the technology used. [5]
5. Differentiate between analogue and digital computer, explain with examples. [5]

6. What do you mean by number system? Why do digital computers use binary numbers for their operation? [2+3]
7. Convert these numbers. [5]
   (a) $(126)_{10} = (?)_2$
   (b) $(11011)_2 = (?)_{10}$
   (c) $(57)_8 = (?)_2$
   Perform following operations
   (d) 1011 – 1001
   (e) 1110+1110
8. State the Demorgan's theorem and verify it. [5]
9. What are logic gates? Construct the truth table of NOR operation. [5]
10. Write short notes on (any two): [5]
    (a) IDE (b) SCSI (c) Wave Camera
11. What are uses of internet? Write any five search engine name. [5]
12. Differentiate between System Software and Application Software with examples. [5]
13. What are DTP features in MS-Word? Write three features of Presentation Packages. [2+3]
14. Write an algorithm and flow chart to print the word "Hello" ten times using "while loop". [5]

## 1. Introduction and Evolution of Computer

### Long Answer Questions

1. 2072 Set D Q.No. 1
   What is generation of computer? Explain the different generations of computer with their major features. [2+8]
2. 2071 Supp. Q.No. 5
   List out the advantages of transistors over vacuum tubes. [5]
3. 2069 Supp Q.No. 4
   Explain any five fields of usage of computer in present days. [10]
4. 2068 Q.No. 4
   Describe the usage of computer in five different areas of real time applications. [10]
5. 2067 Q. No. 3
   What do you mean by generation of computer? Explain the technology used in different generation of computers. [5 +7.5]
6. 2065 Q. No. 3
   What are the application areas of computer? Explain in detail. [12.5]
7. 2059 Q. No. 1
   Explain the evolution of compute describing the technologies used in different generations. [12.5]
8. 2058 Q. No. 3
   Discuss about how the development of the PCs (Personal Computer) has extended the use of computer at present days. [12.5]

### Short Answer Questions

9. 2072 Set C Q.No. 5
   Describe the forth generation of computer. [5]
10. 2072 Set E Q.No. 5
    List out the advantages of AI. [5]
11. 2071 Set C Q.No. 11
    Differentiate between third and forth generation computer. [5]
12. 2071 Set D Q.No. 9
    Describe the features of forth generation computer. [5]
13. 2070 Supp Q.No. 11
    What is generation of computer? Describe the Third generation computer. [1+4]
14. 2070 Set C Q.No. 5
    Describe the major characteristics of forth generation computer. [5]

15. 2070 Set D Q.No. 10
Differentiate between second and third generation computer. [5]

16. 2069 Supp Q.No. 5
Explain the technologies used in different generations of computer. [5]

17. 2069 Q. No. 5
Why computer is known as versatile and diligent device? Explain. [5]

18. 2068 Q.No. 6
Explain the technologies used in different generations of computer. [5]

19. 2067 Q. No. 5
What are the application areas of computer? Explain in brief. [2+3]

20. 2066 Q.No. 5
Discuss the generation of computers. [5]

21. 2065 Q. No. 9
Explain the different generation of computers. [5]

22. 2064 Q.No. 4
State the characteristics of the 4th generation computers. [5]

23. 2062 Q. No. 4
Write brief notes on the achievement of the following computer scientist:
(a) Howard Aiken (b) Herman Hollerith [2.5+2.5]

24. 2061 Q. No. 4
What do you mean by the generation of computer? Explain the characteristics of third generation computers. [5]

25. 2060 Q. No. 4
Compare the distinctions between third and fourth generation computers. [5]

## 2. Classification of Computer

**Short Answer Questions**

1. 2072 Set C Q.No. 11
What is mobile computing? Explain why it is becoming more popular these days. [1+4]

2. 2072 Set C Q.No. 11 OR
Differentiate between micro computer and super computer. [1+4]

3. 2072 Set D Q.No. 5
Differentiate between IBM PC and IBM compatible computers. [5]

4. 2072 Set D Q.No. 11
What is super computer? List out application areas of super computer. [1+4]

5. 2072 Set D Q.No. 11 OR
What is mobile Technology? Give the advantages and disadvantages of Mobile Technology. [1+4]

6. 2072 Set E Q.No. 10
What is mobile computing? List the advantages of mobile computing. [1+4]

7. 2072 Set E Q.No. 10 OR
Differentiate between mini and mainframe computers. [5]

8. 2071 Supp. Q.No. 11
What is mobile computing? List out the advantages of mobile computing. [1+4]

9. 2071 Supp. Q.No. 11 OR
Differentiate between Analog and Digital Computers. [5]

10. 2071 Set C Q.No. 6
Explain the importance of mobile computing. [5]

11. 2071 Set C Q.No. 6 Or
Differentiate between Mini and Mainframe computer. [5]

12. 2071 Set D Q.No. 6
List the major features of mobile computing. [5]

13. 2071 Set D Q.No. 6 Or
Describe the major features of super computer. [5]

14. 2070 Supp Q.No. 5
List out the major features of mobile computing. [5]

15. 2070 Supp Q.No. 5 Or
Describe the Mainframe computer in detail. [5]

16. 2070 Set C Q.No. 6
Explain the advantages of mobile computing. [5]

17. 2070 Set C Q.No. 6Or
Describe the application areas of super computer. [5]

18. 2070 Set D Q.No. 7
Explain the importance of mobile computing. [5]

19. 2070 Set D Q.No. 7 Or
Differentiate between analog and digital computer. [5]

20. 2069 Supp Q.No. 6
List any five features of mobile computing. [5]

21. 2069 Supp Q.No. 6 Or
Classify the computers on the basis of size. [5]

22. 2069 Q. No. 6
What is mobile computing? Explain. [5]

23. 2069 Q. No. 6OR
Differentiate between analog and digital computer. [2.5+2.5]

24. 2068 Q.No. 5
What is super computer? Explain its application in real life situation. [1+4]

25. 2068 Q.No. 11
What is mobile computing? Explain the importances of mobile computing in communication. [1+4]

26. 2068 Q.No. 11 OR
Differentiate between mainframe computer and personal computer. [5]

27. 2067 Q. No. 4
What are the super computer? Explain their application in real life situation. [2+3]

28. 2066 Q.No. 6
Differentiate between Mini and Mainframe computers. [2.5+2.5]

29. 2065 Q. No. 7
Differentiate between Analog and digital computers. [2.5+2.5]

30. 2064 Q.No. 5
Differentiate between 'mini' and 'Mainframe' computers. [5]

31. 2061 Q. No. 6
What are super computers and explain their applications in real life situation. [5]

32. 2060 Q. No. 6
Differentiate between Analog and digital computers. [5]

33. 2057 Q. No. 1 Group B
Compare and contrast Analogue and Digital computer with appropriate examples. [5]

**Write short notes on**

34. 2063 Q. No. 4
(c) IBM PC and IBM compatibles (d) Digital computers [2.5+2.5]

35. 2062 Q. No. 10
(a) Analog computer (b) Microcomputer [2.5+2.5]

36. 2058 Q. No. 1Group B
(a) Microcomputer (b) Super computer [2.5+2.5]

## 3. Number System and Their Conversion

**Short Answer Questions**

1. 2072 Set C Q.No. 6
What is octal number? Convert $(167)_8$octal number into $(?)_{16}$ hexadecimal number. [1+4]

2. 2072 Set C Q.No. 14
Subtract $(100000)_2$ from $(111)_2$ using 1's and 2's complement method of subtraction. [2.5+2.5]

3. 2072 Set D Q.No. 14
Subtract $(1000)_2$ from $(111)_2$ using 1's and 2's complement method. [2.5 + 2.5]

4. 2072 Set D Q.No. 6
What is binary number? Convert $(2345)_8$ octal numbers into $(...)_{16}$ hexadecimal number. [1+4]

5. 2072 Set E Q.No. 6
What is number system? Convert $(10001)_2$ binary number into base 8 octal number system. [1+4]

6. 2072 Set E Q.No. 14
Subtract $(10111)_2$ from $(111111)_2$ using 1's and 2's complement method. [2.5 + 2.5]

7. 2071 Supp. Q.No. 6
What is binary number system? Convert $(11111)_2$ binary number into base 10. [5]

8. 2071 Supp. Q.No. 15a
Perform the following
a. 10111–10001 [2.5]
b. 11110+11110 [2.5]

9. 2071 Set C Q.No. 13
Subtract $(10001)_2$ from $(11011)_2$ using 1's and 2's complement method. [5]

10. 2071 Set D Q.No. 13
Subtract $(11001)_2$ from $(11101)_2$ using 1's and 2's complement method. [5]

11. 2071 Set C Q.No. 7
What is octal number? Convert $(567)_8$ number into hexadecimal number. [1+4]

12. 2071 Set D Q.No. 5
What is number system? Convert $(ABCD)_{16}$ hexadecimal number into octal number system. [1+4]]

13. 2070 Supp Q.No. 6
What is binary number? Convert $(567)_8$ octal number into hexadecimal number. [1+4]

14. 2070 Supp Q.No. 13
Subtract $(1000)_2$ from $(1111)_2$ using 1's and 2's complement method. [5]

15. 2070 Set C Q.No. 7
What is octal number system? Convert $(BAC)_{16}$ hexadecimal number into binary number system. [1+4]

16. 2070 Set D Q.No. 5
What is number system? Convert $(111111)_2$ binary number into octal number. [1+4]

17. 2070 Set C Q.No. 13
Subtract $(11111)_2$ from $(11000)_2$ using 1's and 2's complement method. [5]

18. 2070 Set D Q.No. 12
Subtract $(111)_2$ from $(1000)_2$ using 1's and 2's complement methods. [2.5+2.5]

19. 2069 Supp Q.No. 7
Convert $(5634)_8$ octal number into binary number. [5]

20. 2069 Supp Q.No. 14
Subtract $(1010)_2$ from $(1011)_2$ using 1's and 2 's complement method. [2.5+2.5]

21. 2069 Q. No. 7
Convert $(11O1111O1)_2$ binary number into octal number. [5]

22. 2069 Q. No. 14
Subtract $(1100)_2$from $(1111)_2$ 1'sand 2's complement method. [2.5+2.5]

23. 2068 Q.No. 7
What is hexadecimal number? Convert $(ABC)_{16}$ hexadecimal number into $(.....)_8$ octal number. [1+4]

24. 2068 Q.No. 15
Perform the following: [2.5+2.5]
(a) 11111 – 10001
(b) 1111+1111

25. 2067 Q. No. 7
What is hexadecimal number? Convert $(B8C)_{16}$ Hexadecimal number into base 8 number system. [2+3]

26. 2066 Q.No. 7
What is binary number system? Convert $(BEEF)_{16}$ into binary. [2+3]

27. 2065 Q .No. 8
What is Hexadecimal number? Convert $(BCA)_{16}$ Hexadecimal number into base 8 number system. [2+3]

28. 2064 Q.No. 6
What is binary number? Convert $(BBA)_{16}$ into binary. [2+3]

29. 2063 Q. No. 11
What is hexadecimal number system? Convert $637_{10}$ into hexadecimal system. [5]

30. 2062 Q. No. 9
What is binary number system? Convert $(A5B)_{16}$ into decimal number. [5]

31. 2061 Q. No. 5
What is hexadecimal number system? Convert 11 10 $11_2$ into base 16. [5]

32. 2060 Q. No. 7
What is binary number system? Convert $520_{10}$ into base 16. [5]

33. 2059 Q. No. 8
What is octal number system? Convert $356_{10}$ into base 8. [5]

34. 2058 Q. No. 2 Group B
Convert the following numbers according to the given instruction [5]
a. $240_{10}$ into Octal number
b. $ABC_{16}$ in to Binary number.

35. 2057 Q. No. 2 Group B
Convert $333_{10}$ Denary numbers into Hexadecimal and back to base two number system. [5]

## 4. Logic Function and Boolean Algebra

### Long Answer Questions

1. 2072 Set C Q.No. 1
Describe any five logic gates with Truth Table and gate symbol. [10]

2. 2072 Set E Q.No. 3
What is logic gate? Explain the types of gates with truth table. [2+8]

3. 2071 Supp. Q.No. 2
Define logic gates. Explain the types of gates with truth table. [2+8]

4. 2071 Set C Q.No. 2
Describe any five logic gates with truth table and gate symbol. [10]

5. 2071 Set D Q.No. 2
What is logic gate? Describe any four logic gates with Truth Table. [2+8]

6. 2070 Supp Q.No. 3
Describe any five logic gates with Truth Table. [2+8]

7. 2070 Set C Q.No. 1
Describe any five logic gates with Truth Table and gate symbol. [10]

8. 2070 Set D Q.No. 2
What is logic gate? Describe any four logic gates with truth table and gate symbol. [2+8]

9. 2069 Q. No. 4
What is Boolean algebra? Describe AND gate, OR gate and NOT gate and NAND gate with gate symbol and Truth Table. [2+8]

### Short Answer Questions

10. 2072 Set D Q.No. 8
Give the truth table and logical symbols of AND, OR and NOT gates of boolean algebra. [2+2+1]

11. 2069 Supp Q.No. 9
Differentiate between NAND and NOR gate with truth table. [5]

12. 2068 Q.No. 8
What is boolean algebra? Differentiate between NAND and NOR gate with truth table. [1+4]

13. 2067 Q. No. 6
What are the computer gates? Differentiate between NAND and NOR gate with an example. [2+3]

14. 2066 Q.No. 10
What are the logic gates? Explain the NAND gate with truth table. [2+3]

15. 2065 Q. No. 5
What are logic gates? Differentiate between "NAND" and "NOR" gate with truth table. [2+3]

16. 2064 Q.No. 7
Construct the truth table of XOR and XNOR operations of Boolean algebra. [2.5+2.5]

17. 2063 Q. No. 9
What is NOR gate and construct its truth table. [5]

18. 2062 Q. No. 8
Define a NOR gate and draw its logic symbol [5]

19. 2061 Q. No. 12
Construct truth table for NAND operation. [5]

20. 2060 Q. No. 8
Write truth table for NOR operation of Boolean algebra. [5]

21. 2059 Q. No. 6
Write truth table for NAND operation of Boolean algebra. [5]

22. 2058 Q. No. 10 Group B
Construct the truth table of the AND & OR operations of Boolean algebra. [5]

23. 2057 Q. No. 5 Group B
Define Boolean functions. Construct truth table for AND operation of Boolean algebra. [5]

## 5. Computer Systems

**Long Answer Questions**

1. 2072 Set C Q.No. 3
Define the terms 'computer architecture' and 'computer organization'. Explain the different units of computer system with suitable block diagram. [2+8]

2. 2072 Set D Q.No. 2
What is memory? Describe the different types of memory present in the computer system. [2+8]

3. 2072 Set E Q.No. 2
Explain the computer system with block diagram. [10]

4. 2072 Set E Q.No. 4
What is language processor? Differentiate between compiler and interpreter with examples. [2+8]

5. 2071 Supp. Q.No. 1
What is computer system? Explain the computer system with block diagram. [2+8]

6. 2071 Set C Q.No. 1
What is computer architecture? Describe different units of computer system. [2+8]

7. 2071 Set C Q.No. 3
Describe different types of language processors with examples. [10]

8. 2071 Set D Q.No. 4
What is memory? Describe the types of memory. [2+8]

9. 2070 Supp Q.No. 1
What is CPU? Explain the major units of CPU. [2+8]

10. 2070 Set C Q.No. 2
Describe the major units of computer system with logical diagram. [10]

11. 2070 Set D Q.No. 3
What is computer architecture and computer organization? Describe the different units of computer system. [2+8]

12. 2070 Set D Q.No. 9
What is an application program? List the major features of application program. [1+4]

13. 2069 Supp Q.No. 2
What is computer system? Explain the major units of computer system. [2+8]

14. 2069 Q. No. 2
What is memory in the computer system? Explain primary and secondary memory. [2+8=10]

15. 2068 Q.No. 3
Define memory. Explain the types of memory in details. [2+8=10]

16. 2067 Q. No. 1
Define computer architecture? Draw a block diagram of computer system along with logical connections. Explain each block in detail. [5+7.5]

17. 2067 Q. No. 11
Define software. Explain the different types of software in detail. [1 +4]

18. 2064 Q.No. 2
What is memory? Differentiate between primary and secondary memory. Why hard disk is popular than floppy disk? Explain. [2.5+5+5]

19. 2063 Q. No. 2
Explain the role of memory in a computer and differentiate between main memory and auxiliary storage. [12.5]

20. 2063 Q. No. 3
What do you mean by peripherals? Differentiate between impact and non-impact printers. [12.5]

21. 2062 Q. No. 2
What are the main types of memory in a computer, and explain how do they differ from one another? [12.5]

22. 2061 Q. No. 2
Discuss the term computer architecture. Draw block diagram and explain the main components of a computer system. [12.5]

23. 2061 Q. No. 3
What do you mean by the term 'Virtual memory'? How does it differ from 'main memory' and 'secondary memory'? Discuss. [12.5]

24. 2060 Q. No. 1
Show with reference to a block diagram, the structure of a digital computer system and the inter-connection of various units. Explain the functions of various units briefly. [12.5]

25. 2059 Q. No. 2
With a logical structural diagram, explain functions of elements of a computer system. [12.5]

**Short Answer Questions**

26. 2072 Set C Q.No. 7
What is memory? List out any four differences between primary and secondary memory. [1+4]

27. 2072 Set D Q.No. 7
What is 'BUS' in the computer system? Describe the different types of BUS. [1+4]

28. 2072 Set D Q.No. 12
Differentiate between Compiler and Interpreter with example. [5]

29. 2072 Set E Q.No. 8
What is output? List out the major features of Non-Impact printers. [1+4]

30. 2072 Set E Q.No. 9
What is memory? Differentiate between RAM and ROM. [1+4]

31. 2071 Supp. Q.No. 8
Define printer. Differentiate between Impact and Non-Impact printer with examples. [1+4]

32. 2071 Supp. Q.No. 9
Define memory. Differentiate between DRAM and SRAM. [1+4]

33. 2071 Set C Q.No. 5
What is memory? Differentiate between Primary and Secondary memory. [1+4]

34. 2071 Set C Q.No. 12
Describe the Impact Printers with examples. [5]

35. 2071 Set D Q.No. 7
Describe different types of software. [5]

36. 2071 Set D Q.No. 8
List out the functions of CPU. [5]

37. 2071 Set D Q.No. 10
Describe Non-Impact Printers with example. [5]

38. 2071 Set D Q.No. 12
Differentiate between Compiler and Interpreter. [5]

39. 2070 Supp Q.No. 7
Define memory. Differentiate between primary and secondary memory. [1+4]

40. 2070 Supp Q.No. 8
Describe different types of software. [5]

41. 2070 Supp Q.No. 10
Differentiate between Impact and Non-Impact printers. [5]

42. 2070 Supp Q.No. 12
Differentiate between Compiler and Interpreter. [5]

43. 2070 Set C Q.No. 8
Differentiate between primary and secondary memory with examples. [5]

44. 2070 Set C Q.No. 9
What is laser printer? List out the major features of laser printer. [1+4]

45. 2070 Set D Q.No. 6
What is memory? Differentiate between SRAM and DRM. [1+4]

46. 2070 Set D Q.No. 13
Describe the Non-Impact printers with examples. [5]

47. 2069 Supp Q.No. 12
Describe the terms *"Hardware"*, *"Software"* and *"Firmware"*. [5]

48. 2069 Supp Q.No. 8
What is laser printer? List the features of laser printer. [1+4]

49. 2069 Q. No. 8
What is BUS in terms of computer architecture? Explain. [5]

50. 2069 Q. No. 9
Differentiate between Impact and Non-Impact printers with examples. [2.5+2.5]

51. 2069 Q. No. 12
What is CPU? Write down the functions of CPU. [5]

52. 2068 Q.No. 10
Define the term "BUS". Explain different types of BUS. [2+3]

53. 2068 Q.No. 12
What is an output device? Differentiate between Impact and Non-Impact printers with examples. [1+4]

54. 2067 Q. No. 9
Differentiate between impact printers and non-impact printers. [5]

55. 2067 Q. No. 10
What is output? Distinguish between CRT monitor and LCD monitor. [1+4]

56. 2067 Q. No. 12
Differentiate between RAM and ROM. [5]

57. 2066 Q.No. 4
What is printer? Differentiate between soft copy and hard copy output. [5]

58. 2066 Q.No. 11
What is memory? Differentiate between primary and secondary memory. [1+4]

59. 2066 Q.No. 12
What is bus in computer architecture? Explain. [5]

60. 2065 Q. No. 6
What is memory? Explain the main memory and secondary memory. [1+4]

61. 2065 Q. No. 12
Differentiate between Impact and Non-Impact printers. [2.5+2.5]

62. 2064 Q.No. 8
Explain the functions of CPU. [5]

63. 2064 Q.No. 9
What is an output device? Differentiate between hardcopy and softcopy output. [1+4]

64. 2063 Q. No. 5
Differentiate between the terms hardware, software and firmware. [5]

65. 2063 Q. No. 8
Differentiate between computer and interpreter. [5]

66. 2063 Q. No. 12
Explain briefly the functions of input unit and control unit of a computer. [5]

67. 2062 Q. No. 5
Differentiate between impact and non-impact printers. [5]

68. 2062 Q. No. 12
Explain work done by the control unit and ALU of a computer. [5]

69. 2061 Q. No. 7
Describe the differences between serial and parallel interfaces. [5]

70. 2060 Q. No. 5
Explain the terms hardware interrupts and software interrupts. [5]

71. 2060 Q. No. 12
Describe the terms spooling and buffering. [5]

72. 2059 Q. No. 4
What is a 'bus' in computer architecture? [5]

73. 2059 Q. No. 7
Distinguish between the terms 'Hardware', 'Software' and 'Firmware'. [5]

74. 2059 Q. No. 9
What do you mean by "Volatility"? Explain RAM and ROM with the concept and term. [5]

75. 2059 Q. No. 10
What is a purpose of a MODEM and where it could be used? [5]

76. 2058 Q. No. 3 Group B
Define the term computer peripheral. Discuss about different types of printers with their merits and demerits. [5]

77. 2058 Q. No. 7 Group B
Write the importance of primary and secondary storage in a computer system. [5]

78. 2057 Q. No. 3 Group B
What do you understand by storage media? Why CDROM are more reliable than the floppy diskettes? [5]

**Write short notes on**

79. 2072 Set C Q.No. 15
a. Cache Memory [2.5]
b. Bus in the Computer System [2.5]

80. 2072 Set D Q.No. 15
a. Scanner [2.5]
b. Light pen. [2.5]

81. 2072 Set E Q.No. 15
a. Touch screen [2.5]
b. MICR [2.5]

82. 2071 Supp. Q.No. 14
a. System software. [2.5]
b. OCR [2.5]

83. 2071 Set C Q.No. 15a / 2070 Set C Q.No. 15b
MICR [2.5]

84. 2071 Set D Q.No. 15a
OCR [2.5]

85. 2070 Supp Q.No. 15a
Scanner [2.5]

86. 2070 Supp Q.No. 15b
Joystick [2.5]

87. 2070 Set D Q.No. 15a
Bar Code Reader [2.5]

88. 2069 Supp Q.No. 15a
Memory [2.5]

89. 2069 Q. No. 15
(i) Modem (ii) Trackball. [2.5+2.5]

90. 2068 Q.No. 14
(a) Modem (b) MICR [2.5+2.5]

91. 2067 Q. No. 13b
Cache Memory [2.5]

92. 2067 Q. No. 13c
Compiler versus Interpreter. [2.5]

93. 2066 Q.No. 13
(a) Joystick (b) Modem [2.5+2.5]

94. 2065 Q. No. 13
(a) Scanner (b) Light pen (c) Laser printer [2.5×2]

95. 2064 Q.No. 13
(a) Charles Babbage (b) MICR (c) Laser printer [2.5×2]

96. 2060 Q. No. 9
Touch pads and light pens [5]

## 6. Operating System

### Long Answer Questions

1. 2072 Set C Q.No. 2
What are the primary objectives of operating system? Describe any four functions of operating system. [2+8]

2. 2072 Set D Q.No. 3
What is OS? Explain any four functions of OS. [2+8]

3. 2072 Set E Q.No. 1
What is operating system? Explain any four types of operating system. [2+8]

4. 2071 Supp. Q.No. 3
What is operating system? Explain the types of operating systems based on processes. [2+8]

5. 2071 Set C Q.No. 4
What is on Operating System? Describe GUI and CUI based operating systems with merits and demerits. [2+8]

6. 2071 Set D Q.No. 1
What is an operating system? Describe the types of operating system. [2+8]

7. 2070 Supp Q.No. 4
What is on Operating System? Explain the functions of Operating System. [2+8]

8. 2070 Set C Q.No. 3
What is operating system? Describe GUI and CUI operating systems in details. [2+8]

9. 2070 Set D Q.No. 4
What is an operating system? Explain the types of operating system. [2+8]

10. 2069 Supp Q.No. 1
What is operating system? Describe the types of operating system on the basis of process. [2+8]

11. 2069 Q. No. 1
What is an operating system? Explain the functions of operating system. [2+8=10]

12. 2068 Q.No. 2
What is an operating system? Explain the functions of operating system in brief. [2+8=10]

13. 2067 Q. No. 2
What is an operating system? Explain the different types of operating system with suitable examples. [5 +7.5]

14. 2066 Q.No. 2
What is an operating system? Explain its major functions. [5 +7.5]

15. 2065 Q. No. 1
What is an operating system? Explain the functions of an operating system. [5 +7.5]

16. 2064 Q.No. 1
Explain the importance of an operating system. Differentiate between GUI (Graphical User Interface) and CUI (Character User Interface) operating system with examples. [6+6.5]

17. 2064 Q.No. 3
What do you mean by system software and application software? Explain any five areas of computer applications. [5 +7.5]

18. 2063 Q. No. 1
What is an operating system (OS)? Explain why GUI OS is more popular than text based OS.[12.5]

19. 2062 Q. No. 1
Define an operating system. What is its purpose? List the functions. [12.5]

20. 2060 Q. No. 3
What is an operating system? Why is GUI operating system move popular than text based operating system? Justify clearly. [12.5]

21. 2057 Q. No. 2
"An operating system is an interface between human operates and an application software". Justify this statement with examples of operating systems known to you. [12.5]

**Short Answer Questions**

22. 2072 Set C Q.No. 12 OR
Describe the terms 'Operator', 'Operand' and 'Operation' with suitable examples. [5]

23. 2071 Set C Q.No. 14
What is booting? Describe the types of computer booting. [1+4]

24. 2070 Set C Q.No. 14
Describe the types of computer booting. [5]

25. 2070 Set D Q.No. 14
What is computer booting? Describe the types of computer booting. [5]

26. 2065 Q. No. 11
What is software? Why graphical user interface (GUI) operating system is more popular than character user interface (CUI) operating system? Justify. [2+3]

27. 2061 Q. No. 11
What is an operating system? Explain its major functions. [5]

28. 2061 Q. No. 13
What do you mean by data sequencing? Differentiate between random access and sequential access. [5]

29. 2059 Q. No. 5
Distinguish between batch processing of on-line processing [5]

30. 2058 Q. No. 4
Discuss about the advantage of GUI operating system (MS- Windows) over Text based operating system (DSO). [5]

31. 2057 Q. No. 6
Distinguish between on-line and real time processing. What application would you suggest appropriate of real time processing? [5]

**Write short notes on**

32. 2071 Set D Q.No. 15b
Computer booting

## 7. Programming Concepts & Logics

**Long Answer Questions**

1. 2072 Set C Q.No. 4
What is programming language? Explain the different programming languages with their major features. [2+8]

2. 2072 Set D Q.No. 4
What is programming? Explain the different types of programming languages with their merits and demerits. [2+8]

3. 2071 Supp. Q.No. 10
Explain the types of errors in programming language. [5]

4. 2071 Supp. Q.No. 13
Define flowchart. Describe the symbols used in flowchart. [1+4]

5. 2071 Supp. Q.No. 4
What is programming? Differentiate between Compiler and Interpreter with examples. [2+8]

6. 2071 Set D Q.No. 3
Describe different types of programming design tools with examples. [10]

7. 2070 Supp Q.No. 2
What are the program design tools? Describe different types of program design tools with merits and demerits. [2+8]

8. 2070 Set C Q.No. 4
What is programming? Describe the types of programming languages with appropriate examples. [2+8]

9. 2070 Set D Q.No. 1
Explain different types of programming languages with their merits and demerits. [10]

10. 2069 Supp Q.No. 3
What is programming language? Explain different types of programming languages. [2+8]

11. 2069 Q. No. 3
What is programming? Differentiate between compiler and interpreter. [2+8]

12. 2068 Q.No. 1
What is programming language? Explain the types of programming languages with merits and demerits. [2+8=10]

13. 2066 Q.No. 1
What are the programming languages? Explain each of them in detail. [5 +7.5]

14. 2066 Q.No. 3
Draw block diagram and explain the main components of a computer system. [12.5]

15. 2065 Q. No. 2
Explain the components of computer system with block diagram. [12.5]

16. 2061 Q. No. 1
What is program documentation? Why documentation is important for the successful implementation of a system? [12.5]

17. 2060 Q. No. 2
What are the different phases of the software development? Explain each of the phases in detail.

18. 2059 Q. No. 3
Explain roles of system analysts and programmes with a distinction between system documentation and program documentation. [12.5]

19. 2058 Q. No. 1
Why should user be involved through the system development life cycle? Can you think of some specific examples of what might happen, if the users are not involved? [12.5]

20. 2058 Q. No. 2
Who is system analyst? List and explain the characteristics of a good system analyst. [12.5]

21. 2057 Q. No. 1
Explain with examples why a program development requires systematic methods. What are the initial steps of program design? [12.5]

22. 2057 Q. No. 3
Explain the roles of systems Analyst programmer in the process of systems design and implementation. [12.5]

**Short Answer Questions**

23. 2072 Set C Q.No. 8
What is program testing and debugging? Explain why logical errors are difficult to detect and correct than syntax errors. [1+4]

24. 2072 Set E Q.No. 13
What is flowchart? Describe the symbols used in flowchart. [5]

25. 2072 Set E Q.No. 11
Explain the types of errors in programming language. [5]

26. 2071 Set C Q.No. 9
Describe algorithms and flow chart with examples. [2.5+2.5]

27. 2070 Set C Q.No. 12
Differentiate between logical error and syntax error with examples. [5]

28. 2070 Set D Q.No. 8
Describe algorithm and flowchart with examples. [5]

29. 2069 Supp Q.No. 13
What are programming errors? Explain. [5]

30. 2069 Q. No. 13
Explain the types of programming errors with examples. [5]

31. 2067 Q. No. 8
What is programming? Differentiate between flowchart and alogorithms. [1+4]

32. 2066 Q.No. 8
Differentiate between algorithm and flowchart with suitable examples. [2.5+2.5].

33. 2065 Q. No. 4
What is programming? Differentiate between flowchart and algorithms with suitable examples. [1+2+2]

34. 2064 Q.No. 10
What is an algorithm? Explain the advantages of an algorithm. [2+3]

35. 2063 Q. No. 7
Define flow chart and algorithm with examples. [5]

36. 2062 Q. No. 6
What are the characteristics necessary for programming to be considered as a high level language? [5]

37. 2062 Q. No. 7
What is an algorithm? Write an algorithm to compute a sales person's commission based on a sales volume shown below:

| Sales Account | Commission (% of sales) |
|---|---|
| a. Under Rs. 500/- | 2% |
| b. Rs. 500 or more but under Rs. 5000 | [5]% |
| c. Rs. 5000 and above | 10% |

[5]

38. 2061 Q. No. 9
What is flowchart? Differentiate between program flowchart and system flowchart. [5]

39. 2061 Q. No. 10
What is program debugging? Differentiate between 'syntax error' and 'logical error'. [5]

40. 2060 Q. No. 10
What is program logic? What are symbols used to draw a flowchart? [5]

41. 2060 Q. No. 13
What are the two types of programming errors? How are they detected? [5]

42. 2059 Q. No. 11
Distinguish the terms "Operation" and "Operand" with examples. [5]

43. 2059 Q. No. 12
Draw of flowchart to test condition, if-then-else in program design process. [5]

44. 2059 Q. No. 13
Explain the difference between syntax and semantics. [5]

45. 2058 Q. No. 6 Group B
What is flowchart? Write the advantages of drawing flowcharts. [5]

46. 2058 Q. No. 8 Group B
Logical errors are difficult to find than the syntax errors. Justify. [5]

47. 2057 Q. No. 4 Group B
What do you understand by 4GL? Give examples. [5]

48. 2057 Q. No. 7 Group B
What is a Binary tee? Explain algorithm of Binary search? [5]

49. 2057 Q. No. 8 Group B
Draw a diagram showing semantics of case statement and syntax in structure English. [5]

**Write short notes on**

50. 2070 Set C Q.No. 15a
Flowchart [2.5]

## 8. Application Package

**Short Answer Questions**

1. 2072 Set C Q.No. 9 OR
What is word processor? Give the major features of word processor. [1+4]

2. 2072 Set C Q.No. 10
What is spreadsheet application program? List the uses of spreadsheet. [1+4]

3. 2072 Set D Q.No. 10
What is spreadsheet application program? Describe the terms cell, cell reference, worksheet and work book. [1+4]

4. 2072 Set E Q.No. 7 OR
What is application program? List out the uses of spreadsheet application program. [1+4]

5. 2071 Supp. Q.No. 7 OR
What is spread sheet? State the advantages of spread sheet. [2+3]

6. 2071 Set C Q.No. 8
What is an application program? List the major features of spread-sheet. [1+4]

7. 2071 Set D Q.No. 11 Or
Describe the features of Word-processor. [5]

8. 2070 Supp Q.No. 9 Or
What is word processor? List out the major features of word processor. [5]

9. 2070 Set C Q.No. 10 Or
Describe the major features of spread sheet. [5]

10. 2069 Supp Q.No. 10 Or
Explain the features of spread sheet package. [5]

11. 2069 Q. No. 10OR
Explain the features of word processor. [5]

12. 2068 Q.No. 9 OR
What is word processor? State the advantages of word processor in document designing. [1+4]

13. 2064 Q.No. 11
What is a spreadsheet package? State the advantages of spreadsheet package. [2+3]

14. 2063 Q. No. 6
What do you mean by word processing? Distinguish between word processing and data processing software. [5]

15. 2063 Q. No. 13
Explain briefly the followings:
(a) Document formatting in word processing package [2.5]
(b) Cell referencing in spread sheet package. [2.5]

16. 2062 Q. No. 13
Explain the following terms used in different software packages: [2.5+2.5]
(a) Cut and paste (b) Text justification

17. 2058 Q. No. 9
What do you understand by formatting a document? Give the significance of speller and thesaurus of modern word processing package. [5]

**Write short notes on**

18. 2069 Supp Q.No. 15b
Word processor [2.5]

## 9. Internet and E-mail

**Short Answer Questions**

1. 2072 Set C Q.No. 9 OR
List the advantages and disadvantages of Internet. [1+4]
2. 2072 Set D Q.No. 9
What is mail merge? Describe its major uses. [1+4]
3. 2072 Set D Q.No. 9 OR
List the positive and negative impacts of Internet in our society. [1+4]
4. 2072 Set E Q.No. 7
What is internet? List out the importance of internet in our society. [1+4]
5. 2071 Supp. Q.No. 7
What is Internet? Explain the impacts of Internet in our society. [1+4]
6. 2071 Set D Q.No. 11
What is Internet? List the major uses of Internet. [1+4]
7. 2070 Supp Q.No. 9
What is search engine? List out the major uses of internet. [1+4]
8. 2070 Set C Q.No. 10
List out the advantages and disadvantages of Internet. [5]
9. 2069 Supp Q.No. 10
List the positive and negative impacts of internet in our daily life. [5]
10. 2069 Q. No. 10
What is internet? Write down the uses of internet. [1+4]
11. 2068 Q.No. 9
What is internet? List out the positive and negative impacts of internet in our society. [1+4]

**Write short notes on**

12. 2071 Set C Q.No. 15b / 2070 Set D Q.No. 15b
Uses of Internet [2.5]

## 10. Web Page Designing

**Short Answer Questions**

1. 2072 Set C Q.No. 13
What is HTML? Describe the importance of HTML in web-page designing. [1+4]
2. 2072 Set C Q.No. 13 OR
What is Database Management System? List out the different application areas of Database Management System. [1+4]
3. 2072 Set D Q.No. 13
Define HTML. Describe the uses of HTML. [1+4]
4. 2072 Set D Q.No. 13 OR
Describe the features of DBMS. [5]
5. 2072 Set E Q.No. 12
Explain the importance of HTML in web page designing. [5]
6. 2072 Set E Q.No. 12 OR
What is DBMS? List out the objectives of DBMS. [1+4]
7. 2071 Supp. Q.No. 12
What is HTML? Explain the importance of HTML in web page designing. [1+4]

8. 2071 Supp. Q.No. 12 OR
What is DBMS? List out the functions of DBMS. [1+4]

9. 2071 Set C Q.No. 10
What is HTML? Describe the major features of HTML. [1+4]

10. 2071 Set C Q.No. 10 Or
List out the advantages of DBMS. [5]

11. 2071 Set D Q.No. 14
List out the advantages and uses of HTML. [2.5+2.5]

12. 2071 Set D Q.No. 14 Or
Write the functions of DBMS. [5]

13. 2070 Supp Q.No. 14
List out the advantages and disadvantages of HTML. [5]

14. 2070 Supp Q.No. 14 Or
What is DBMS? Write the uses of DBMS. [5]

15. 2070 Set C Q.No. 11
What is HTML? Describe the types of links which are used in web page design. [1+4]

16. 2070 Set C Q.No. 11 Or
What is DBMS? Give the functions of DBMS. [1+4]

17. 2070 Set D Q.No. 11
What is HTML? Describe the objectives of HTML. [1+4]

18. 2070 Set D Q.No. 11 Or
Describe the features of DBMS. [1+4]

19. 2069 Supp Q.No. 11
Define *HTML*. Explain the uses of *HTML* in web page designing. [1+4]

20. 2069 Supp Q.No. 11 Or
Differentiate between *DBMS and RDBMS* [1+4]

21. 2069 Q. No. 11
What is web page? List the features of web page. [1+4]

22. 2069 Q. No. 11 OR
Write down the advantages and disadvantages of DBMS. [2.5+2.5]

23. 2068 Q.No. 13
Define HTML. Explain the importances of HTML in web page designing. [1+4]

24. 2068 Q.No. 13 OR
What is RDBMS? Explain the advantages of RDBMS. [1+4]