		8.6 Intellectual Property Right 8.7 Concept of Digital Signature 8.8 Concept of Cyber Law in Nepal 8.9 ICT Policy in Nepal	
		Total	80

Specification Grid

Grade: 11 — **Theory (Com. 427**

SN	Content Area	Working hour	Competency level															
			Remembering				Understanding						Applying				Higher Ability					
			MCQ		SAQ		MCQ		SAQ		LAQ		MCQ		SAQ		LAQ		MCQ		SAQ		LAQ	
			No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks
1	Computer system	20																						
2	Number system and conservation Boolean Logic	11																						
3	Computer software and Operating system	12																						
4	Application package	5																						
5	Programming Concepts and Logics	8																						
6	Web Technology I	8	3	3	1	5	2	2	2	10	-	-	2	2	1	5	1	8	2	2	1	5	1	8
7	Multimedia	6																						
8	Information security and Cyber law	10																						
Total Marks		80	8				12						15						15					

Item format plan

S.N.	Type of item	Score per item	Total item	Total score	Time
1	Multiple Choice Questions	1	9	9	20 minu
2	Short Question Answer	5	5	25	100
3	Long Question Answer	8	2	16	minute
Grand Total			16	50	2 hou

Remarks:

Item format in composite should be met as per the specification grid.
Designated weightage of the units/content areas should be met.
In the case of SAQ and LAQ, these should ensure that 1 mark will be assigned per element expected as correct response.
The distribution of cognitive domain of questions should be nearly 15% knowledge/remembering, 25% understandir applying and 30% higher ability level. Higher ability includes analyzing, evaluating and creating level.
SAQ and LAQ can be structured (have two or more sub-items). SAQ and LAQ can be distributed to two or more behaviors. In such case these will be added to their respective cognitive behavior. In sum the distribution of cognitive should be approximately to the required distribution.
In case of SAQ there will be 2 "OR" questions and in case of LAQ there will be 1 "OR" question.

Model Questions
Issued by CDC, 2077

Grade: 11

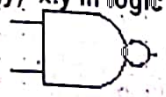
Theory (Com. 427)
Time 2 Hours

Group A

ultiple Choice Questions (9 x 1=9)
ck the best alternative.

Which one of the following is an input device?
a. speaker b. printer
c. monitor d mouse

Which of the following is NOT a bus type?
a. Address bus b Data bus
c. Memory bus d. Control bus

How to represent Boolean F(x,y)=x.y in logic gate?
A) 
B) 
C) 
D) 

Which scheduling algorithm allocates the CPU first to the process that requests the CPU first?
a. first-come, first-served scheduling
c. shortest job scheduling
b. priority scheduling
d. Round robin scheduling

Which operator is used to start for enter the formula in in Excel cell?
a. $ b. @
c. = d. +

Which looping process checks the test condition at the end of the loop?
a. for b. while
c. do-while d Nested loop

How to insert an image in web page using HTML tag?
a. <img=...> b. <img source=...>
c. <img src=...> d. <img href=..>

8. Which image format is best used for photographs and offers a small file size?
a. PNG b. GIF
c. BMP d. JPEG

9. Which of following is monitors user activity on internet and transmit that information in the background to someone else? (U)
a. Malware b. Spyware
c. Adware d. Virus

Answers								
1. d	2. c	3. a	4. a	5.c	6. c	7. a	8. d	9. b

Group 'B'

Give short answer to the following questions. (5 x 5=25)

1. Explain different types of secondary memory of computer system.
   OR
   Describe the decimal to binary number conversion process with example.
2. What are the functions of operating system? Describe.
3. Define different types of CSS.
   OR
   Explain the different components of multimedia.
4. Differentiate between the do and while loop.
5. Suggest the prevention methods of cybercrime.

Group 'C'

Give long answer to the following question (2 x 8=16)

6. Explain computer architecture with block diagram and functions of its components.
   OR
   Write a program to input the elements of 4 x 3 matrix and prints its elements properly using array.
7. Draw AND, OR, XOR and XNOR gates with truth table and logic gates.

Chapter Based Questions

. Computer System

g Answer Questions

2076 Set B Q.No. 2 Draw the block diagram of computer system. Explain the input and processing units. [4+6]

2076 Set C Q.No. 1 Explain different types of system bus. Differentiate between primary and secondary memory. [5+5]

2075 GIE Q.No. 2 Define the memory structure of computer system. Explain cache, main and secondary memory with purpose. [4+6]

2075 Set A Q.No. 1 What is computer system? Explain different components of computer system with their function. [2+8]

2074 Supp Q.No. 1 What is computer system? Explain different types of memory available in computer system? [2+8]

6. 2074 Set A Q.No. 1 What is computer system? Explain main parts of digital computer? [2+8]
7. 2074 Set B Q.No. 2 What is computer architecture? Explain different types of memory available in computer. [2+8]
8. 2073 Supp Q.No. 4 Describe a computer system with logical diagram. [10]
9. 2073 Set C Q.No. 3 Define computer Architecture with block diagram. Describe the function of memory and processing unit of computer system. [4+6]
10. 2073 Set D Q.No. 2 What is memory? Explain different types of memory present in the computer system with their uses. [2+8]
11. 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]

12. 2072 Set D Q.No. 1 What is generation of computer? Explain the different generations of computer with their major features. [2+8]
13. 2072 Set D Q.No. 2 What is memory? Describe the different types of memory present in the computer system. [2+8]
14. 2072 Set E Q.No. 2 Explain the computer system with block diagram. [10]
15. 2071 Supp. Q.No. 1 What is computer system? Explain the computer system with block diagram. [2+8]
16. 2071 Set C Q.No. 1 What is computer architecture? Describe different units of computer system. [2+8]
17. 2071 Set D Q.No. 4 What is memory? Describe the types of memory. [2+8]
18. 2070 Supp Q.No. 1 What is CPU? Explain the major units of CPU. [2+8]
19. 2070 Set C Q.No. 2 Describe the major units of computer system with logical diagram. [10]
20. 2070 Set D Q.No. 3 What is computer architecture and computer organization? Describe the different units of computer system. [2+8]
21. 2069 Supp Q.No. 4 Explain any five fields of usage of computer in present days. [10]
22. 2069 Supp Q.No. 2 What is computer system? Explain the major units of computer system. [2+8]
23. 2069 Q. No. 2 What is memory in the computer system? Explain primary and secondary memory. [2+8]
24. 2068 Q.No. 3 Define memory. Explain the types of memory in details. [2+8]
25. 2068 Q.No. 4 Describe the usage of computer in five different areas of real time applications. [10]
26. 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]
27. 2067 Q. No. 3 What do you mean by generation of computer? Explain the technology used in different generation of computers. [5 +7.5]
28. 2066 Q.No. 3 Draw block diagram and explain the main components of a computer system. [12.5]
29. 2065 Q. No. 2 Explain the components of computer system with block diagram. [12.5]
30. 2065 Q. No. 3 What are the application areas of computer? Explain in detail. [12.5]
31. 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]
32. 2063 Q. No. 2 Explain the role of memory in a computer and differentiate between main memory and auxiliary storage.[12.5]
33. 2063 Q. No. 3 What do you mean by peripherals? Differentiate between impact and non-impact printers. [12.5]
34. 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]
35. 2061 Q. No. 2 Discuss the term computer architecture. Draw block diagram and explain the main components of a computer system. [12.5]
36. 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]
37. 2059 Q. No. 1 Explain the evolution of compute describing the technologies used in different generations. [12.5]
38. 2059 Q. No. 2 With a logical structural diagram, explain functions of elements of a computer system. [12.5]
39. 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

40. 2076 Set B Q.No. 5 2075 Set B Q.No. 6 2074 Supp Q.No. 6 2074 Set A Q.No. 6 2071 Supp. Q.No. 11 OR 2070 Set D Q.No. 7 Or 2069 Q.No. 6 OR 2065 Q.No. 7 2060 Q.No. 6 Differentiate between analog and digital computer. [5]
41. 2076 Set B Q.No. 7 What is ROM? List out the different types of ROM. [2+3]
42. 2076 Set B Q.No. 9 What is secondary memory? Explain about hard disk. [2+3]
43. 2076 Set C Q.No. 5 Explain fourth generation of computer with its features. [5]
44. 2076 Set C Q.No. 6 What is digital computer? Write the features of digital computer. [2+3]
45. 2076 Set C Q.No. 9 What is printer? Differentiate between impact and non-impact printer. [1+4]
46. 2076 Set C Q.No. 13 OR 2075 GIE Q.No. 12OR Write the advantages of DBMS. [5]
47. 2075 GIE Q.No. 5 What are the differences between analog and digital computer? [5]
48. 2075 GIE Q.No. 7 Describe the bus structure in computer system. [5]
49. 2075 GIE Q.No. 8 What is output unit? Describe the different types of printers. [2+3]
50. 2075 GIE Q.No. 9 What are the functions of ALU and CU? [5]
51. 2075 GIE Q.No. 14 What are advantages and disadvantages of mobile technology? [5]
52. 2075 Set A Q.No. 5 What is memory? Write the importance of secondary memory? [1+4]
53. 2075 Set A Q.No. 6 2074 Set B Q.No. 6 What is mobile computing? Explain. [5]
54. 2075 Set A Q.No. 6OR 2072 Set E Q.No. 10OR 2071 Set C Q.No. 6OR 2066 Q.No. 6 2064 Q.No. 5 Differentiate between mini and main frame computer. [5]
55. 2075 Set A Q.No. 10 OR What is DBMS? Write its advantages. [
56. 2075 Set A Q.No. 11 2070 Set D Q.No. 10 Differentiate between second and third generation of computer. [5]
57. 2075 Set B Q.No. 8 What is CPU? Explain the components of CPU. [2+3]
58. 2075 Set B Q.No. 9 Define computer. Explain the features of third generation computer. [2+3]
59. 2075 Set B Q.No. 12 OR 2074 Supp Q.No. 11 OR Write the advantages of DBMS. [5]
60. 2074 Supp Q.No. 5 Write characteristics of second generation computer. [5]

1. 2074 Supp Q.No. 8 Explain different types of Bus architecture.[5]
2. 2074 Supp Q.No. 12 OR Write the characteristics of impact printer. [5]
3. 2074 Set A Q.No. 5 Explain third generation computer with its characteristics. [5]
4. 2074 Set A Q.No. 9 What is cache memory? Explain the advantages of cache memory. [2+3]
5. 2074 Set B Q.No. 5 Write the functions of CPU. [5]
6. 2074 Set B Q.No. 6 OR Write the characteristics of first generation of computer. [5]
7. 2074 Set B Q.No. 14 2069 Q. No. 9 Differentiate between impact and non-impact printer, with an example. [5]
8. 2073 Supp Q.No. 5 2067 Q. No. 12 Differentiate between RAM and ROM. [5]
9. 2073 Supp Q.No. 6 Explain the computer on the basis of working principle. [5]
10. 2073 Supp Q.No. 8 2070 Supp Q.No. 10 2067 Q.No. 9 2065 Q.No. 12 2062 Q. No. 5 Differentiate between impact and non-impact printer. [5]
11. 2073 Supp Q.No. 13 What is cache memory ? How it helps to improve the performance of computer? [1+4]
12. 2073 Set C Q.No. 5 How do you measure the capacity of speed and memory of computer system? Explain. [5]
13. 2073 Set C Q.No. 8 Describe the secondary memory in computer system with example. [5]
14. 2073 Set C Q.No. 14 What do you mean by mobile computing? [5]
15. 2073 Set D Q.No. 5 Explain impact and non-impact printers. [5]
16. 2073 Set D Q.No. 6 2072 Set E Q.No. 10 2071 Supp. Q.No. 11 What is mobile computing? List the advantages of mobile computing. [1+4]
17. 2073 Set D Q.No. 6 OR What is super computer? Write its uses. [1+4]
18. 2072 Set C Q.No. 5 Describe the forth generation of computer.[5]
19. 2072 Set C Q.No. 7 What is memory? List out any four differences between primary and secondary memory. [5]
20. 2072 Set C Q.No. 11 What is mobile computing? Explain why it is becoming more popular these days. [1+4]
21. 2072 Set C Q.No. 11 OR Differentiate between micro computer and super computer. [1+4]
22. 2072 Set D Q.No. 7 What is 'BUS' in the computer system? Describe the different types of BUS. [1+4]
23. 2072 Set D Q.No. 11 What is super computer? List out application areas of super computer. [1+4]
24. 2072 Set D Q.No. 11 OR What is mobile Technology? Give the advantages and disadvantages of Mobile Technology. [1+4]
25. 2072 Set E Q.No. 5 List out the advantages of AI. [5]
26. 2072 Set E Q.No. 8 What is output? List out the major features of Non-Impact printers. [1+4]
27. 2072 Set E Q.No. 9 What is memory? Differentiate between RAM and ROM. [1+4]
28. 2071 Supp. Q.No. 5 List out the advantages of transistors over vacuum tubes. [5]
29. 2071 Supp. Q.No. 8 Define printer. Differentiate between Impact and Non-Impact printer with examples. [1+4]
90. 2071 Supp. Q.No. 9 Define memory. Differentiate between DRAM and SRAM. [1+4]
91. 2071 Set C Q.No. 5 2066 Q.No. 11 What is memory? Differentiate between Primary and Secondary memory. [1+4]
92. 2071 Set C Q.No. 6 2070 Set D Q.No. 7 Explain the importance of mobile computing. [5]
93. 2071 Set C Q.No. 11 Differentiate between third and forth generation computer. [5]
94. 2071 Set C Q.No. 12 Describe the Impact Printers with examples. [5]
95. 2071 Set D Q.No. 6 2070 Supp Q.No. 5 List the major features of mobile computing. [5]
96. 2071 Set D Q.No. 6 Or Describe the major features of super computer. [5]
97. 2071 Set D Q.No. 8 List out the functions of CPU. [5]
98. 2071 Set D Q.No. 9 Describe the features of forth generation computer. [5]
99. 2071 Set D Q.No. 10 Describe Non-Impact Printers with example. [5]
100. 2070 Supp Q.No. 5 Or Describe the Mainframe computer in detail. [5]
101. 2070 Supp Q.No. 7 Define memory. Differentiate between primary and secondary memory. [1+4]
102. 2070 Supp Q.No. 11 What is generation of computer? Describe the Third generation computer. [1+4]
103. 2070 Set C Q.No. 5 Describe the major characteristics of forth generation computer. [5]
104. 2070 Set C Q.No. 6 Explain the advantages of mobile computing. [5]
105. 2070 Set C Q.No. 6Or Describe the application areas of super computer. [5]
106. 2070 Set C Q.No. 8 Differentiate between primary and secondary memory with examples. [5]
107. 2070 Set C Q.No. 9 What is laser printer? List out the major features of laser printer. [1+4]
108. 2070 Set D Q.No. 6 What is memory? Differentiate between SRAM and DRM. [1+4]
109. 2070 Set D Q.No. 13 Describe the Non-Impact printers with examples. [5]
110. 2069 Supp Q.No. 5 2068 Q.No. 6 Explain the technologies used in different generations of computer. [5]
111. 2069 Supp Q.No. 6 List any five features of mobile computing.[5]
112. 2069 Supp Q.No. 6 Or Classify the computers on the basis of size. [5]
113. 2069 Supp Q.No. 8 What is laser printer? List the features of laser printer. [1+4]
114. 2069 Supp Q.No. 12 Describe the terms *"Hardware"*, *"Software"* and *"Firmware"*. [5]
115. 2069 Q. No. 5 Why computer is known as versatile and diligent device? Explain. [5]
116. 2069 Q. No. 6 What is mobile computing? Explain. [5]
117. 2069 Q. No. 8 What is BUS in terms of computer architecture? Explain. [5]

118. 2069 Q. No. 12 What is CPU? Write down the functions of CPU. [5]
119. 2068 Q.No. 5 What is super computer? Explain its application in real life situation. [1+4]
120. 2068 Q.No. 10 Define the term "BUS". Explain different types of BUS. [2+3]
121. 2068 Q.No. 11 What is mobile computing? Explain the importances of mobile computing in communication. [1+4]
122. 2068 Q.No. 11 OR Differentiate between mainframe computer and personal computer. [5]
123. 2068 Q.No. 12 What is an output device? Differentiate between Impact and Non-Impact printers with examples. [1+4]
124. 2067 Q. No. 4 What are the super computer? Explain their application in real life situation. [2+3]
125. 2067 Q. No. 5 What are the application areas of computer? Explain in brief. [2+3]
126. 2067 Q. No. 10 What is output? Distinguish between CRT monitor and LCD monitor. [1+4]
127. 2066 Q.No. 4 What is printer? Differentiate between soft copy and hard copy output. [5]
128. 2066 Q.No. 5 Discuss the generation of computers. [5]
129. 2066 Q.No. 12 What is bus in computer architecture? Explain. [5]
130. 2065 Q. No. 6 What is memory? Explain the main memory and secondary memory. [1+4]
131. 2065 Q. No. 9 Explain the different generation of computers.[5]
132. 2064 Q.No. 4 State the characteristics of the 4th generation computers. [5]
133. 2064 Q.No. 8 Explain the functions of CPU. [5]
134. 2064 Q.No. 9 What is an output device? Differentiate between hardcopy and softcopy output. [1+4]
135. 2063 Q. No. 5 2059 Q. No. 7 Differentiate between the terms hardware, software and firmware. [5]
136. 2063 Q. No. 12 Explain briefly the functions of input unit and control unit of a computer. [5]
137. 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]
138. 2062 Q. No. 12 Explain work done by the control unit and ALU of a computer. [5]
139. 2061 Q. No. 4 What do you mean by the generation of computer? Explain the characteristics of third generation computers. [5]
140. 2061 Q. No. 6 What are super computers and explain their applications in real life situation. [5]
141. 2061 Q. No. 7 Describe the differences between serial and parallel interfaces. [5]
142. 2060 Q. No. 4 Compare the distinctions between third and fourth generation computers. [5]
143. 2059 Q. No. 4 What is a 'bus' in computer architecture? [5]
144. 2059 Q. No. 9 What do you mean by "Volatility"? Explain RAM and ROM with the concept and term. [5]
145. 2058 Q. No. 3 Group B Define the term computer peripheral. Discuss about different types of printers with their merits and demerits. [5]
146. 2058 Q. No. 7 Group B Write the importance of primary and secondary storage in a computer system. [5]
147. 2057 Q. No. 1 Group B Compare and contrast Analogue and Digital computer with appropriate examples. [5]
148. 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

149. 2076 Set B Q.No. 15b Mobile computing [2.5]
150. 2075 GIE Q.No. 15a 2073 Set D Q.No. 15a Second generation computer [2.5]
151. 2074 Set A Q.No. 15b Bus architecture [2.5]
152. 2074 Set B Q.No. 15a Mouse [2.5]
153. 2073 Supp Q.No. 15a 3rd Generation Computer. [2.5]
154. 2073 Supp Q.No. 15b Monitor [2.5]
155. 2073 Set C Q.No. 15b USB [2.5]
156. 2073 Set D Q.No. 15b 2072 Set C Q.No. 15a 2067 Q. No. 13b Cache memory. [2.5]
157. 2072 Set C Q.No. 15b Bus in the Computer System [2.5]
158. 2072 Set D Q.No. 15a 2070 Supp Q.No. 15a 2065 Q. No. 13a Scanner [2.5]
159. 2072 Set D Q.No. 15b 2065 Q. No. 13b Light pen. [2.5]
160. 2072 Set E Q.No. 15a Touch screen [2.5]
161. 2072 Set E Q.No. 15b 2071 Set C Q.No. 15a 2070 Set C Q.No. 15b 2068 Q.No. 14b 2064 Q.No. 13b MICR [2.5]
162. 2071 Supp. Q.No. 14b 2071 Set D Q.No. 15a OCR [2.5]
163. 2070 Supp Q.No. 15b 2066 Q.No. 13a Joystick [2.5]
164. 2070 Set D Q.No. 15a Bar Code Reader [2.5]
165. 2069 Supp Q.No. 15a Memory [2.5]
166. 2069 Q. No. 15ii Trackball. [2.5]
167. 2065 Q. No. 13c 2064 Q.No. 13c Laser printer [2.5]
168. 2064 Q.No. 13a Charles Babbage [2.5]
169. 2063 Q. No. 4c IBM [2.5]
170. 2063 Q. No. 4d Digital computers [2.5]
171. 2062 Q. No. 10a Analog computer [2.5]
172. 2062 Q. No. 10b 2058 Q. No. 1a Group B Microcomputer [2.5]
173. 2060 Q. No. 9 Touch pads and light pens [5]
174. 2058 Q. No. 1b Group B Super computer [2.5]

2. Number System and Conservation Boolean Logic

Long Answer Questions

1. 2076 Set B Q.No. 1 What is Boolean algebra? Describe AND and NAND gates with logic symbol, truth table and Venn diagram. [4+6]
2. 2075 GIE Q.No. 1 Describe the AND, OR, NOR gate with truth table, symbols and algebraic expression. [10]
3. 2075 Set A Q.No. 2 Describe any five logic gates with truth table and gate symbol. [10]
4. 2074 Supp Q.No. 3 Explain NAND, NOR, AND and XNOR gates with truth table, logic symbol and Venn diagram. [10]
5. 2074 Set A Q.No. 4 Explain OR, AND, NOR and NOT gate with its truth table, symbol and venn diagram. [10]

[2074 Set B Q.No. 3] Explain any four logic gates with truth table, symbol and Venn diagram. [2.5+4]
[2074 Supp Q.No. 4] What is logic gate? Describe OR, AND, NOR AND gates with truth table, gate symbol and Boolean expression. [2+8]
[2074 Set C Q.No. 4] What is Boolean logic? Describe the AND, OR, NOR logic gates with truth table and logic symbols. [4+6]
[2074 Set D Q.No. 4] Define Boolean Algebra. Explain AND, OR, NAND and NOR gate with truth table and logic gate. [2+8]
[2073 Set C Q.No. 8] [2071 Set C Q.No. 3] [2070 Set C Q.No. 1] Describe any five logic gates with Truth Table and gate symbol. [10]
[2073 Set E Q.No. 3] What is logic gate? Explain the types of gates with truth table. [2+8]
[2071 Supp. Q.No. 3] Define logic gates. Explain the types of gates with truth table. [2+8]
[2071 Set D Q.No. 3] What is logic gate? Describe any four logic gates with Truth Table. [2+8]
[2070 Supp Q.No. 3] Describe any five logic gates with Truth Table. [2+8]
[2070 Set D Q.No. 3] What is logic gate? Describe any four logic gates with truth table and gate symbol. [2+8]
[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

[2076 Set B Q.No. 6] Convert $(513)_{10}$ Decimal number to $(...)_2$ Binary number. [5]
[2076 Set B Q.No. 8] [2073 Set C Q.No. 7] Describe the De Morgan's Law. [5]
[2076 Set C Q.No. 7] Convert $(DAD)_{16}$ to its octal equivalent. [5]
[2076 Set C Q.No. 8] What is Associative law? Explain OR gate with its truth table and logic symbol. [2+3]
[2076 Set C Q.No. 14] Subtract $(11100)_2$ from $(11110)_2$ by using 1's and 2's complement method. [2.5+2.5]
[2075 GIE Q.No. 6] What is number system? Convert $(894)_{10}$ Decimal number to $(...)_2$ binary number. [5]
[2075 Set A Q.No. 7] Convert $(ABC)_{16}$ to its octal equivalent. [5]
[2075 Set B Q.No. 13] What is truth table? Explain AND gate with its truth table and logic symbol. [2+3]
[2075 Set A Q.No. 13] [2070 Supp Q.No. 13] Subtract $(1000)_2$ from $(1111)_2$ by using 1's and 2's complement method. [5]
[2075 Set B Q.No. 7] Convert $(BEE)_{16}$ to its octal equivalent. [5]
[2075 Set B Q.No. 14] Subtract $(1100)_2$ from $(1110)_2$ by using 1's and 2's complement method. [2.5+2.5]
[2074 Supp Q.No. 7] Convert $(357)_{10}$ to its binary equivalent. [5]
[2074 Supp Q.No. 13] Subtract $(11010)_2$ from $(11110)_2$ by using 1's and 2's complement. [5]
[2074 Set A Q.No. 7] Convert $(563)_{10}$ to its octal equivalent. [5]
[2074 Set A Q.No. 8] State and prove De Morgan's theorem. [5]
[2074 Set A Q.No. 14 OR] Subtract $(10011)_2$ from $(11110)_2$ by using 1's and 2's complement method. [5]
[2074 Set B Q.No. 7] Convert $(1234)_8$ to its hexadecimal equivalent. [5]
[2074 Set B Q.No. 13] Subtract $(11001)_2$ from $(11110)_2$ by using 1's and 2's complement method. [5]
[2073 Supp Q.No. 7] Convert $(BCA)_{16}$ to its octal number system. [5]
[2073 Supp Q.No. 14] Subtract $(10011)_2$ from $(11011)_2$ by using 1's and 2's complement method. [2.5+2.5]
[2073 Set C Q.No. 6] List out the different number system with its base. Convert $(456)_{10}$ decimal number to $(.....)_2$ binary number. [2+3]
[2073 Set D Q.No. 7] Convert $(BEA)_{16}$ to its octal number system. [5]
[2073 Set D Q.No. 14] Subtract $(1011)_2$ from $(1100)_2$ by using 1's and 2's complement method. [5]
[2072 Set C Q.No. 6] What is octal number? Convert $(167)_8$ octal number into $(?)_{16}$ hexadecimal number. [1+4]
[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]
[2072 Set D Q.No. 6] What is binary number? Convert $(2345)_8$ octal numbers into $(...)_{16}$ hexadecimal number. [1+4]
[2072 Set D Q.No. 8] Give the truth table and logical symbols of AND, OR and NOT gates of boolean algebra. [5]
[2072 Set D Q.No. 14] Subtract $(1000)_2$ from $(111)_2$ using 1's and 2's complement method. [2.5 + 2.5]
[2072 Set E Q.No. 6] What is number system? Convert $(10001)_2$ binary number into base 8 octal number system. [1+4]
[2072 Set E Q.No. 14] Subtract $(10111)_2$ from $(111111)_2$ using 1's and 2's complement method. [2.5 + 2.5]
[2071 Supp. Q.No. 6] What is binary number system? Convert $(11111)_2$ binary number into base 10. [5]
[2071 Supp. Q.No. 15a] Perform the following
a. 10111–10001 [2.5]
b. 11110+11110 [2.5]
[2071 Set C Q.No. 13] Subtract $(10001)_2$ from $(11011)_2$ using 1's and 2's complement method. [5]
[2071 Set D Q.No. 13] Subtract $(11001)_2$ from $(11101)_2$ using 1's and 2's complement method. [5]
[2071 Set C Q.No. 7] What is octal number? Convert $(567)_8$ number into hexadecimal number. [1+4]
[2071 Set D Q.No. 5] What is number system? Convert $(ABCD)_{16}$ hexadecimal number into octal number system. [1+4]
[2070 Supp Q.No. 6] What is binary number? Convert $(567)_8$ octal number into hexadecimal number. [1+4]
[2070 Set C Q.No. 7] What is octal number system? Convert $(BAC)_{16}$ hexadecimal number into binary number system. [1+4]
[2070 Set D Q.No. 5] What is number system? Convert $(111111)_2$ binary number into octal number. [1+4]
[2070 Set C Q.No. 13] Subtract $(11111)_2$ from $(11000)_2$ using 1's and 2's complement method. [5]
[2070 Set D Q.No. 12] Subtract $(111)_2$ from $(1000)_2$ using 1's and 2's complement methods. [2.5+2.5]
[2069 Supp Q.No. 7] Convert $(5634)_8$ octal number into binary number. [5]
[2069 Supp Q.No. 9] Differentiate between NAND and NOR gate with truth table. [5]

60. 2069 Supp Q.No. 14 Subtract $(1010)_2$ from $(1011)_2$ using 1's and 2's complement method. [2.5+2.5]
61. 2069 Q. No. 7 Convert $(110111101)_2$ binary number into octal number. [5]
62. 2069 Q. No. 14 Subtract $(1100)_2$ from $(1111)_2$ 1's and 2's complement method. [2.5+2.5]
63. 2068 Q.No. 7 What is hexadecimal number? Convert $(ABC)_{16}$ hexadecimal number into $(...)_8$ octal number. [1+4]
64. 2068 Q.No. 8 What is boolean algebra? Differentiate between NAND and NOR gate with truth table. [1+4]
65. 2068 Q.No. 15 Perform the following: [2.5+2.5]
    a. 11111 – 10001 b. 1111+1111
66. 2067 Q. No. 6 What are the computer gates? Differentiate between NAND and NOR gate with an example. [2+3]
67. 2067 Q. No. 7 What is hexadecimal number? Convert $(B8C)_{16}$ Hexadecimal number into base 8 number system. [2+3]
68. 2066 Q.No. 7 What is binary number system? Convert $(BEEF)_{16}$ into binary. [2+3]
69. 2066 Q.No. 10 What are the logic gates? Explain the NAND gate with truth table. [2+3]
70. 2065 Q. No. 5 What are logic gates? Differentiate between "NAND" and "NOR" gate with truth table. [2+3]
71. 2065 Q .No. 8 What is Hexadecimal number? Convert $(BCA)_{16}$ Hexadecimal number into base 8 number system. [2+3]
72. 2064 Q.No. 6 What is binary number? Convert $(BBA)_{16}$ into binary. [2+3]
73. 2064 Q.No. 7 Construct the truth table of XOR and XNOR operations of Boolean algebra. [2.5+2.5]
74. 2063 Q. No. 9 What is NOR gate and construct its truth table. [5]
75. 2063 Q. No. 11 What is hexadecimal number system? Convert 637_{10} into hexadecimal system. [5]
76. 2062 Q. No. 8 Define a NOR gate and draw its logic symbol [5]
77. 2062 Q. No. 9 What is binary number system? Convert $(A5B)_{16}$ into decimal number. [5]
78. 2061 Q. No. 5 What is hexadecimal number system? Convert $11\ 10\ 11_2$ into base 16. [5]
79. 2061 Q. No. 12 Construct truth table for NAND operation. [5]
80. 2060 Q. No. 7 What is binary number system? Convert $(520)_{10}$ into base 16. [5]
81. 2060 Q. No. 8 Write truth table for NOR operation of Boolean algebra. [5]
82. 2059 Q. No. 6 Write truth table for NAND operation of Boolean algebra. [5]
83. 2059 Q. No. 8 What is octal number system? Convert $(356)_{10}$ into base 8. [5]
84. 2059 Q. No. 10 What is a purpose of a MODEM and where it could be used? [5]
85. 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
86. 2058 Q. No. 10 Group B Construct the truth table of the AND & OR operations of Boolean algebra. [5]
87. 2057 Q. No. 2 Group B Convert $(333)_{10}$ Denary numbers into Hexadecimal and back to base two number system. [5]
88. 2057 Q. No. 5 Group B Define Boolean functions. Construct truth table for AND operation of Boolean algebra. [5]

Write short notes on

89. 2075 Set A Q.No. 15a De Morgan's law [2.5]
90. 2069 Q. No. 15i 2068 Q.No. 14a 2066 Q.No. 13b Modern [2.5]

3. Computer Software and Operating System

Long Answer Questions

1. 2076 Set B Q.No. 3 What is operating System (OS)? Describe its functions in brief. [2+8]
2. 2076 Set C Q.No. 2 Write importance of operating system. Explain the types of operating system based on processing method. [2+8]
3. 2075 GIE Q.No. 3 What are the functions of operating system? List out different category of operating system. [6+4]
4. 2075 Set A Q.No. 4 2075 Set B Q.No. 2 2074 Supp Q.No. 3 2073 Set D Q.No. 3 What is operating system? Explain any four functions of operating system. [2+8]
5. 2075 Set B Q.No. 1 What is computer software? Explain different types of software with example. [2+8]
6. 2074 Set A Q.No. 2 Explain any five functions of operating system? [10]
7. 2074 Set B Q.No. 1 What is operating system? Write its importance. Describe CUI and GUI based operating system with merits and demerits. [2+2+6]
8. 2073 Supp Q.No. 2 2070 Supp Q.No. 4 2069 Q. No. 1 2065 Q. No. 1 What is operating system? Explain the function o operating system. [2+8]
9. 2073 Set C Q.No. 2 Define operating system. Explain th major function of operating system with example of windo based operating system. [4+6]
10. 2073 Set D Q.No. 1 What is operating system? Write its role Explain any three functions of OS. [2+2+4]
11. 2072 Set C Q.No. 2 What are the primary objectives operating system? Describe any four functions of operatir system. [2+
12. 2072 Set E Q.No. 1 What is operating system? Explain ar four types of operating system. [2+
13. 2071 Supp. Q.No. 3 What is operating system? Explain t types of operating systems based on processes. [2+
14. 2071 Set C Q.No. 4 What is on Operating System? Descril GUI and CUI based operating systems with merits a demerits. [2+
15. 2071 Set D Q.No. 1 What is an operating system? Descri the types of operating system. [2-
16. 2070 Set C Q.No. 3 What is operating system? Describe G and CUI operating systems in details. [2-
17. 2070 Set D Q.No. 4 What is an operating system? Explain types of operating system. [2-
18. 2069 Supp Q.No. 1 What is operating system? Describe types of operating system on the basis of process. [2-

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

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

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

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]

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

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

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

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]

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]

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

2076 Set B Q.No. 10 Differentiate between CLI and GUI operating system. [5]

2076 Set C Q.No. 10 2074 Supp Q.No. 9 Differentiate between CUI and GUI based operating system. [5]

2075 Set B Q.No. 9 Differentiate between single-user and multi-user operating system. [5]

2074 Set A Q.No. 10 What is Real Time Operating System? Explain. [5]

2074 Set B Q.No. 13 Define multi processing and multi tasking operating system. [5]

2073 Set C Q.No. 9 List out the name of operating system. What are the main feature of GUI based operating system? [2+3]

2073 Set D Q.No. 9 Differentiate between GUI and CUI. [2+3]

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

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

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

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

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

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

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]

43. 2061 Q. No. 11 What is an operating system? Explain its major functions. [5]
44. 2060 Q. No. 5 Explain the terms hardware interrupts and software interrupts. [5]
45. 2059 Q. No. 5 Distinguish between batch processing of on-line processing [5]
46. 2058 Q. No. 4 Discuss about the advantage of GUI operating system (MS- Windows) over Text based operating system (DSO). [5]
47. 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

48. 2071 Supp. Q.No. 14a System software [2.5]
49. 2071 Set D Q.No. 15b Computer booting

4. Application Package

Short Answer Questions

1. 2076 Set B Q.No. 14 What are the features of spreadsheet? Explain. [5]
2. 2076 Set C Q.No. 11 What is word processor? Explain document formatting features in word processor. [2+3]
3. 2076 Set C Q.No. 12 What is spread sheet software? Define the terms cell and cell address in spread sheet. [2+3]
4. 2075 GIE Q.No. 13 What are major features in spread sheet application package? [5]
5. 2075 Set A Q.No. 8 List any five features of spread-sheet. [5]
6. 2075 Set A Q.No. 14 What is document formatting in MS word? Explain. [5]
7. 2075 Set B Q.No. 10 What is word processor? What do you mean by paragraph formatting? Explain. [2+3]
8. 2075 Set B Q.No. 11 What is spreadsheet? Write uses of spreadsheet. [2+3]
9. 2074 Supp Q.No. 14 What is presentation software? Explain animation. [2+3]
10. 2074 Supp Q.No. 10 What is mail merge? Write advantages of mail merge. [2+3]
11. 2074 Set A Q.No. 12 What is word-processing? Explain document formatting. [1+4]
12. 2074 Set B Q.No. 8 What is Ms-Word? Write the advantages of using Ms-Word. [2+3]
13. 2074 Set B Q.No. 9 What is spread sheet? Define cell and cell address. [2+3]
14. 2073 Supp Q.No. 9 What is word processor? What do you mean by document formatting? Explain. [1+4]
15. 2073 Supp Q.No. 10 What is spread sheet? Write the uses of spread sheet. [1+4]
16. 2073 Set C Q.No. 13 What are the features of word processing software? List out word processing software. [4+1]
17. 2073 Set D Q.No. 11 What is word processor? What is page formatting? Explain. [1+4]
18. 2073 Set D Q.No. 12 Define the terms worksheet, workbook, sorting and formula in spread sheet. [5]
19. 2072 Set C Q.No. 9 OR What is word processor? Give the major features of word processor. [1+4]

20. 2072 Set C Q.No. 10 What is spreadsheet application program? List the uses of spreadsheet. [1+4]
21. 2072 Set D Q.No. 9 What is mail merge? Describe its major uses. [1+4]
22. 2072 Set D Q.No. 10 What is spreadsheet application program? Describe the terms cell, cell reference, worksheet and work book. [1+4]
23. 2072 Set E Q.No. 7 OR What is application program? List out the uses of spreadsheet application program. [1+4]
24. 2072 Set E Q.No. 14 What is Ms-Access? What are the uses of Ms-Access? [2+3]
25. 2071 Supp Q.No. 8 What is MS-Access? What are the basic components of micro-soft Access? List out. [1+4]
26. 2071 Supp. Q.No. 7 OR What is spread sheet? State the advantages of spread sheet. [2+3]
27. 2071 Set C Q.No. 8 What is an application program? List the major features of spread-sheet. [1+4]
28. 2071 Set D Q.No. 11 Or Describe the features of Word-processor. [5]
29. 2070 Supp Q.No. 9 Or What is word processor? List out the major features of word processor. [5]
30. 2070 Set C Q.No. 10 Or Describe the major features of spread sheet. [5]
31. 2069 Supp Q.No. 10 Or Explain the features of spread sheet package. [5]
32. 2069 Q. No. 10OR Explain the features of word processor. [5]
33. 2068 Q.No. 9 OR What is word processor? State the advantages of word processor in document designing. [1+4]
34. 2064 Q.No. 11 What is a spreadsheet package? State the advantages of spreadsheet package. [2+3]
35. 2063 Q. No. 6 What do you mean by word processing? Distinguish between word processing and data processing software. [5]
36. 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]
37. 2062 Q. No. 13 Explain the following terms used in different software packages: [2.5+2.5]
    a. Cut and paste
    b. Text justification
38. 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

39. 2076 Set C Q.No. 15a Slide transition [2.5]
40. 2075 Set B Q.No. 15a Presentation software [2.5]
41. 2069 Supp Q.No. 15b Word processor [2.5]

5. Programming Concepts & Logics

Long Answer Questions

1. 2077 Set D Q.No. 1 Define array. Write a program to sort the ten integers number in ascending order and display it. [2+5.5]
2. 2077 Set D Q.No. 2 Explain the function with example. Write a program to demonstrate any two string function using C. [2+5.5]
3. 2077 Set D Q.No. 3b Explain while loop with example. [3.5]
4. 2076 GIE Set B Q.No. 1
    a. What is control structure in C? Describe the switch statement with example. [2+3]
    b. Describe about loop. Print 1 to 10 number using for loop in C. [2+3]
5. 2076 GIE Set B Q.No. 4 What are the string function in C program? Write a program that describe any two string handling functions. [3+7]
6. 2076 Q.No. 2 What is 'while' loop statement? Write an algorithm and a C program to input a number and reverse it. [4+6]
7. 2076 Q.No. 3 Define array. Write a program to input any 10 numbers in an array and display it. Find the biggest number among the input numbers. [2+4+4]
8. 2076 Q.No. 5b Explain any two - string functions with examples. [5]
9. 2076 Set B Q.No. 4 What is programming language? Describe the various types of programming language with their merits and demerits. [2+8]
10. 2076 Set C Q.No. 3 What is program? Explain first, second, third and fourth generation programming languages with their merits and demerits. [2+8]
11. 2075 GIE Q.No. 1a Explain if-else control structure with example. [5]
12. 2075 GIE Q.No. 2 Write a program to enter 10 integer numbers into an array and display in ascending order. [10]
13. 2075 GIE Q.No. 4 What are the differences between syntax and semantics? Describe the different types of programming language with features. [3+7]
14. 2075 Set A Q.No. 1a What is loop? Differentiate between while and do while loop. [2+3]
15. 2075 Set A Q.No. 3 2070 Set D Q.No. 1 Explain different types of programming language with their merits and demerits. [10]
16. 2075 Set B Q.No. 1a What is operator? Explain logical and relational operator with example. [1+4]
17. 2075 Set B Q.No. 1b Write a program to find out whether entered number is positive or negative number. [5]
18. 2075 Set B Q.No. 2b Write a program to enter 5 integer numbers into an array and display. [5]
19. 2075 Set B Q.No. 3 What is programming language? Explain complier, interpreter and assembler. [2+]
20. 2074 Supp Q.No. 4 Explain different types of programming language. [1]
21. 2074 Supp Q.No. 1
    a. What is the control structure in C? Describe if-else statement with example. [2+]
    b. What are different types of loop in C? Write a program print multiplication table of 1 to 10. [2+]
22. 2074 Supp Q.No. 2 Write a program to input any 10 integer number in an array and find the total. [1]
23. 2074 Set A Q.No. 1
    a. What are the conditional statement in C? Describe switch statement. [2-]
    b. List the different types of loop in C. Explain for loop with example. [2-]
24. 2074 Set A Q.No. 2 Write a program to find addition of any two matrix of size 2*2 using array.

25. 2074 Set A Q.No. 3 What is programming language? Explain algorithm and flowchart with example. [2+8]
26. 2074 Set A Q.No. 3
    a. Write a program to compare any two string by using string function in C. [5]
    b. What is pointer in C? Explain. [5]
27. 2074 Set B Q.No. 4 What is programming language? Explain different types of language translator. [1+9]
28. 2074 Set B Q.No. 1
    a. What is switch statement in C Program? Explain with example. [5]
    b. Explain FOR loop in C with example. [5]
29. 2074 Set B Q.No. 2 Describe the syntax of array. Write a program to sort ten integer numbers in ascending order. [2+8]
30. 2074 Set B Q.No. 4 What is string? Explain any four string function with example. [2+8]
31. 2073 Supp Q.No. 1a Explain different types of data types used in C-Program. [5]
32. 2073 Supp Q.No. 3 What is programming language? Explain compiler, interpreter and assembler. Also differentiate between compiler and interpreter. [2+6+2]
33. 2073 Supp Q.No. 2 Write a program to enter elements into 4×4 matrix and find the sum of the elements of matrix. [5+5]
34. 2073 Supp Q.No. 4b What are the different types of operator in C? List out. [5]
35. 2073 Set C Q.No. 1
    a. Describe the switch statement with example. [5]
    b. What are the differences between while and do while loop? Explain with syntax. [3+2]
36. 2073 Set C Q.No. 2 Write a program to read five positive number using array and find out the smallest among them. [10]
37. 2073 Set C Q.No. 3
    a. Describe the string manipulation function in C. Explain strcpy and strcmp with example. [2+3]
    b. Write a program to demonstrate the value of variable and address of variable using pointer in C. [5]
38. 2073 Set C Q.No. 4 What are difference generation of programming language? Draw a flow chart for sequence control and looping concept with suitable example. [2+8]
39. 2073 Set D Q.No. 1
    a. What is loop? Differentiate between while and do-while loop. Describe with example. [1+4]
    b. Write a program to display first ten even numbers. [5]
40. 2073 Set D Q.No. 2 What is string? Explain any four string handling functions with example. [2+8]
41. 2073 Set D Q.No. 3 What is programming language? Explain different types of programming language with their merits and demerits. [2+8]
42. 2073 Set D Q.No. 3 What is array? Write a program to sort twenty integer numbers in ascending order. [2+8]
43. 2073 Set D Q.No. 4a Define simple and compound statements. Describe logical operator with example.
44. 2072 Set C Q.No. 1 Write a program which find the sum, difference and product of 2 numbers using switch case statement. [10]
45. 2072 Set C Q.No. 2
    a. Differentiate between while and do-while loop with appropriate example. [2.5+2.5]
    b. Write a program to display the following: [5]
    1
    1 2
    1 2 3
    1 2 3 4
    1 2 3 4 5
46. 2072 Set C Q.No. 3 Write a program which asks n^{th} terms of numbers and sort them in ascending order. [10]
47. 2072 Set C Q.No, 4 What is programming language? Explain the different programming languages with their major features. [2+8]
48. 2072 Set C Q.No. 4b Write a program to find the factorial of a given number. [5]
49. 2072 Set D Q.No. 1
    a. What is looping? Describe 'for' and while loop with appropriate examples. [1+2+2]
    b. Write a program to check if a given number is odd or even using if statement. [5]
50. 2072 Set D Q.No. 2 Describe any five string handling functions with examples. [10]
51. 2072 Set D Q.No. 3 What is array? Write a program to find addition of two matrices (3 × 3). [2+8]
52. 2072 Set D Q.No. 4 What is programming? Explain the different types of programming languages with their merits and demerits. [2+8]
53. 2072 Set D Q.No. 4b Write a program to find greatest number among four numbers. [5]
54. 2072 Set E Q.No. 1 Differentiate between 'While' and "do-while" loop. Write a program to display first 10 even numbers using loop. [5+5]
55. 2072 Set E Q.No. 2 What is an array? Write a program to enter 20 integer numbers into an array and display the greatest number entered. [3+7]
56. 2072 Set E Q.No. 4 What is string? Describe any four string handling functions with examples. [2+8]
57. 2072 Set E Q.No. 4 What is language processor? Differentiate between compiler and interpreter with examples. [2+8]
58. 2071 Supp Q.No. 1 What are the data types available in C programming? Explain in detail with examples. [10]
59. 2071 Supp Q.No. 2 What is looping? Write a program to calculate and display the multiplication table using nested loop. [2+8=10]
60. 2071 Supp Q.No. 3 Describe the "strcat", "strcpy", "strcmp", "strlen" and "strrev" string functions with examples. [10]
61. 2071 Supp Q.No. 4 Write a program to arrange the elements of an array in ascending order. [10]
62. 2071 Supp. Q.No. 4 What is programming? Differentiate between Compiler and Interpreter with examples. [2+8]
63. 2071 Set C Q.No. 3 Describe different types of language processors with examples. [10]
64. 2071 Set C Q.No. 3 What is looping? Describe 'for loop', 'while loop' and 'do-while loop' with appropriate examples. [1+9]

65. 2071 Set C Q.No. 4 Write a program which asks 100 numbers and sort them in ascending order. [10]
66. 2071 Set C Q.No. 5 Write a program to find greatest number among four numbers. [10]
67. 2071 Set D Q.No. 1 Write a program which reads name of 100 students and sort them in alphabetical order. [10]
68. 2071 Set D Q.No. 2 Describe 'Sequence", 'Selection' and 'Loop' with flowchart. Write a program to check if a number is odd or even. [6+4]
69. 2071 Set D Q.No. 3 Describe different types of programming design tools with examples. [10]
70. 2071 Set D Q.No. 4 What is an array? Write a program which finds multiplication table of two matrices (3×3). [2+8]
71. 2070 Supp Q.No. 1 Write a program which finds the sum, difference and product of 2 numbers using switch case statement. [10]
72. 2070 Supp Q.No. 2 What are the program design tools? Describe different types of program design tools with merits and demerits. [2+8]
73. 2070 Set C Q.No. 1 What is nested loop? Write a program to display the multiplication table of n^{th} terms of given numbers.[2+8]
74. 2070 Set C Q.No. 4 What is programming? Describe the types of programming languages with appropriate examples. [2+8]
75. 2070 Set C Q.No. 4 Write a program which reads salary of 25 employees and count the number of employees who are getting salary between 30,000 to 40,000. [10]
76. 2070 Set D Q.No. 1 What is control statement? Describe 'Sequence', 'Selection' and 'Loop' with flowchart and examples. [2+8]
77. 2070 Set D Q.No. 2 Write a program which reads name of 20 employees and sort them in alphabetical order. [10]
78. 2069 Supp Q.No. 3 What is programming language? Explain different types of programming languages. [2+8]
79. 2069 Q.No. 1 What is looping? Describe "for", "while" and "do-while" loops with appropriate examples. [1+9]
80. 2069 Q.No. 2 What is control statement? Write a program which selects and prints largest among 3 numbers using "if-else" statement with flow charts. [2+8]
81. 2069 Q.No. 3 What is string? Explain any four string handling functions with example. [2+8]
82. 2069 Q.No. 4 Write a program to add two matrices by supplying elements of matrices by the user. [10]
83. 2069 Q. No. 12 What is programming? Differentiate between compiler and interpreter. [2+8]
84. 2068 Q.No. 1 What is programming language? Explain the types of programming languages with merits and demerits. [2+8]
85. 2068 Q.No. 1
    a. What is an operator? Explain different types of operators used in programming with examples. [1+4]
    b. Define 'Nested Loop'. Write a program to calculate and display the multiplication table using nested loop. [2+3]
    c. Write a program to find out factorial of any number. [5]
86. 2068 Q.No. 2b Write a program to read salaries of 300 employees and count the number of employees getting salary from 10,000 to 15,000. [10]
87. 2068 Cancelled Q.No. 1
    a. Explain data types used in programming with an example. [5]
    b. Write a program to read a line text and to convert it into uppercase. [5]
    c. Compare "While", "do-while" and "for" loops with an examples. [5]
    d. Write a program to find out whether it is an odd number or even number. [5]
88. 2068 Cancelled Q.No. 3b Write a program to input names of 'n' numbers of students and sort them in alphabetical order. [10]
89. 2067 Q.No. 1c Write a program to display all prime numbers from 1 to 100. [5]
90. 2067 Q.No. 1d What do you mean by string manipulation? Explain about strcpy and strcat. [2+3]
91. 2066 Supp Q.No. 1
    a. Draw a flowchart to check whether entered number is even or odd. Convert this flowchart into program. [5]
    b. Define keywords and variables with examples. [5]
    c. Write a program to find the factorial of an entered number (n). [5]
    d. Write a program to find the commission amount on the basis of sales amount as per the following conditions: [5]

Sales amount (Rs.)	Commission
0 – 1000	5%
1001 – 2000	10%
> 2000	12%

92. 2066 Supp Q.No. 2
    a. Write a program to store mark obtained by 'n' students and count the number of students who obtained mark greater than 70. Also count the number of students who are failed (mark <35). List any five string functions. [10]
    b. Write a program to input a siring and count the number of consonants containing in the string. [2+8]
93. 2066 Q.No. 1 What are the programming languages? Explain each of them in detail. [5+7.5]
94. 2066 Q.No. 1
    a. Write an algorithm for a program that input cost price (CP) and selling price (SP) and determines whether there is gain or loss. Convert this algorithm into program code. [5]
    b. Write a program to display the name of day on the basis of entered number 1 to 7. For example, 1 for Sunday. [5]
    c. Write a program to input an integer number and checks whether it is prime or not. [5]
    d. Explain data types used in C-programming with examples. [5]
95. 2065 Q.No. 1
    a. Write an algorithm and a flow chart for a program that checks whether the number entered by user is exactly divisible by 5 but not by 11. [5]
    b. Write a program that reads three numbers and displays the largest among them. [5]
    c. What is an operator? Explain different types of operations used in programming. [2+3]
    d. Write a program to read a four digit number and display it in reverse order. [5]

2065 Q.No. 2a Write a program to add two matrices. [10]

2065 Q.No. 3b Write a program to enter 'n' numbers into one dimensional array and sort and display them in ascending order.[10]

2064 Q.No. 1a Differentiate between break and continue statements with examples. Write a program to print first 10 terms of any series using 'for' loop: [2+3]

2064 Q.No. 1b What is an operator? Explain assignment, Ternary, Comma operators with examples. [2+3]

2064 Q.No. 1d Write the advantages of function. Write a recursive function to calculate the factorial of any integer number. [2+3]

2064 Q.No. 3b Write a program to count the number of vowels and consonants in a given text. [10]

2063 Q.No. 1c What is an operator? Describe different types of operators that are included in C.

2063 Q.No. 1d What are the differences between break and continue statement? Write a C program to print first 10 terms of the following series using FOR loop.1, 5, 9, 13, ... [20]

2063 Q.No. 2

a. What is an array? Write a C program to sort integer values in descending order. [10]

b. Write a C program to read age of 40 students and count the number of students of the age between 15 and 22.[10]

2062 Q.No. 1

a. Write a C program to print the 10 positive integers and their factorials. [5]

b. Differentiate between while and Do while loop with suitable examples. [5]

c. For any integer input through the keyboard, write a C program to find out whether it is an odd number or even number. [5]

d. Write a C program to input 'n' numbers and find out greatest and smallest number. [5]

2062 Q.No. 2

a. Draw a flowchart and write a C program to read in a positive integer less than 20 and display its multiplication table. [10]

b. Write a C program to input names of 'n' numbers of students and sort them in alphabetical order. [10]

2062 Q.No. 3a Write an algorithm and C program to read salaries of 200 employees and count the number of employees getting salary between 5,000 – 10,000. [10]

2061 Q.No. 1a The marks obtained by a student in 7 different subjects are entered through the keyboard. The student gets a division as per the following rules. [10]

Percentage greater or equal to 60	first division
Percentage between 45 and 59	second division
Percentage between 35 and 44.	third division
Percentage less than 35	fail
Mark less than 35 in a subject will be declared as	fail

Write a program using C language to process result of all students based on the specification state above.

2061 Q.No. 1(b)OR 2058 Q.No. 2 Describe either in flowchart or algorithm the steps required to display the multiplication table of a series of given numbers (entered by the user). Convert the flowchart or algorithm into program of any the 4GL or HLL of your choice. The program should use the 'For' looping structure in calculating and displaying the multiplication table.[20]

110. 2061 Q.No. 2

a. Write a program using C language to read the age of 100 persons and count the number of persons in the age group between 50 and 60. Use 'for' and 'continue' statements. [10]

b. Differentiate between while and do while loop. What are the advantages of object oriented programming over structured programming? [5+5]

111. 2060 Q.No. 2

a. Write a program to store Kathmandu Valley's 7days maximum and minimum temperature (in centigrade) and calculate average, maximum, minimum temperature using function and print 7 days temperature, maximum, minimum and average temperature using any high level programming language. [12]

b. Write a algorithm to solve the above calculations [8]

112. 2060 Q.No. 3 Write a programme to input a message from keyboard and display the menu. [5×4]

a. Print the message length in term of characters.

b. Print the message in reverse order.

c. Print the message in capital letters.

d. Copy the message from one location of screen to another location.

113. 2057 Q.No. 2 Write an algorithm and draw a flowchart to enter names of the students and ages of 10 different students in arrays, then arrange them in descending order according to the age and print them. [20]

114. 2057 Q.No. 3 An organization has 5 stores and it deals in items. The stock position of these items is shown below.

	Item 1	Item 2	Item 3	Item 4
Store 1	30	35	0	0
Store 2	20	0	25	0
Store 3	80	175	25	35
Store 4	0	21	32	28
Store 5	10	80	15	40

Develop a computer program in any of the high level language you are taught in your class, to input this table and to indicate the items that are completely out of stock at store i, where the value of i may be input from the keyboard.

Your program should also calculate the total stock of each item in the organization and also the stock in store number 5. [20]

Short Answer Questions

115. 2076 GIE Set A Q.No. 12 Describe logical operator with example. [5]

116. 2076 Q.No. 11 Describe the different operator types in C program. [5]

117. 2076 Set B Q.No. 11 Explain the compiler and interpreter. [5]

118. 2075 GIE Q.No. 10 What is flow chart? Explain with example.[5]

119. 2075 Set A Q.No. 9 What is an algorithm and flowchart? Write its example of each. [5]

120. 2075 Set A Q.No. 12 What is language translator? Explain. [5]

121. 2075 Set B Q.No. 12 Distinguish between "for" and "while" loop. [5]

122. 2074 Supp Q.No. 12 List out the different operator in C. Describe relational operator with example. [2+3]

123. 2074 Set A Q.No. 11 2073 Supp Q.No. 12 Explain different types of errors in program. [5]

124. 2074 Set A Q.No. 11 List out the different operators in C program. Explain arithmetic operator with example. [2+3]
125. 2074 Set B Q.No. 12 Explain third generation programming language. [5]
126. 2074 Set B Q.No. 12 List out the different operator in C. Describe logical operator with example. [2+3]
127. 2073 Set C Q.No. 10 Describe the feature of high level programming language. [5]
128. 2073 Set C Q.No. 11 What is variables in programming? List out the different data types in C program. [2+3]
129. 2073 Set D Q.No. 10 What is language translator? Differentiate between compiler and interpreter. [1+4]
130. 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]
131. 2072 Set C Q.No. 12 OR Describe the terms 'Operator', 'Operand' and 'Operation' with suitable examples. [5]
132. 2072 Set D Q.No. 12 Differentiate between Compiler and Interpreter with example. [5]
133. 2072 Set E Q.No. 10 What are the data types used in C programming? List out. [5]
134. 2072 Set E Q.No. 11 2071 Supp. Q.No. 10 Explain the types of errors in programming language. [5]
135. 2072 Set E Q.No. 13 What is flowchart? Describe the symbols used in flowchart. [5]
136. 2071 Supp Q.No. 8 OR What are operators used in C programming? Explain with examples. [5]
137. 2071 Supp. Q.No. 13 Define flowchart. Describe the symbols used in flowchart. [1+4]
138. 2071 Set C Q.No. 9 2070 Set D Q.No. 8 Describe algorithms and flow chart with examples. [2.5+2.5]
139. 2071 Set C Q.No. 11 Describe the different data types which are used in C-programming. [5]
140. 2070 Set C Q.No. 12 Differentiate between logical error and syntax error with examples. [5]
141. 2071 Set D Q.No. 7 Describe different types of software. [5]
142. 2071 Set D Q.No. 9 Describe "Operators" which are used in C-programming. [5]
143. 2071 Set D Q.No. 12 2070 Supp Q.No. 12 Differentiate between Compiler and Interpreter. [5]
144. 2070 Supp Q.No. 11 What is operator? Describe the types of operators with appropriate examples. [1+4]
145. 2070 Set C Q.No. 11 Differentiate between "While" and "Do-While" loop with flowchart. [2.5+2.5]
146. 2070 Set D Q.No. 9 Describe the data types which are used in C programming. [5]
147. 2069 Supp Q.No. 13 What are programming errors? Explain. [5]
148. 2069 Q. No. 13 Explain the types of programming errors with examples. [5]
149. 2067 Q. No. 8 What is programming? Differentiate between flowchart and alogorithms. [1+4]
150. 2066 Q.No. 8 Differentiate between algorithm and flowchart with suitable examples. [2.5+2.5]
151. 2066 Q.No. 9 What are the different program logic tools? Explain about the decision table and decision tree with examples. [2+3]
152. 2065 Q. No. 4 What is programming? Differentiate between flowchart and algorithms with suitable examples. [5]
153. 2065 Q.No. 9 Differentiate between while and do-while loop. [7]
154. 2064 Q.No. 10 What is an algorithm? Explain the advantages of an algorithm. [2+3]
155. 2063 Q. No. 7 Define flow chart and algorithm with examples. [5]
156. 2063 Q. No. 8 Differentiate between computer and interpreter. [5]
157. 2062 Q. No. 6 What are the characteristics necessary for programming to be considered as a high level language? [5]
158. 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: [5]

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%

159. 2062 Q.No. 9 Describe the limitation of using getchar and putchar functions for reading strings. [7]
160. 2061 Q. No. 9 What is flowchart? Differentiate between program flowchart and system flowchart. [5]
161. 2061 Q. No. 10 What is program debugging? Differentiate between 'syntax error' and 'logical error'. [5]
162. 2061 Q. No. 13 What do you mean by data sequencing? Differentiate between random access and sequential access. [5]
163. 2060 Q. No. 10 What is program logic? What are symbols used to draw a flowchart? [5]
164. 2060 Q. No. 13 What are the two types of programming errors? How are they detected? [5]
165. 2059 Q. No. 11 Distinguish the terms "Operation" and "Operand" with examples. [5]
166. 2059 Q. No. 12 Draw a flowchart to test condition, if-then-else in program design process. [5]
167. 2059 Q.No. 12 What is Program Logic? What are different tools to explain the logic and design of a program? What is infinite loop? What are symbols used to draw a flow chart? [1+3+1+2]
168. 2059 Q. No. 13 Explain the difference between syntax and semantics. [5]
169. 2058 Q. No. 6 Group B What is flowchart? Write the advantages of drawing flowcharts. [5]
170. 2058 Q. No. 8 Group B Logical errors are difficult to find than the syntax errors. Justify. [5]
171. 2057 Q. No. 4 Group B What do you understand by 4GL? Give examples. [5]

Write short notes on

172. 2074 Supp Q.No. 15a Pseudo Code [2.5]
173. 2070 Set C Q.No. 15a Flowchart [2.5]
174. 2067 Q. No. 13c Compiler versus Interpreter. [2.5]

4. Web Technology I

Long Answer Questions

2076 Set C Q No. 4 What is e-mail? Write advantages and disadvantages of e-mail. Explain different types of e-mail account. [2+3+5]

2075 GIE Q.No. 12 Explain the <Table> and <Img> tag with its properties and values. [5]

2075 Set A Q.No. 10 What is HTML? Describe different types of tag used in HTML. [2+3]

2075 Set B Q.No. 4 What is Internet? Explain the uses of internet. [2+8]

2075 Set B Q.No. 12 2073 Set D Q.No. 13 What is HTML? Write the basic structure of HTML. [2+3]

2074 Supp Q.No. 12 Explain ordered list and unordered list in HTML with example. [5]

2074 Set A Q.No. 14 Write the basis structure of HTML. [5]

2074 Set B Q.No. 10 What is HTML? Explain different types of tag. [2+3]

2073 Supp Q.No. 11 What is HTML? Explain different types of tag used in HTML. [1+4]

2073 Set C Q.No. 12 Explain the <A> and < 1 mg > tag with its properties and values. [2+3]

2072 Set C Q.No. 13 What is HTML? Describe the importance of HTML in web-page designing. [1+4]

2072 Set D Q.No. 13 Define HTML. Describe the uses of HTML. [1+4]

2072 Set E Q.No. 12 Explain the importance of HTML in web page designing. [5]

2071 Supp. Q.No. 12 What is HTML? Explain the importance of HTML in web page designing. [1+4]

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

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

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

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

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

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

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

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

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

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

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

26. 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]
27. 2058 Q. No. 2 Who is system analyst? List and explain the characteristics of a good system analyst. [12.5]
28. 2057 Q. No. 1 Explain with examples why a program development requires systematic methods. What are the initial steps of program design? [12.5]
29. 2057 Q. No. 3 Explain the roles of systems Analyst programmer in the process of systems design and implementation. [12.5]

Short Answer Questions

30. 2076 GIE Set A Q.No. 13 What are positive and negative impacts of internet? [5]
31. 2076 Set B Q.No. 12 Define social media. Describe negative impact of social media. [2.5+2.5]
32. 2076 Set B Q.No. 13 Explain the <OL> tag and <img> tag with its properties and values. [2.5+2.5]
33. 2076 Set C Q.No. 13 What is HTML? Explain <Img> tag. [2+3]
34. 2075 GIE Q.No. 11 What are negative and positive impacts of use of internet in college? [5]
35. 2074 Supp Q.No. 10 Differentiate between internet and intranet. [5]
36. 2074 Supp Q.No. 11 Write the uses of Internet. [5]
37. 2074 Set A Q.No. 13 OR Explain different types of e-mail. [5]
38. 2073 Supp Q.No. 9 OR What is the Internet? Write the advantages of the Internet. [1+4]
39. 2073 Set C Q.No. 11 What is URL? Describe the search engine. [5]
40. 2073 Set D Q.No. 11 OR Describe different types of e-mail Account. [5]
41. 2072 Set C Q.No. 9 OR 2070 Set C Q.No. 10 List the advantages and disadvantages of Internet. [1+4]
42. 2072 Set D Q.No. 9 OR List the positive and negative impacts of Internet in our society. [1+4]
43. 2072 Set E Q.No. 7 What is internet? List out the importance of internet in our society. [1+4]
44. 2071 Supp. Q.No. 7 What is Internet? Explain the impacts of Internet in our society. [1+4]
45. 2071 Set D Q.No. 11 What is Internet? List the major uses of Internet. [1+4]
46. 2070 Supp Q.No. 9 What is search engine? List out the major uses of internet. [1+4]
47. 2069 Supp Q.No. 10 List the positive and negative impacts of internet in our daily life. [5]
48. 2069 Q.No. 10 What is internet? Write down the uses of internet. [1+4]
49. 2068 Q.No. 9 What is internet? List out the positive and negative impacts of internet in our society. [1+4]
50. 2067 Q.No. 10 What is internet? Explain the uses of internet in business. [2+5]
51. 2065 Q.No. 7 Differentiate between internet and intranet with suitable example. [2+5]
52. 2057 Q.No. 6 What is internet? Explain the uses of internet in business. [2+5]

Write short notes on

53. 2076 Set B Q.No. 15a URL [2.5]

54. 2076 Set C Q.No. 15b WWW [2.5]
55. 2075 GIE Q.No. 15b 2074 Supp Q.No. 15b 2074 Set B Q.No. 15b 2073 Set C Q.No. 15a E-mail [2.5]
56. 2075 Set A Q.No. 15b 2060 Q.No. 6(a) Internet [2.5]
57. 2075 Set B Q.No. 15b Search engine. [2.5]
58. 2071 Set C Q.No. 15b / 2070 Set D Q.No. 15b Uses of Internet [2.5]

7. Multimedia

Short Answer Questions

1. 2075 GIE Q.No. 13 What is multimedia? Write applications of multimedia. [2+3]
2. 2075 Set A Q.No. 14 2074 Set A Q.No. 14 2073 Set C Q.No. 14 2072 Set D Q.No. 13 What is multimedia? List the components of multimedia. [2.5+2.5]
3. 2075 Set B Q.No. 13 Define the components of multimedia. [5]
4. 2073 Supp Q.No. 12 What is multimedia? Write its applications. [1+4]
5. 2073 Set D Q.No. 13 Explain the components of multimedia. [5]
6. 2072 Set C Q.No. 14 Describe any five application of multimedia. [5]
7. 2072 Set E Q.No. 11 What is multimedia? Explain. [1+4]
8. 2071 Supp Q.No. 12 Define multimedia. List the advantages and disadvantages of multimedia. [1+4]
9. 2071 Set C Q.No. 14 Describe the advantages of multimedia. [5]
10. 2071 Set D Q.No. 13 What is multimedia? List out the advantages of multimedia. [1+4]
11. 2070 Supp Q.No. 13 What is multimedia? List out the advantages of multimedia system. [1+4]
12. 2070 Set C Q.No. 14 What are the components of multimedia? Explain. [5]
13. 2070 Set D Q.No. 13 List out the advantages and disadvantages of multimedia. [5]
14. 2069 Q.No. 12 What is multimedia? What are the components of multimedia? List out. [1+4]
15. 2064 Q.No. 7 What is computer animation? How is it used in film making industry? [2+5]
16. 2063 Q.No. 9 Define the term multimedia. Explain the application areas of multimedia.
17. 2060 Q.No. 12 What is multimedia? Explain its application areas. [3+4]
18. 2057 Q.No. 9 What is computer animation? How is it used on one film making industry? [3+4]

Write short notes on

19. 2076 GIE Set A Q.No. 15a You Tube [2.5]

8. Information Security and Cyber Law

Short Answer Questions

1. 2076 GIE Set A Q.No. 14 What is cybercrime? List out methods safety from cybercrime. [2+3]
2. 2076 GIE Set B Q.No. 14 What is cybercrime? Suggest to protection methods in your student life to safe from cybercrime. [2+3]
3. 2076 Q.No. 13 Define cyber bullying. Suggest the possible solutions to remain safe from cybercrime. [5]
4. 2075 GIE Q.No. 12 What is intellectual property right? Explain.
5. 2075 Set A Q.No. 13 Explain the social impact of ICT. [1+4]
6. 2074 Set B Q.No. 14 What is cybercrime? How are you affected from cybercrime in your daily life? [2+3]
7. 2074 Supp Q.No. 14 What is cyber bullying? How do you protect from cybercrime? [2+3]
8. 2074 Set A Q.No. 13 List out the cyber crime. Give suggestion to protect from identify theft. [3+2]
9. 2073 Set C Q.No. 13 Describe the cyber crime in Nepal. What are protection method to the cyber crime? [2+3]
10. 2073 Set D Q.No. 8 Describe computer virus and method of protection from virus. [5]
11. 2071 Set D Q.No. 12 2070 Set D Q.No. 12 Describe computer crime and its various forms. [5]
12. 2069 Q.No. 13 Define computer crime and its various forms. [5]
13. 2066 Supp Q.No. 9 What is cyber crime? Explain its effects raised in this contemporary society. [2+5]
14. 2066 Q.No. 8 Explain about the importance of computer security in this knowledge based society. [7]
15. 2062 Q.No. 10 What do you mean by IT? Explain the advantages and disadvantages of IT. [2+5]

Write short notes on

16. 2074 Set A Q.No. 15a Computer virus [2.5]
17. 2072 Set C Q.No. 15a Computer crime [2.5]
18. 2072 Set C Q.No. 15b Social impact of the ICT. [2.5]
19. 2072 Set E Q.No. 15b 2066 Supp Q.No. 12a System security [2.5]
20. 2071 Supp Q.No. 13 Digital divide & social impact of ICT. [2.5+2.5]
21. 2071 Set D Q.No. 15a 2068 Q.No. 12b 2064 Q.No. 12a 2065 Q.No. 12a 2062 Q.No. 7c 2060 Q.No. 6c Cyber law [3.5]