SHRI S.H.KELKAR COLLEGE OF ARTS, COMMERCE AND SCIENCE,
DEVGAD (SINDHUDURG)
SEMESTER I, NOV 2022

SUBJECT : Digital Electronics **CLASS: FYIT**
DATE: 15-11-2022 **TIME: 8.15 a.m to 11:15 a.m.**
DURATION: 2 - 1/2Hrs. **SUBJECT CODE: USIT102**
MAX.MARKS: 75

Q1. Attempt any three of the following: **(15 Marks)**

1.Convert binary to octal

A. (001100)
B. (1100111)
C. (1110000)
D. (111100)
E. (10101010)

2.Convert octal to decimal

A. (30)
B. (40)
C. (50)
D. (17)
E. (54)

3.Convert decimal to binary

A. (116)
B. (128)
C. (135)
D. (140)
E. (64)

4.Find 1's complement

A. 0011100
B. 11100111
C. 11110011
D. 00011100
E. 0000111100

4.Find 2's complement

A. 0011100
B. 11100111
C. 11110011
D. 00011100

E. 0000111100

Q2. Attempt any three of the following: (15 Marks)

1. Write a short note on keyboard mouse and printers
2. Write history evaluation of computer
3. Right a short note on concept of networking
4. Explain block diagram of computer
5. What is the use of computer explain each and every application of computer

Q3. Attempt any three of the following: (15 Marks)

1. Explain concept of basic logic gate
2. Demonstrate theorem of Demorgan's
3. Implementation of AND get using NOR gate
4. Implementation of OR get using NOR gate
5. Implementation of AND gate using NAND gate

Q4. Attempt any three of the following: (15 Marks)

1. Explain concept of full adder
2. Explain concept of half adder
3. Explain concept of k map
4. Explain concept of logic gates
5. Short note on Memory

Q5 Attempt any three of the following: (15 Marks)

1. Write a note on Derive Gate
2. Implementation of OR get using NAND gate
3. Implementation of Inverter using NOR Gate
4. Implementation of Inverter using NAND Gate
5. Explain Concept of Minterm