

GOVERNMENT DEGREE COLLEGE GANDERBAL

Assignment for BCA 2nd Semester Regular Batch 2019, Backlog Batch 2016 /2017/2018

Linear And Digital Integrated Circuits
dt:18/06/2020

Course Code: ELECTRONICS-DSC 1B
Marks: 60

Attempt any 03 Questions and each question carries equal weightage.

Q1 What is an operational amplifier? Explain various types of operational amplifier?

Explain in detail, the characteristics of ideal op-amp and the practical op-amp?

Q2. *Convert the following:*

i) $(423.625)_{10} = (\quad)_2$

ii) $(101111)_2 = (\quad)_8$

iii) $(3562)_8 = (\quad)_{16}$

iv) $(2A5B)_{16} = (\quad)_{10}$

Q3. i) *Explain using diagram how NOR and NAND Gates are Universal Gate.*

ii) Explain De Morgan's theorem using example.

Q4. *What are shift registers? Design and explain the working of various types of shift registers*

Instructions:

1. The assignment is to be submitted through google class room having code **25nkp55**
2. Last date of assignment submission is **26/06/20**.
3. The assignment must be **handwritten**.
4. Students must write page no., roll no., registration no. on the top right corner of each page.
5. A4 size ruled paper with not more than **10** pages converted into a single PDF file using **camscanner** will be only accepted.
6. Students are advised to preserve hard copy of Assignment.
7. Do not copy answers from other students.
8. Assignments should be scanned properly for clear visibility.

Title page of assignment must contain

- Name of the candidate.....
- Semester.....
- Category: Fresh/Backlog.....
- Batch.....
- Roll No.....
- Regd. No
- Subject.....
- Cell no.....
- E-mail address.....
- Date of Submission.....
- Signature of Candidate.....