UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 3rd Semester Examination, 2020

CC7-PHYSICS

DIGITAL SYSTEMS AND APPLICATIONS

Full Marks: 40

ASSIGNMENT

The figures in the margin indicate full marks.
All symbols are of usual significance.

For each question, the candidates will be graded according to the quality of the presentation of the topic (8 marks) and originality of language (2 marks). Maximum word limit of each topic is 400.

Write short notes on any *four* of the following topics　　　10×4 = 40

1.　Decimal to binary, octal and hexadecimal conversion and vice-versa.

2.　XOR gate: parity generator and checker.

3.　Race around condition and JK Master Slave Flip Flop.

4.　Multiplexer and demultiplexer: use of demultiplexer as decoder

5.　IC 555 and astable multivibrator.

6.　Decade Counter and explanation of its modulus.

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