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RNLKWC/B.Sc.-CBCS/IS/COS-C2P./1/22

2022

Computer Science

[HONOURS]

(CBCS)

(B.Sc. First Semester Practical End Examination-2022)

PAPER-C2P

Full Marks: 20

Time: 02 Hrs

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

Answer any one question

1x15=15

1. Implement the following by using basic gats. Also verify its truth table

$$Y = \bar{A}B + \bar{B}\bar{C}$$

2. Design a half adders by using NAND gate. Also verify its truth table.
3. Design Full subtractor with basic gates and also verify its truth table.
4. Design and implement 8:1 MUX and also verify its thrutyh table..
5. Verify the truth table of 3:8 decoders with proper circuit..

(2)

6. Design and implement S-R flipflop by using NAND gate. Also verify its truth table.
7. Design and implement D-flipflop by using NAND gate.
8. $f(A, B, C) = \sum_m(2, 4, 5, 6, 7)$ Minimize this and implement with basic gates..
9. Design and implement mod-6 counters and also verify its truth table.

VIVA – 03

PNB - 02
