

## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-1 EXAMINATION- OCTOBER -2017

M.Tech III Semester, PhD

COURSE CODE: 17M1WEC331

MAX. MARKS: 15

COURSE NAME: VLSI IN BIOMEDICAL SIGNAL PROCESSING

COURSE CREDITS: 03

MAX. TIME: 1 HRS

*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

1.

- (a) What is a Kogge Stone Prefix Adder Method? Take any example to illustrate your answer.
- (b) What is a Wallace multiplier? How it is different from Array Multipliers?
- (c) What is a difference between compressors and counters? [3 + 1+1 = 5]

2.

- (a) Explain the circuit diagram of 7 -3 counter using full adder.
- (b) Draw and Explain Conventional diagram of 3-2 compressor. [2.5 + 2.5 = 5]

3.

- (a) What is the significance of Fig 1? Write the output equations.

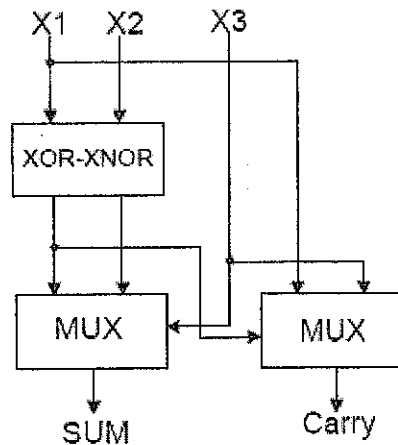


Fig 1

- (b) Give the CMOS Implementation of XOR/XNOR Gate.

[2.5 + 2.5 = 5]