

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-2 EXAMINATION- OCTOBER -2019

PhD

COURSE CODE: 19P1WEC101

MAX. MARKS: 25

COURSE NAME: RECONFIGURABLE COMPUTING

COURSE CREDITS: 03

MAX. TIME: 1 HRS 30 MIN

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

1. For larger and more complex projects, FPGA technology provides many benefits. Justify. [5]
2. Which type of FPGA is better suited for rapid system prototyping applications? The different points of Generic FPGA architecture is shown in Fig 1. Explain each marked points and give brief of every system. [5]

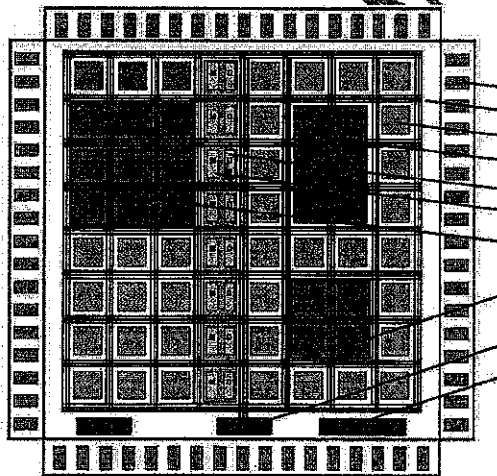


Fig 1 : Generic FPGA Architecture

3. Configurable Logic Blocks (CLBs) usually contain more than one Look Up Table (LUT). Justify. How to connect CLB to wires? [5]
4. If FPGA doesn't know which CLBs will be connected, where does it put wires? How do FPGAs connect wires together? [5]
5. Write short note on : [5]
  - a) What is a FPGA fabric?
  - b) Why do flexibility and topology matter in Reconfigurable Interconnect?