

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- September 2018

B.Tech CSE/IT/ECE VII Semester

COURSE CODE: 13B1WCI731

MAX. MARKS: 15

COURSE NAME: ARM BASED EMBEDDED SYSTEM DESIGN

COURSE CREDITS: 03

MAX. TIME: 1Hr

Note: All questions are compulsory. Each question carries equal marks. Carrying of mobile phone during examinations will be treated as case of unfair means.

1. (a) What are the types of CORTEX series? Explain the following Cortex Series and their use:
- CORTEX-M
 - CORTEX-R
 - CORTEX-A

(b) List the applications of following ARM-based chips:

Cortex-A9	ARMv6-M
Cortex-A15	ARM Cortex-A75

2. (a) What is the Difference between RISC and CISC Processor? Explain in terms of hardware and software complexity.
- (b) Draw the Block Diagram of ARM architecture. What is the use of Barrel shifter?
3. (a) Draw and explain the Register Organization of ARM Processor with various Processor Modes
- (b) Draw and explain each bit of 32 bits Program Status Registers