D. Naveen

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -1 EXAMINATIONS FEB 2022

B. Tech - VI Semester

COURSE CODE:13B1WCI731

MAX. MARKS: 15

COURSE NAME: ARM Based Embedded System Design

COURSE CREDITS: 3

MAX. TIME: 1 Hour

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Marks are indicated against each question in square brackets.

Ques 1: What is the difference between Harvard Architecture and Von Neumann Architecture?

[CO-1: 2 Marks]

Ques 2: Which features does ARM have in common with many other RISC architectures? [CO-1:

2 Marks]

Ques 3: Explain the concept of thumb instructions in ARM processor. [CO-1, 2: 1 Marks]

Ques 4: Explain all the operating modes of ARM 7. [CO-2: 3 Marks]

Ques 5: With the help of an example explain all addressing modes of ARM 7. [CO-1: 3 Marks]

Ques 6: Differentiate between CPSR and SPSR. [CO-1: 1 Marks]

Ques 7: Draw the architectural block diagram of ARM and explain data flow referring each unit.

[CO-1: 3 Marks]