Seat No.:	Enrolment No.
Seat No	Ellionnent No

GUJARAT TECHNOLOGICAL UNIVERSITY

		SEMESTER- I (New course) • REMEDIAL EXAMINATION – SUMMER Code: 3715201 Date:12/05	
Su Ti	bject N me: 1 struction 1. 2.	Name: Advanced Computer Architecture 10:30 am to 1:00 pm Total Mark ns: Attempt all questions. Make suitable assumptions wherever necessary.	xs: 70
Q.1	3. (a) (b)	Figures to the right indicate full marks. What are Classes of Computer architecture Explain about Processor vs. System architecture	07 07
Q.2	(a) (b)	Explain Data Hazard in detail. Explain the below mentioned concepts and differentiate them. 1.RISC and CISC 2. Big-endian and Little-endian.	07 07
		OR	. –
	(b)	Describe in brief Interrupt Controller MPCore processors	07
Q.3	(a) (b)	Explain 3 stage pipeline in ARM architecture Explain Host Interface for GPU OR	07 07
Q.3	(a) (b)	Draw block diagram of Unified instruction and data cache Explain SIMD instructions in brief.	07 07
Q.4	(a)	Draw block diagram of Harvard architecture based data and instruction caches	07
	(b)	List advantages & disadvantages of Onchip RAM OR	07
Q.4	(a) (b)	Explain Paging memory management to MMU Explain memory Segmentation in brief	07 07
Q.5	(a) (b)	Explain vertex processing in GPU Describe a typical Typical TLB Format OR	07 07
Q.5	(a) (b)	What are Implications for Compilers design in VLIW. What are essential components of a toolchain and explain each	07 07
