Time 3 Hrs Max. Marks 80

Note: 1. Question No. 1 is compulsory.
2. Answer any 3 questions from remaining five.
3. Assume suitable data wherever necessary.

Q1.	a) Explain role of RTOS in Embedded System.	5
	b) How program validation and testing is done in embedded systems?	5
	c) State features of ARM Cortex-M3.	5
	d) Explain hardware/software co-design in embedded system.	5
Q.2	a) Explain priority-based scheduling with example.	10
	b) Discuss embedded product development life cycle management.	10
Q.3	a) Explain addressing modes of ARM processor	10
	b) Explain interrupt mechanism of ARM processor.	10
Q.4	a) Explain various inter-process communication mechanisms in Embedded Operating System.	10
	b) Compare RISC and CISC.	10
Q.5	a) Explain FIR filter implementation using ARM processor.	10
	b) Explain program level performance analysis in embedded system.	10
Q.6	a) Explain operating system performance and optimization strategies.	10
	b) Explain different design challenges in embedded system design.	10
