

Paper code: P119-142(T1)

MARKING SCHEME

OCTOBER 2019 / INSEM (T1)

F. Y. M. TECH. (E&TC Engineering) (SEMESTER - I)

**COURSE NAME: ADVANCED EMBEDDED PROCESSORS
AND PROGRAMMING**

COURSE CODE: ETPA11182

(PATTERN 2018:R1)

Q1a) With reference to an application, comment on selection of processor and memory –06 marks

Three justification points for processor and memory selection --- 01 mark each

Q1b) Explain suitability of RISC architecture for embedded system. –04 marks

Any four points of RISC architecture to prove suitability for embedded system –01 mark each

OR

Q2a) What are embedded system design challenges? --06 marks

Any six design challenges—01 mark each

Q2b) How embedded C programming is different than ANSI C programming? –04 marks

Any four differentiating points—01 mark each

Q3a) Compare coarse and fine granularity in application design with merit and demerits –06 marks

Any four point of merit and demerit of coarse and fine granularity—1.5 marks for each

Q3b) What is basis of architecture classification? Illustrate example of SIMD architecture.—04 marks

Architecture classification –02 marks ; explanation of SIMD architecture example –02 mark

OR

Q4) Illustrate instruction level parallelism and explain any two applications of parallel processing.-10 marks

Explanation of ILP—04marks and two applications of parallel processing—03 mark each