

People's Education Society's
Dr.Ambedkar College of Commerce & Economics, Wadala , Mumbai – 400 031
S.Y.B.Sc. (IT) Fourth Semester Examination April 2016
Sub: Embedded Systems

Date: 11/04/2016

Marks: 75

Times: 2 ½ hrs.

N.B.

Draw neat diagrams wherever necessary.

Attempt any two from Q.1 to Q.6

Attempt any three from Q.7

- Q.1**
- A) What are embedded system and its types? (05)**
 - B) Classify embedded system based on generation. (05)**
 - C) Classify embedded system based on performance. (05)**
 - D) Give some application and purpose of embedded systems. (05)**
- Q.2**
- A) What are core components of embedded system? (05)**
 - B) Write short note on Von Neumann architecture. (05)**
 - B) Write short note on Big-Endian processors. (05)**
 - D) Write short note on PLD. (05)**
- Q.3**
- A) Explain PCB. (05)**
 - B) Write short note on Reset circuit? (05)**
 - B) Write Short note on Sensors. (05)**
 - D) Write Short note on seven segment display (05)**
- Q.4**
- A) What are different types of communication interface? (05)**
 - B) Explain I2C bus. (05)**
 - C) Explain USB. (05)**
 - D) Write Short note on Wi-Fi. (05)**
- Q.5**
- A) Explain Reactive and Real time characteristics of embedded systems. (05)**
 - B) Explain size, weight and power concern of embedded systems. (05)**
 - B) What is non-operational quality attributes of embedded systems? (05)**
 - D) Explain Automotive cars as application specific embedded system. (05)**
- Q.6**
- A) Write short note on Components of RTOS. (05)**
 - B) Write short note on embedded product development. (05)**
 - B) Write Short note on pre-emptive priority based scheduling. (05)**
 - D) Write short note on simulators. (05)**
- Q.7**
- A) Write short note on watch dog timers. (05)**
 - B) Write short on blue tooth. (05)**
 - B) Explain design phase in product development (05)**
 - D) Explain washing machine as application specific embedded system. (05)**
 - E) (05)**
 - F) Embedded system integrated development environment – IDE (05)**
 - Types of file generated on cross compilation. (05)**
