

(3 Hours)

Total Marks-80

N.B.: 1. Question No: 1 is compulsory.**2. Solve any three questions out of remaining questions.****3. Assume Suitable data where necessary.**

- Q 1]** a) Define system bus and explain its types. **05M**
 b) Define serial port. **05M**
 c) Define the following terms:- **05M**
 i) Register ii) Memory devices
 d) Explain features of Pulse Width Modulator. **05M**
- Q 2]** a) Draw and explain the block diagram of Embedded Systems. **10M**
 b) Write short notes on Code Warrior IDE. **10M**
- Q 3]** a) Explain any two Serial communication protocols. **10M**
 b) Explain modes of operation of MC9S12XD. **10M**
- Q 4]** a) Draw and explain functional block diagram of MC9S12XD. **10M**
 b) Write a short note on Serial Communication Interface. **10M**
- Q 5]** a) Explain in brief X by Wire Technology and also explain Steer by wire and power by wire with suitable example each. **10M**
 b) Explain in detail the features of MC9S12XD. **10M**
- Q 6]** a) Explain Power window with focus on embedded technology. **10M**
 b) Explain in brief any one Embedded Automotive Protocol. **10M**
