

M. Tech.-III (Electronics V.L.S.I.) (CBCS – 2015 Course) :

WINTER - 2018

SUBJECT : SELF STUDY PAPER – I IN-VEHICLE NETWORKING

Day : Saturday
Date : 08/12/2018

W-2018-3218

Time : 11.00 AM TO 02.00 PM
Max. Marks : 60

N. B. :

- 1) All questions are **COMPULSORY**.
 - 2) Answers to both the sections should be written in **SEPARATE** answer books.
 - 3) Figures to the right indicate **FULL** marks.
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SECTION - I

Q.1 What is networking? What is the need of networking inside the vehicle? Give (10) example.

OR

What is the need of data communication inside a vehicle? Which layers of OSI reference model play important role for communication?

Q.2 What is meant by TCP? Explain in detail. How is it different from UDP? (10)

OR

What is internet protocol? Explain in detail.

Q.3 What are the CAN frame works? Why CAN is message oriented protocol? (10)

OR

Explain in detail CANopen standard.

SECTION - II

Q.4 What is LIN protocol? Explain the general layout of LIN bus. (10)

OR

Discuss the LIN frame format in detail.

Q.5 Explain the FlexRay protocol. (10)

OR

Compare LIN, FlexRay, CAN.

Q.6 What is GPS? With suitable example explain how it is used in military (10) applications.

OR

What are the different cellular technologies? Explain. (10)

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