

Dr. Vivek Sehgal (IT)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2016

B.Tech Summer Semester

COURSE CODE: 15B1WCI832

MAX. MARKS: 50

COURSE NAME: Internet of Things Architecture and Design

COURSE CREDITS: 03

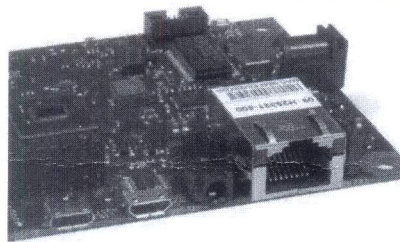
MAX. TIME: 2 HRS

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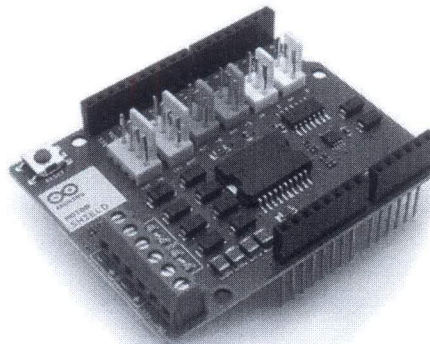
*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Each question carries equal marks.*

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1. Explain the five layers of Internet of Things with smart feedback system.
2. (a) How will you configure the Intel Galileo as a Linux server?  
(b) Write the script to enable the Ethernet port.



3. How will you interface the following Motor Shield with INTEL Galileo Gen 2 board?



- a. Draw the full interface schematic for PWM control with INTEL Galileo Gen 2 board. Explain the interface with script.
- b. Write script for:
  - i. # disable pins 12 & 9 just in case
  - ii. # enable pins 12 & 9

- iii. # we are going to send info on these pins
  - iv. # brake on channel A is off
  - v. # moving forward on channel A
  - vi. echo -n "1" > /sys/class/gpio/gpio12/value
4. Draw the full schematic of INTEL Galileo Gen 2. Explain the following components on this development board:
- a. Processors and IO
  - b. Storage and IO
  - c. USB
  - d. Network
5. Write the various steps to interface the PCI Wi-Fi with INTEL Galileo Gen 2

