BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Registration No.: .....

School of Computing Skills

Session: 2019-20 (Summer)

B. Voc. Program, 5th Semester,

IInd In-Sem. Examination

ITN1504 Internet of Thing (IoT)

Time: 1 Hour

Max. Marks: 20

Instruction: Attempt all questions

Section – A

05X01 = 05 Mark

Q1. 2. What is the microcontroller used in Arduino UNO?
a) ATmega328p
b) ATmega2560
c) ATmega32114
d) AT91SAM3x8E

Q2. Does the level shifter converts the voltage levels between RS-232 and transistor-transistor logic.
a) True
b) False

Q3. Do Arduino provides IDE Environment?
a) True
b) False

Q4. A program written with the IDE for Arduino is called _____
a) IDE source
b) Sketch
c) Cryptography
d) Source code

Q5. Arduino IDE consists of 2 functions. What are they?
a) Build() and loop()
b) Setup() and build()
c) Setup() and loop()
d) Loop() and build() and setup()

Section – B

03X02 = 06 Marks

Q1. What are the main functions of SIM808 chip from Simcom?

Q2. What are sensors and what are they used for?

Q3. What is ESP8266 and what are it's uses?

Section – C

03X03 = 09 Marks

Q1. How many digital pins and other type of connectivity are there on the UNO board?

Q2. Write down five main applications of IOT.

Q3. Write small program to make digital pins 7 and 8 of Arduino Uno high.

Answer Key

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Semester- 1, IInd In-Sem Examination(Ans Key Set B)

B. Voc. Program, Summer (2019-20)

ITN 1504

IOT

Time: 1 Hour

Max. Marks: 20

Section - A

A1. c

A2. a

A3. a

A4. d

A5. a

Section – B

A6. The main functions of SIM808 chip is providing GSM quad band connectivity and GPS location. The chip is manufactured by Simcom and the boards made using this chip are available in the market. The boards are connected to a micro controller like Arduino to get the GPS data and to send it to internet using GSM connectivity.

A7. Sensors are transducers. They convert one type of energy into different type of energy mainly electrical. Sensors are used for monitoring various parameters such as temp, pressure, speed, humidity and weight etc. In IOT system we use these sensors to monitor the environment parameters and take suitable actions based on the sensor inputs.

A8. ESP8266 is WiFi module. It is connected with a micro controller like Arduino to get connected to internet using the WiFi connection.

Section – C

A9. It has 14 digital pins input/output pins of which 6 can be used as PWM output, 6 analog inputs, a USB connection, a power jack, a reset button and more.

A10.

- Wearables
- Smart City

- Smart Grids
- Industrial Internet
- Connected Car
- Connected Health (Digital Health/Telehealth/Telemedicine)

A11.

```
void setup() {
  pinMode(2, OUTPUT);    // sets the digital pin 2 as output
pinMode(3, OUTPUT);    // sets the digital pin 3 as output

}

void loop() {
  digitalWrite(2, LOW); // sets the digital pin 13 on
  delay(1000);            // waits for a second
  digitalWrite(3, LOW);  // sets the digital pin 13 off
  delay(1000);            // waits for a second
}
```