PURCHASE ORDER

Reference No:	**TEQIP-III/2018/duie/Shopping/16**
Date of Issue:	**11-Jun-2018**
Subject:	**DUIET/TEQIP7/CSE/ROBOTICS_1**

Purchaser:
Technology, Dibrugarh

Dibrugarh University Institute of Engineering &

Dibrugarh University, Dibrugarh, Assam- 786004.

Supplier Name:

FUSION SYSTEMS

FLAT NO.C-5, MAHALAXMI APARTMENT, ABC, G.S ROAD, BEHIND RAJIBBHAVAN, GUWAHATI - 781005, ASSAM., Guwahati, Assam, 781005

With reference to our correspondence, **Dibrugarh University Institute of Engineering & Technology, Dibrugarh** is pleased to award this detailed Purchase Order to **FUSION SYSTEMS** for supply of items as per the details given below at a total cost of **961480.00 (Nine lakhs sixty one thousand four hundred eighty only):**

Sr. No	Item Name	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)	Delivery Period
1	3D Depth Sensor	1	30900	30900	20
2	4WD Arduino Mobile Robot Kit with Bluetooth 4.0	1	15500	15500	30
3	Accelerometer	5	1490	7450	20

4	Arduino Uno Development kit	1	8800	8800	20
5	Biogripp Robotic Hand (3D print)	1	229000	229000	20
6	DC Geared Motor with Encoder	4	2600	10400	20
7	Jumper Wires	3	365	1095	20
8	Laser Scanner	1	59900	59900	20
9	LiPo Batteries & balance chargers	2	16400	32800	20
10	Lynxmotion BotBoarduino Shield-Compatible Robot Controller	2	7500	15000	20
11	NiMH / NiCd Smart Charger	1	4500	4500	20
12	NiMH Battery	2	7990	15980	20
13	PCB boards	10	190	1900	20
14	Piezoresistive Tactile Sensors	4	13800	55200	20
15	PKE 7 In 1 Yellow Soldering Iron Tool Kit With Connectivity And Components Tester	2	990	1980	20
16	Position Sensor	1	13800	13800	20
17	Pressure Sensor Kit	1	52500	52500	20
18	Raspberry Pi 3 Learning and Development Kit	1	9990	9990	20
19	Turtle Bot 2	1	349000	349000	20

Total price (without taxes)   :   Rs. **915695.00**

Total applicable taxes   :   5 %

Total price (with taxes)   :   Rs. **961480.00**

Total Octroi   :   Rs.

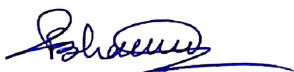| Delivery	:	**Dibrugarh University Institute of Engineering & Technology, Dibrugarh**
Testing/Installation Clause (if any)	:	**Yes**
Training Clause (if any)	:	**Yes**
Technical Specifications	:	As per Annexure - 1
Delivery Period	:	As specified for each item from date of issue of confirmed purchase order or as early as possible.
Warranty	:	**36**
Payment Terms	:	

Delivery and Installation - 100% of total cost
Satisfactory Acceptance - 0% of total cost

For

Dibrugarh University Institute of Engineering & Technology, Dibrugarh

(Authorized Signatory)

Name & Designation

Director
Dibrugarh University Institute of
Engineering & Technology
Dibrugarh University
Dibrugarh-786004, Assam (INDIA)

Accepted by:

Signature

Date

Address

Annexure I

Sr. No	Item Name	Specifications
1	3D Depth Sensor	Microsoft Kinect Sensor for Xbox One + Kinect Adapter for Windows/PC
2	4WD Arduino Mobile Robot Kit with Bluetooth 4.0	Microcontroller: Romeo BLE Controller Operating Voltage: 5V Ultrasonic Sensor Detecting range: 5cm-500cm Rotation range: 0 - 180 Power Supply: 7.5 ~ 12V DC Speed: 90cm/s Dimensions: 200mm x 170mm x 105mm (7.9x 6.7x 4.1 in) Weight: 1020g
3	Accelerometer	SparkFun Triple Axis Accelerometer Breakout - ADXL345 Range: ±2, 4, 8, 16g Interface: SPI and I2C Power Requirements: 2.0- 3.6V, 40-145µA
4	Arduino Uno Development kit	1 Arduino / Genuino Uno, 1 USB cable, 1 Breadboard 400 points, 70 Solid core jumper wires, 1 Easy-to- assemble wooden base, 1 9v battery snap, 1 Stranded jumper wires (black), 1 Stranded jumper wires (red), 6 Phototransistor, 3 Potentiometer 10kOhms, 10 Pushbuttons, 1 Temperature sensor [TMP36], 1 Tilt sensor, 1 alphanumeric LCD (16x2 characters), 1 LED (bright white), 1 LED (RGB), 8 LEDs (red), 8 LEDs (green), 8 LEDs (yellow), 3 LEDs (blue), 1 Small DC motor 6/9V, 1 Small servo motor, 1 Piezo capsule [PKM17EPP-4001-B0], 1 H- bridge motor driver [L293D], 1 Optocouplers [4N35], 2 Mosfet transistors [IRF520], 5 Capacitors 100uF, 5 Diodes [1N4007], 3 Transparent gels (red, green, blue), 1 Male pins strip (40x1), 20 Resistors 220 Ohms, 5 Resistors 560 Ohms, 5 Resistors 1 kOhms, 5 Resistors 4.7 kOhms, 20 Resistors 10 kOhms, 5 Resistors 1 MOhms, 5 Resistors 10 MOhms
5	Biogripp Robotic Hand (3D print)	3D print Robotic Hand
6	DC Geared Motor with Encoder	185RPM 8N.cm 12V SPG30E- 20K
7	Jumper Wires	Male to Male, male to female, female to female, 120 Pieces

8	Laser Scanner	RPLIDAR A2 360° Laser scanner
9	LiPo Batteries & balance chargers	(10000 mAh) battery + 6-12 volts charger
10	Lynxmotion BotBoarduino Shield-Compatible Robot Controller	Arduino Duemilanove compatible microcontroller
11	NiMH / NiCd Smart Charger	6V - 12V charger
12	NiMH Battery	6V, 2800mAh
13	PCB boards	General Purpose + Female Berg Strips + Male Berg Strips
14	Piezoresistive Tactile Sensors	Tekscan FlexiForce A201 Sensor
15	PKE 7 In 1 Yellow Soldering Iron Tool Kit With Connectivity And Components Tester	25W High Quality Soldering Iron, Soldering Stand and Wire Cutter & Stripper, Battery ,Transparent Desolder Pump, Soldering Flux Paste and Desolder Wick, Aluminium Soldering Wire 1mm 50gm Roll*2
16	Position Sensor	Tekscan FlexiPot Strip Position Sensor (pack of 4)
17	Pressure Sensor Kit	Tekscan FlexiForce OEM Development Kit (FlexiForce OEM Development Board + FlexiForce A201 Sensors) Flash Drive with Open- Source Code + USB A-B Cable)
18	Raspberry Pi 3 Learning and Development Kit	Raspberry Pi 3 - Model B - 1 No. 16 GB Micro SD Card with pre-installed NOOBS – 1 No. Raspberry Pi Wedge B+ - 1 No. Robo India FTDI Basic Breakout - 3.3V – 1 No. Cloured Breadboard MB 102 – 1 No. Acrylic breadboard holder – 1 No. Raspberry Transparent case – 1 No. HDMI Cable – 1 No. Wall Adapter Power Supply - 5V DC 2A – 1 No. Micro USB Cable – 1 No. USB Cable A to B type - 1 No. Micro SD card adaptor – 1 No. Raspberry Pi GPIO Ribbon Cable - 40-pin 13" – 1 No. Tactile Switch – 5 No. Red, Yellow, and Green LEDs – 5 Each Resistor 330 Ohm (PTH) - 20 Nos. Jumper Wires Premium M/F – 10 Nos. Jumper Wires Premium M/M - 10 Nos.
19	Turtle Bot 2	Robot Platform (with 3D sensor + NUC i5 controller + Europa CEE 7/16 power cods + 4400 mAh additional battery + docking station + 500 GB HDD extra NUC disc + Assembly & configuration)