

From

Mr.A.AMARNATH PRABHAKARAN,
Assistant Professor/BME.
Nandha Engineering College (Autonomous),
Erode.

To

The Principal,
Nandha Engineering College (Autonomous),
Erode.

Respected Sir,

Sub: Requesting permission to conduct Value added course-Reg

As per the Autonomous regulations, the Department of Biomedical Engineering have planned to conduct Value added course for II year BME students. The Value added course will be handled by the Prashan Medical Technologies, Coimbatore on the title "17BMI02 – "Medical Equipment & it's Calibration" on 12.11.2022 & 13.11.2022 at Block - 3 Human Physiology Lab. The assessment for the same is tentatively planned on 13.11.2022 (AN). So I kindly request you to give permission to conduct the course.

Thanking you,

(34 students)

[Signature]
Yours Faithfully,
(A. Amarnath Prabhakaran)

10
OK
11/11/2022

Place:NEC

Date: 08.10.2022

[Signature]
HOD/BME

NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)

Namelist

Degree: B.E
Branch/SEM : BIOMEDICAL III
Subject Type : VALUE ADDED COURSE
Subject Code : 17BM102
Subject Title: MEDICAL EQUIPMENT AND ITS CALIBRATION

S. No.	Reg No.	Name
1	21BM001	AAKASH R
2	21BM002	ABISHEK T
3	21BM003	AKALYA K
4	21BM004	ARUL M
5	21BM005	BHARATHI K
6	21BM006	BHAVANAPRAVANTHIKA S
7	21BM007	BHUVANESWARI M
8	21BM008	BRIGHTON DANIEL R J
9	21BM009	DEVAPRASATH M
10	21BM010	DHANUSHMATHI S
11	21BM011	DHARANEESH S
12	21BM012	DHARANI K
13	21BM013	DIVYA S
14	21BM014	GAYATHRI P
15	21BM015	HARIHARAN B
16	21BM016	KOWSALYA K
17	21BM017	MAHARAJA N
18	21BM018	MANIKANDAN S
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M
20	21BM020	MOHAMED HUSSAIN S
21	21BM021	POORANI S
22	21BM022	RAMANIKA K
23	21BM023	ROJA M
24	21BM024	SANJAY KUMAR C
25	21BM025	SANJAY KUMAR N
26	21BM026	SANTHOSH N
27	21BM027	SRIKANTH R
28	21BM028	SUDALAIKUMAR P
29	21BM029	SUGANYA R
30	21BM030	SUSVINTH S
31	21BM031	VISHNU R
32	21BM032	WAHITHA BEGUM M
33	21BM033	YASAR ALI A
34	21BML01	SUREN S

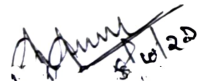

 (Arunachal Prabhakaran)


 HOD



NANDHA ENGINEERING COLLEGE,(Autonomous)
DEPARTMENT OF BME
ACADEMIC YEAR(2022-2023) ODD SEM
VALUE ADDED COURSE SCHEDULE

S.No	Year/Sem	Course code	Course Name	Course Conduct date	Registered count	Exam date	Company Name& Contact Person
1	II/3	17BMI02	MEDICAL EQUIPMENT AND IT'S CALIBRATION	12.11.2022&13.11.2022	34	13.11.2022	Prashan Medical Technologies, Coimbatore & Boopathi Sakthivel - Biomedical Engineer


(A. Ananth Prabhakaran)


HOD/BME


11/10/22
PRINCIPAL

B.E. BIOMEDICAL ENGINEERING
MEDICAL EQUIPMENTS TROUBLESHOOTING & CALIBRATION

COURSE OUTCOME

On successful completion of the course, students will be able to Integrate on clinical and technical application of critical care products, anaesthesia.

PATIENT MONITORING SYSTEMS

(4Hours)

Application of ECG, SPO₂, NIBP, IBP, Temp, Respiration, Cardiac Output, Etco₂, BIS - Function of each module used in the patient monitors - ECG methods & Lead wire systems - Different Arrhythmia – Cardiac output methods - Spo₂ technology- Etco₂(Main stream, side stream, Micro stream) measurement and types.

ICU VENTILATOR & ANESTHESIA WORKSTATION OVERVIEW

(3Hours)

Respiratory breathing System - Different Blocks of Ventilator - Modes of ventilation (Pressure & Volume) - Simulation demonstration on Ventilator on all modes - Purpose of ICU ventilator & Anesthesia workstation.

CRITICALCARE EQUIPMENTS TECHNICAL & APPLICATION

(3+2+2=7Hours)

SYRINGE & INFUSION PUMP: Different blocks - modes of syringe pump - bolus - purge- Volume, Time & Flow - Internal Parts of Syringe pump.

DIATHERMY: Basics blocks of Diathermy- Monopolar & Bi-polar modes - Internal blocks of Diathermy.

CPAP & BIPAP: Basic Blocks of CPAP & its purpose - Internal parts of CPAP.

ROLE OF BIOMEDICAL ENGINEERS IN CRITICAL CARE

(1Hour)

Know the technology- Easy Handling - Troubleshooting - Maintenance - Calibration – MIS.

(Total Hours: 15)

REFERENCES

1. Joseph J Carr. John M Brown, "Introduction to Biomedical Equipment Technology", Pearson Education, New Delhi, 2011.
2. Fred A Mettler Jr, Milton J Guiberteau, "Essentials of Nuclear Medicine Imaging", Elsevier, 5th Edition, 2006
3. Rüdiger Kramme, Klaus-Peter Hoffmann, Robert S. Pozos (Eds.), "Handbook of Medical Technology". Springer, 2011

To

The Head of Department

Nandha Engineering College

Erode

Ref No: QT/PMT/017/22-23

Date : 10.10.2022

Subject: Quotation toward Value added course

Dear Sir,

Greetings from Prashan Medical Technologies!!!

Kindly find the below quotation

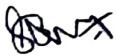
your reference.

SR No	Product Description	Unit Price	No of unit	Price in INR
1	Value added course on "Medical Equipment Calibration & Troubleshooting"	12,712	1	12,712
Sub Total				12,712
GST @18% (CGST9% + SGST9%)				2288.16
Total(Rupees fifteen thousand only)				15,000

TERMS & CONDITIONS:

1. Tax : GST @18% Extra Included
2. Validity: This offer is valid for 1 weeks from the date of contract.

We assure you our best services.



Boopathi Sakthivel
Founder, CEO & Biomedical Engineer
Prashan Medical Technologies
Mobile: +91 8883774112



NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)
ATTENDANCE SHEET

Degree: **B.E**
Branch/SEM: **BIOMEDICAL III**
Subject Type: **VALUE ADDED COURSE**
Subject Code: **17BM102**
Subject Title: **MEDICAL EQUIPMENT and ITS CALIBRATION**

DATE: 03.12.2022

S. No.	Reg No.	Name	FN	AN
1	21BM001	AAKASH R	Aakash R	Aakash R
2	21BM002	ABISHEK T	T. Abishek K. Akalya	T. Abishek K. Akalya
3	21BM003	AKALYA K		
4	21BM004	ARUL M	M. Arul	Arul. M
5	21BM005	BHARATHI K	K. B	K. B
6	21BM006	BHAVANAPRAVANTHIKA S	S. Princy	S. Princy
7	21BM007	BHUVANESWARI M	M. Dhruv	M. Dhruv
8	21BM008	BRIGHTON DANIEL R J	Daniel	Daniel
9	21BM009	DEVAPRASATH M	M. Devaprath	M. Devaprath
10	21BM010	DHANUSHMATHI S	S. Dhruv	S. Dhruv
11	21BM011	DHARANEESH S	S. Dhruv	S. Dhruv
12	21BM012	DHARANI K	K. Dhruv	K. Dhruv
13	21BM013	DIVYA S	S. Divya	S. Divya
14	21BM014	GAYATHRI P	P. Gayathri	P. Gayathri
15	21BM015	HARIHARAN B	B. Hariharan	B. Hariharan
16	21BM016	KOWSALYA K	K. Kowshalya	K. Kowshalya
17	21BM017	MAHARAJA N	N. Mahiraj	N. Mahiraj
18	21BM018	MANIKANDAN S	S. Manikandan	S. Manikandan
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M	M. Sidik	M. Sidik
20	21BM020	MOHAMED HUSSAIN S	S. Mohamed Hussain	S. Mohamed Hussain
21	21BM021	POORANI S	S. Poorani	S. Poorani
22	21BM022	RAMANIKA K	K. Ramani	K. Ramani

23	21BM023	ROJA M	R.j.a.m	R.j.a.m.
24	21BM024	SANJAY KUMAR C	C. Sanjay	C. Sanjay
25	21BM025	SANJAY KUMAR N	Sanjaykumar N	N. sanjaykumar
26	21BM026	SANTHOSH N	AB	AB
27	21BM027	SRIKANTH R	← Discontinued →	
28	21BM028	SUDALAIKUMAR P	P. S. S.	P. S. S.
29	21BM029	SUGANYA R	R. Suganya	R. suganya.
30	21BM030	SUSVINTH S	S. S. S.	S. S. S.
31	21BM031	VISHNU R	R. Vishnu	R. Vishnu
32	21BM032	WAHITHA BEGUM M	M. Wahitha Begum	M. Wahitha Begum
33	21BM033	YASAR ALI A	A. Y. A.	A. Y. A.
34	21BML01	SURENDER C	← DPS continued →	

DATE: 03/12/22




INDUSTRY EXPERT



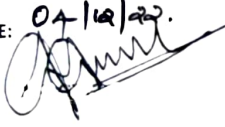
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ATTENDANCE SHEET

Degree: B.E
Branch/SEM : BIOMEDICAL III
Subject Type : VALUE ADDED COURSE
Subject Code : 17BM102
Subject Title: MEDICAL EQUIPMENT and ITS CALIBRATION

DATE: 04.12.2022

S. No.	Reg No.	Name	FN	AN
1	21BM001	AAKASH R	Aakash. R	Aakash. R
2	21BM002	ABISHEK T	T. Abishek	T. Abishek
3	21BM003	AKALYA K	K. Akalya	K. Akalya
4	21BM004	ARUL M	Arul. m	Arul. m
5	21BM005	BHARATHI K	K. Bhanthi	K. Bhanthi
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10	21BM010	DHANUSHMATHI S	S. Dhani	S. Dhani
11	21BM011	DHARANEESH S	S. Dhani	S. Dhani
12	21BM012	DHARANI K	K. Dhani	K. Dhani
13	21BM013	DIVYA S	S. Dani	S. Dani
14	21BM014	GAYATHRI P	P. Dani	P. Dani
15	21BM015	HARIHARAN B	B. Hariharan	B. Hariharan
16	21BM016	KOWSALYA K	K. Hari	K. Hari
17	21BM017	MAHARAJA N	N. Hari	N. Hari
18	21BM018	MANIKANDAN S	S. Manikandan	S. Manikandan
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M	M. Sidik	M. Sidik
20	21BM020	MOHAMED HUSSAIN S	S. Mohamed Hussain	S. Mohamed Hussain
21	21BM021	POORANI S	S. Poorani	S. Poorani
22	21BM022	RAMANIKA K	K. Poorani	K. Poorani

23	21BM023	ROJA M	Roya.m	Roya.m.
24	21BM024	SANJAY KUMAR C	C. Sanjay	C. Sanjay
25	21BM025	SANJAY KUMAR N	AB	AB.
26	21BM026	SANTHOSH N	As	As
27	21BM027	SRIKANTH R	← Discontinued →	← Discontinued →
28	21BM028	SUDALAIKUMAR P	P. S. S.	P. S. S.
29	21BM029	SUGANYA R	R. Suganya	R. Suganya
30	21BM030	SUSVINTH S	S. S. S.	S. S. S.
31	21BM031	VISHNU R	R. Vishnu.	R. Vishnu.
32	21BM032	WAHITHA BEGUM M	M. Wahitha Begum	M. Wahitha Begum
33	21BM033	YASAR ALI A	A. Yasar Ali	A. Yasar Ali
34	21BML01	SURENDER C	← Discontinued →	← Discontinued →

DATE: 04/10/20.



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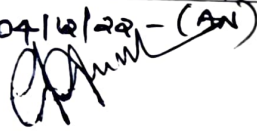


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SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)
EXAM ATTENDANCE SHEET

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21	21BM021	POORANI S	S. Poorani
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25	21BM025	SANJAY KUMAR N	AB
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29	21BM029	SUGANYA R	R. Suganya .
30	21BM030	SUSVINTH S	S. S. S.
31	21BM031	VISHNU R	R. Vishnu
32	21BM032	WAHITHA BEGUM M	M. Wahitha Begum
33	21BM033	YASAR ALI A	A. Y. A.
34	21BML01	SURENDER C	AB .

DATE: 04/10/22 - (AN)



INDUSTRY EXPERT





NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)
Degree: BE/B.Tech/M.E/MCA/MBA
Namelist - Mark Sheet

DATE : 04/12/2022

Branch		BIOMEDICAL ENGINEERING		
Elective Subject Type		VALUE ADDED COURSE		
Elective Subject Code		17BM102		
Elective Subject Title		MEDICAL EQUIPMENT AND ITS CALIBRATION		
S.No	Reg. No	Student Name	MARKS (50)	MARKS IN WORDS
1	21BM001	AAKASH R	27	TWO SEVEN.
2	21BM002	ABISHEK T	43	FOUR THREE
3	21BM003	AKALYA K	38	THREE EIGHT
4	21BM004	ARUL M	36	THREE SIX
5	21BM005	BHARATHI K	35	THREE FIVE
6	21BM006	BHAVANAPRAVANTHIKA S	39	THREE NINE
7	21BM007	BHUVANESWARI M	42	FOUR TWO
8	21BM008	BRIGHTON DANIEL R J	42	FOUR TWO
9	21BM009	DEVAPRASATH M	46	FOUR SIX
10	21BM010	DHANUSHMATHI S	35	THREE FIVE
11	21BM011	DHARANEESH S	35	THREE FIVE
12	21BM012	DHARANI K	39	THREE NINE
13	21BM013	DIVYA S	39	THREE NINE
14	21BM014	GAYATHRI P	39	THREE NINE
15	21BM015	HARIHARAN B	37	THREE SEVEN
16	21BM016	KOWSALYA K	45	FOUR FIVE
17	21BM017	MAHARAJA N	36	THREE SIX
18	21BM018	MANIKANDAN S	40	FOUR ZERO
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M	42	FOUR TWO
20	21BM020	MOHAMED HUSSAIN S	39	THREE NINE
21	21BM021	POORANI S	37	THREE SEVEN
22	21BM022	RAMANIKA K	43	FOUR THREE
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25	21BM025	SANJAY KUMAR N	AB	-
26	21BM026	SANTHOSH N	AB	-

	21BM027	SRIKANTH R	AB	
28	21BM028	SUDALAIKUMAR P	39	THREE NINE
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30	21BM030	SUSVINTH S	36	THREE SIX
31	21BM031	VISHNU R	46	FOUR SIX
32	21BM032	WAHITHA BEGUM M	41	FOUR ONE
33	21BM033	YASAR ALI A	40	FOUR ZERO
34	21BML01	SURENDER C	AB	

[Handwritten Signature]
02/10/22

INDUSTRY CO-ORDINATOR



OBJECTIVE TEST

VALUE ADDED COURSE ON BIOMEDICAL EQUIPMENTS AND ITS CALIBRATION

1. On an average, a person can live without oxygen for how many minutes?
1) 3minutes
2) 4minutes
3) 5minutes
4) 6minutes
2. What is CPR..?
1) Cardia output
2) cardio pulmonary resuscitation
3) Cardia activity
4) cardiac conductio,
3. Fuel for our body is...?
1) Oxygen
2) Glucose
3) Oxygen & Glucose
4) None of the above
4. How does every single cell in your body receives this fuel?
1) Respiratory System
2) Nervous system
3) circulatory system
4) All the above
5. How many valves heart have..?
1) 2 Valves
2) 3 Valves
3) 4 Valves
4) 5 Valves
6. How many valves heart have..?
1) 2 Valves
2) 3 Valves
3) 4 Valves
4) 5 Valves
7. Oxygenated blood can be carried by...?
1) Veins
2) Arteries
3) None of the above
4) All the above
8. Name the valve which is there between right atrium and right ventricle...?
1) Tricuspid valve
2) Bicuspid valve
3) Pulmonary valve
4) Aortic valve
9. ECG Stands for...?
1) Electrocardiogram
2) Electro cardiac output
3) Electromyograph
4) None of the above
10. Why do we require ECG...?
1) Suspected heart attack
2) Pulmonary embplism
3) Fainting and collapse
4) All the above
11. The event of cardiac conduction system is...?
1) PQRS complex
2) QRS
3) PR segment
4) ST segment
12. The heart rate more than 100bpm is called...?
1) Arrythmia
2) Bradycardia
3) Tachycardia
4) Normal sinus rhythm



- 13 The formation of QRS complex due to following activity ?
 1) Atrial depolarisation
 2) Ventricular depolarisation
 3) Ventricular repolarisation
 4) None of the above
- 14 How many lead systems available in ECG ?
 1) 3Lead
 2) 7Lead
 3) 12Lead
 4) All the above
- 15 Name some limb leads in the following ?
 1) Lead I
 2) aVL
 3) V1
 4) aVR
- 16 What are the rules used to calculate heart rate ?
 1) 300 rule
 2) 1500 rule
 3) 10sec rule
 4) All the above
- 17 The device used to check/identify cardiac arrest is..?
 1) CATH Lab
 2) Patient monitor
 3) ECG machine
 4) Syringe Pump
- 18 HRV Stands for..?
 1) Heart rate variability
 2) Heart respiration variability
 3) Heart response variability
 4) All the above
- 19 The purpose of using pacemaker is..?
 1) to control respiration rate
 2) to monitor the cardiac conduction
 3) to help control abnormal heart rhythms
 4) to help clearing CO2
- 20 What kind of electrodes used in internal defibrillator..?
 1) Catheter
 2) Spoon electrode
 3) eyelid electrode
 4) paddle electrode
- 21 Which mode of defibrillation consumes more current..?
 1) Biphasic
 2) Monophasic
 3) Monophasic & Biphasic
 4) None of the above
- 22 Respiration rate can be measured by..?
 1) Counting breath per minute
 2) ECG
 3) Capnography
 4) All the above
- 23 What is the typical respiration rate?
 1) 5-10bpm
 2) 7-10bpm
 3) 12-16bpm
 4) 20-30bpm
- 24 What is the normal blood pressure level (systolic/diastolic)?
 1) 120/80 mmHg
 2) 80/120 mmHg
 3) 100/200 mmHg
 4) 150/200 mmHg
- 25 I&B stands for..?
 1) Intermittent blood pressure
 2) Invasive blood pressure
 3) Incorrect blood pressure
 4) Immediate blood pressure





26. ICP stands for..?
1) Intra cranial blood pressure
3) Intra duct blood pressure
2) Invasive blood pressure
4) Intra duct blood pressure
27. Purpose of SpO₂ to check..?
1) Oxygen percentage in blood
3) Heart rate
2) Oxygen partial pressure in blood
4) Respiration rate
28. Which light absorbs oxygenated hemoglobin...?
1) Red light
3) Laser light
2) Infrared light
4) None of the above
29. Volume of blood pumped by the heart (RV/LV) per unit time....?
1) Heart rate
3) Stroke Volume
2) Cardiac output
4) Respiration rate
30. Etco₂ stands for....?
1) End Tidal Co₂
3) Expected Tidal Co₂
2) End time Co₂
4) None of the above
31. Etco₂ stands for....?
1) End Tidal Co₂
3) Expected Tidal Co₂
2) End time Co₂
4) None of the above
32. What kind of motor used in syringe pump and infusion pump..?
1) Servo motor
3) DC motor
2) AC motor
4) Stepper motor
33. KVO Stands for..?
1) Keep Vector Open
3) Keep Vein Oscillate
2) Keep Vein Open
4) None of the above
34. What kind of battery used in syringe pump
1) Lead Acid
3) Ni-Cd
2) Lithium Ion
4) None of the above
35. Flow rate can be set in syringe and infusion pump as..?
1) ml/min
3) ml/hr
2) ml/sec
4) None of the above
36. Purpose of purge in syringe pump is used for..?
1) to remove air bubbles
3) to increase the flow
2) to warm the infusion
4) None of the above
37. Sudden pause in the breathing is called..?
1) Apnea
3) hypoxmia
2) respiration pause
4) Anemia
38. CPAP stands for..?
1) Continuous Positive Airway Pressure
3) Chronic Positive Airway Problem
2) Contact Positive Airway Pressure
4) None of the above



39. CPAP stands for...?
 1) Bifunctional Airway pressure
 2) Bifunctional Position airway pressure
 3) Inlevel Positive Airway Pressure
 4) All the above
40. What is the maximum syringe size can be used in syringe pump...?
 1) 50ml
 2) 100ml
 3) 150ml
 4) 200ml
41. Defibrillator can be used in...?
 1) Ambulance
 2) ICU
 3) Operation theatre
 4) All the above
42. OxyCBG stands for...?
 1) Oxycardio Respirogram
 2) Oxycardiac resonance
 3) Operational cardiac respiration
 4) None of the above
43. Purpose of humidifier in the CPAP/Bi-RAP is to...?
 1) To maintain/regulate the humidity
 2) To increase the flow
 3) To reduce the flow
 4) To reduce the pressure
44. What kind of mechanism used in Infusion pump...?
 1) Piston pump
 2) Linear actuating
 3) Curvilinear Peristaltic
 4) None of the above
45. Amount of blood pumped out by heart each beat is called...?
 1) Stroke volume
 2) Cardiac output
 3) Etco2
 4) Respiration
46. Types of Etco2...?
 1) Main Stream
 2) Side Stream
 3) Microstream
 4) All the above
47. What parameter indicates the amount oxygen level in brain
 1) Intracranial Pressure
 2) Intracardiac pressure
 3) Atrial Pressure
 4) Bispectral Index
48. Unit used in surgical defibrillator is...?
 1) Joules
 2) Resistance
 3) Watts
 4) All the above
49. What is myocardial infarction...?
 1) cardiac arrest
 2) Heart attack
 3) Blockage on the coronary artery
 4) All the above
50. What is the purpose of calibration...?
 1) To check accuracy & performance of the device
 2) To service
 3) To sell the device
 4) None of the above



Contact

www.linkedin.com/in/boopathi-sakthivel-668a5469 (LinkedIn)

Top Skills

Biomedical Research & Development

Biomedical Device Design

Biomedical Engineering

Languages

Tamil (Native or Bilingual)

English (Professional Working)

Kannada (Elementary)

Certifications

Natus Sales & Product Training with theory and practice on using Natus Hearing & Balance assesment, Fitting & Verification solution

Honors-Awards

Best Service-MES 2019

Publications

SIMULATION AND PERFORMANCE ANALYSIS OF NANOWIRE WITH DIFFERENT DIAMETERS

Boopathi Sakthivel

Founder, CEO & Biomedical Engineer at Prashan Medical Technologies

Summary

Experienced Technical Support Engineer with a demonstrated history of working in the hospital & health care industry. Skilled in Technical Support, Biomedical Devices, PSoC, Keil, and Biomedical Device Design. Strong information technology professional with a Bachelor of Engineering (B.Eng.) focused in Biomedical/Medical Engineering from PSG College of Technology.

Experience

Prashan Medical Technologies

Founder, CEO & Biomedical Engineer

July 2020 - Present (2 years 1 month)

Medial Equipment Sales | Service | Calibration & Testing | Training

Authorised Service Partner for Schiller India

NMC Trading LLC

Technical Specialist

January 2019 - December 2020 (2 years)

1. Providing excellent Customer & Technical support to UAE customers for the products of Schiller, Stephan, Terumo, Welchlyalyn, Healthometer, Dantsky Ganshorn, etc
2. Providing excellent support to end user on installation, Preventive maintenance & service calls
3. Handing connectivity parts for Schiller products
4. Providing training to the end users & Engineers on the products which we installed
5. Spare parts suggestion to be ordered
6. Maintaining HIS/EMS connectivity of Cardiology products in Healthplus Diabetic Centre(Abu Dhabi) and Holistic Medical Centre(Abu Dhabi)
7. Excellent knowledge on Primary care and Critical care products
8. Comprehensive knowledge of problem solving

Schiller India

4 years 2 months

Senior Technical Support Engineer

December 2015 - January 2019 (3 years 2 months)

1. Technical support to the engineers and customers of India and overseas
2. Technical training provided to Schiller engineers and Schiller Dealers
3. Technical support provided to end users and engineers for the products like patient monitors, Infusion pump, syringe pump, fetal monitors, diathermy, suction machine, central nursing station, defibrillator, ECG machines, Ventilator, Spirometer, Radiology
4. Components level repair activity for defective board
5. Presentation preparation for the products which are handled
6. Online support provided to overseas engineers and end users
7. Coordinated with the suppliers like Biolight(China), JYM(Daiwan), Yuwell, SAP, Biometric Cables(Chennai), Lub Dub Medicals(Chennai)
8. Stock allocation for all Schiller branches in India and Overseas
9. Physics stock verification
10. Ensured comprehensive knowledge to the engineers and dealers
11. Organized training for Engineers and End user
12. Part number creation for Device, PCB's, Spares and Consumables
13. Price list preparation based on import and export details
14. Excellent skills on MS office for MIS documentations
15. Supported for Repair Report software implementation for Schiller Service team
15. Failure Analysis & Escalation to principle supplier to take preventive action
16. Local development of PCB's and Consumables
17. Demonstration on Tenders and Big orders
18. Busted customer places for Critical calls

Technical Support Engineer

December 2014 - December 2015 (1 year 1 month)

ARIES BIOMED TECHNOLOGY PVT LTD

1 year 4 months

Product Development Engineer

September 2013 - December 2014 (1 year 4 months)

1. Medical Product Development, Biomedical Calibration and Service, Technical Support, Document Preparation, Biomedical Instrument Demonstration for Doctors & Biomedical Engineers in Hospital
2. Worked in Labview, Arduino and Embedded to develop products for end users
3. Developed Medical Socket tester to check the electrical socket outlet in hospitals to ensure the electrical safety and to avoid leakage current
4. Developed an Algorithm for Anesthesia ventilator for Avasarala Technologies
5. Developed ventilator breathing circuit test jig for Biometric Cables, Chennai
6. Developed Venturi test Jig product for Lakshmi Life Sciences, Coimbatore to measure output flow, oxygen & temperature
7. Developed Electrical patient bed actuator current measurement test jig for Lakshmi Life Sciences, Coimbatore
8. Developed & prototype designed for Oxygen monitor and Oxygen conservation device
9. Prepared the Manuals and Presentation for all the products which I have developed
10. Schematic design & Hardware circuit testing
11. Medical equipments calibration conducted in Madurai Meenakshi mission hospital(Madurai)and KG Hospitals(Coimbatore)

Intern

September 2013 - December 2013 (4 months)

Company: [Cummins India Pvt Ltd](#)

1. Schematic designs, hardware circuit assembling and testing
2. Developed Medical Socket tester to ensure hospitals Electrical safety

PSG INSTITUTE OF MEDICAL SCIENCES AND RESEARCH (Inst. Code - 446), COIMBATORE

Training

June 2011 - April 2013 (1 year 11 months)

Bharat Scans Pvt Ltd

Training

April 2012 - May 2012 (2 months)

1. Learnt all kind of radiology equipments like CT, X-Ray, MRI, PET scanner, SPECT scanner and it's imaging modalities

G.Kuppuswamy Naidu Memorial Hospital

Training

June 2011 - April 2012 (11 months)

1. It was an opportunity to learn all kind of medical equipments including Critical care, cardiology & Radiology
2. Application level training received from the hospital doctors and biomedical technician
3. Worked with the equipments like CT, MRI, Gamma Camera, Cobalt 60, Ventilator and UltraSound

Authentic Engineers Pvt.ltd

Training

April 2010 - May 2010 (2 months)

Chennai, Tamil Nadu

1. Leary about electronics components, soldering, PCB designs for Stabilizers
2. Hands on experience in PCB soldering for all kind of through hole & SMT PCB's

Education

PSG College of Technology

Bachelor of Engineering (B.Eng.), Biomedical/Medical

Engineering · (2011 - 2014)

P.A.Polytechnic College

Diploma, Diploma in Electronics and Communication

Engineering · (2008 - 2011)

Government High School,Devambadi Kalipalayam,Pollachi

· (1998 - 2008)

From

Mr.A.AMARNATH PRABHAKARAN,
Assistant Professor/BME,
Nandha Engineering College (Autonomous),
Erode.

To

The Principal,
Nandha Engineering College (Autonomous),
Erode.


Respected Sir,

Sub: Requesting permission to conduct Value added course-Reg

As per the Autonomous regulations, the Department of Biomedical Engineering have planned to conduct Value added course for III year BME students. The Value added course will be handled by the Prashan Medical Technologies, Coimbatore on the title "17BMI03 – Labview for Biomedical Applications" on 26.11.2022 & 27.11.2022 at Block -3 Human Physiology Lab. The assessment for the same is tentatively planned on 27.11.2022 (AN). So I kindly request you to give permission to conduct the course.

(53 Students) Thanking you,

To
COE
2
11/10/2022


Yours Faithfully,
(A. Amarnath Prabhakaran)

Place:NEC

Date: 08.10.2022


HOD/BME

“LABVIEW GUI PROGRAMMING WITH REALTIME APPLICATION”

PURPOSE:

To integrate & educate students on GUI programming with the language LabVIEW.

INSTRUCTIONAL OBJECTIVES:

- ✦ To transmute Electronics/Electrical/Instrumentation & control Engineer to LabVIEW design Engineer (Fresher into Professional)
- ✦ To impart basic Logical thinking knowledge on LabVIEW for simulation & control
- ✦ To program, simulate & control for every product in R&D.

OVERVIEW & INTRODUCTION MODULE: (8 Hours)

- ✦ **INTRODUCTION:** - Advantages of a Virtual Instrument - LabVIEW Software Overview - graphical user interfaces – data types –data flow programming, editing, debugging and running a virtual instrument - General functional description of a digital instrument - block diagram of a virtual instrument - physical quantities and analog interfaces - hardware and software - user interfaces - advantages of virtual instrumentation over conventional instruments - architecture of a virtual instrument and its relation to the operating system.
- ✦ **G PROGRAMMING :** Graphical programming palettes and tools – front panel objects – Functions and libraries - Controls, Indicators, Labels and Text - Shape – size and colour – owned and free labels - Data type, format, precision and representation - Software environment - palettes - data types and colour coding - editing, debugging and running a vi – data flow programming - modular programming - loops - local and global variables.
- ✦ **PROGRAMMING STRUCTURE :** For loop, While loop, Case structure, Flat Sequence- Arrays and clusters - sequence structures - plotting data – Chart, Graph, XY Graph - making decisions in a vi - strings and File I/O - - TCP/IP - shared variables - data publishing - state machines.

- **HARDWARE OVERVIEW:** PC architecture: current trends - operating system requirement drivers - interface buses - myDAQ - ELVIS - Compact RIO Arduino Interface with LabVIEW - LIFA Interface

REAL-TIME APPLICATION MODULE: (10 Hours)

- **DATA ACQUISITION:** Classification of signals - analog and digital interfacing - DAQ hardware and software - configuring the hardware - ADC, DAC, Digital I/O - basic system components of a signal conditioning system.
- **HARDWARE INTERFACE WITH LABVIEW:** myDAQ - Compact RIO - NI ELVIS - Arduino UNO - LM35 - Relay - Buzzer - Servo Motor - Data Acquisition - Data Control - Real-time Application - Temperature measurement & control.
- **APPLICATIONS:** Biomedical Application: Temperature measurement - Hand Dynamometer measurement - Spirometer & Heart Sound measurement - Gas pressure sensor measurement - Pulse plethysmograph measurement - Respiration monitoring - Heart sounds microphone - Ultrasonic sensor - use of analysis tools: Fourier transforms - power spectrum - correlation methods - windowing and filtering - image acquisition and processing - networking basics for office and industrial application - VISA and IVI.

OUTCOME:

- Ability to understand the basic working principle of LabVIEW software.
- Ability to comprehend the knowledge on the different instruments I/O for the appropriate application.

REFERENCE BOOKS:

1. Johnson G, Jennings R, "LabVIEW Graphical Programming", Tata McGraw Hill, New York, 2006.
2. Sanjay Gupta, Joseph John, "Virtual Instrumentation using LabVIEW", Tata McGraw Hill, New Delhi, 2010.
3. Kevin James, "PC Interfacing and Data Acquisition: Techniques for Measurement, Instrumentation and Control", Newnes, 2000.

NANDHA ENGINEERING COLLEGE

NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52

OFFICE OF CONTROLLER OF EXAMINATIONS

SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)

Namelist

Degree: B.E

Branch/SEM : BIOMEDICAL V


Subject Type : VALUE ADDED COURSE

Subject Code : 17BM103

Subject Title: LABVIEW FOR BIOMEDICAL APPLICATIONS

S. No.	Reg No.	Name
1	20BM001	AALIYA THASLIM.F
2	20BM002	AATHI SRI.S.S
3	20BM003	ABISHEK.M
4	20BM004	ABISHEK S
5	20BM005	BHARANI.M
6	20BM007	DHANUSH M
7	20BM009	GAYATHRI.N
8	20BM010	GIRIDHARAN.G
9	20BM011	HARIHARAN. R
10	20BM012	HARIHARASUDHAN.S
11	20BM013	20BM013
12	20BM015	JEEVANANTHAN. S
13	20BM016	KIRUTHIKA.S
14	20BM017	KOUSHIKA.V
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17	20BM020	MANJU.R.E
18	20BM021	MITHRA K
19	20BM022	MOHAMMED ASWATH.L
20	20BM023	MOHANKUMAR.M
21	20BM024	MOHANPRASATH. B
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24	20BM027	MOWNITHTHA TM
25	20BM030	NIRANJANA.V
26	20BM031	NIROSHKUMAR.S
27	20BM032	PAVITHRA R
28	20BM033	PAVITHRA.S
29	20BM034	PRADEEP. S
30	20BM035	PRASANTH.M
31	20BM036	PRAVEEN KUMAR.D
32	20BM037	RUBA.P
33	20BM038	SAKTHIVEL K

34	20BM039	SAKTHIVEL P
35	20BM040	SANJAY. S
36	20BM042	SARANYA S
37	20BM043	SELVARAJ. R
38	20BM044	SHANMUGAPRIYA.M
39	20BM045	SHARMILA. K
40	20BM046	SHEIKCHAN. M
41	20BM047	SHIYAMALA.S
42	20BM048	SOWMIYA.P
43	20BM049	SRIHARINI.B
44	20BM050	SRINITHI.A
45	20BM051	SUBASHREE.M
46	20BM052	V.SUGANYA.V
47	20BM053	SUJAN.K
48	20BM054	SURESHKUMAR.V
49	20BM055	SWATHI.K
50	20BM056	SWETHA K
51	20BM057	VASANTH M
52	20BML01	THARANI G
53	20BML02	VILLIAM DAVID.R


(A. Arunathi Prabhakaran)


HOD

To

The Head of Department

Nandha Engineering College

Erode

Ref No: QT/PMT/018/22-23

Date : 10.10.2022

Subject: Quotation towards Value added course

Dear Sir,

Greetings from Prashan Medical Technologies!!!


Kindly find the below quotation

SR No	Product Description	HSN Code	Unit Price	No of unit	CGST @9%	SGST @9%	Price in INR
1	value added course on "LabVIEW for Biomedical Application"	999294	19,915.00	1	1,792.35	1,792.35	23,499.70
GST-18%					1,792.35	1,792.35	3,585
Total (Rupees twenty-three thousand five hundred only)							23,500

TERMS & CONDITIONS:

1. **Tax** : GST @18% Extra Included
2. **Validity**: This offer is valid for 1weeks from the date of contract.

We assure you our best services.



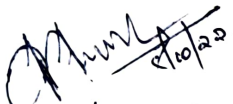
Boopathi Sakthivel
Founder, CEO & Biomedical Engineer
Prashan Medical Technologies
Mobile: +91 8883774112





NANDHA ENGINEERING COLLEGE,(Autonomous)
DEPARTMENT OF BME
ACADEMIC YEAR(2022-2023) ODD SEM
VALUE ADDED COURSE SCHEDULE

S.No	Year/Sem	Course code	Course Name	Course Conduct date	Registered count	Exam date	Company Name & Contact Person
1	II/5	17BME03	LABVIEW FOR BIOMEDICAL APPLICATIONS	26.11.2022 & 27.11.2022	53	27.11.2022	Prashan Medical Technologies, Coimbatore & Boopathi Sakthivel - Biomedical Engineer


(A. Arunachal Prabhakaran)


HOD/BME


PRINCIPAL

Request letter

14/11/22.
Erode.

From.

A. Arunath Prabhakaran,
AP/BME,
One Credit Course Incharge,
NEC.

To.

The Principal,
Nardha Engineering College.

Respected Sir,

Sub: Requesting for Change of date - one credit course - req

As per Autonomous regulations, the department of Biomedical Engineering have planned one credit course for II - BME & III BME. Due to non-availability of the industry resource person the proposed dates are changed. The new dates for the course conduct are III - BME - LABVIEW FOR BIOMEDICAL APPLICATION: will be on 12.11.2022 & 13.11.2022, and II - BME - MEDICAL EQUIPMENT & ITS CALIBRATION will be on 06.11.2022 & 07.11.2022. So I kindly request you to give permission to conduct the course in the above mentioned new dates.

Thanking you.

Yours
Arunath
14/11/22
Head BME

Yours faithfully
Principal
12/11/2022.


NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)
Namelist - Attendance Sheet

Degree: B.E
Branch/SEM : BIOMEDICAL/V
Subject Type : VALUE ADDED COURSE
Subject Code : 17BM103
Subject Title: LABVIEW FOR BIOMEDICAL APPLICATIONS

DATE: 12.11.2022

S. No.	Reg No.	Name	FN	AN
1	20BM001	AALIYA THASLIM.F	<i>Aaliya</i>	<i>Aaliya</i>
2	20BM002	AATHI SRI.S.S	<i>A. S. Sathya</i>	<i>A. S. Sathya</i>
3	20BM003	ABISHEK.M	<i>A. Abhishek</i>	<i>A. Abhishek</i>
4	20BM004	ABISHEK S	<i>S. Abhishek</i>	<i>S. Abhishek</i>
5	20BM005	BHARANI.M	<i>M. Bharani</i>	<i>M. Bharani</i>
6	20BM007	DHANUSH M	<i>M. Dhanush</i>	<i>M. Dhanush</i>
7	20BM009	GAYATHRI.N	<i>N. Gayathri</i>	<i>N. Gayathri</i>
8	20BM010	GIRIDHARAN.G	<i>G. Giridharan</i>	<i>G. Giridharan</i>
9	20BM011	HARIHARAN. R	<i>(AB)</i>	<i>Hari</i>
10	20BM012	HARIHARASUDHAN.S	<i>S. Hariharasudhan</i>	<i>S. Hariharasudhan</i>
11	20BM013	HARIPRASANTH	<i>M. Hariprasanth</i>	<i>M. Hariprasanth</i>
12	20BM015	JEEVANANTHAN. S	<i>S. Jeevananthan</i>	<i>S. Jeevananthan</i>
13	20BM016	KIRUTHIKA.S	<i>S. Kiruthika</i>	<i>S. Kiruthika</i>
14	20BM017	KOUSHIKA.V	<i>Koushika.V.</i>	<i>Koushika.V.</i>
15	20BM018	KUMARESAN S	<i>S. Kumaresan</i>	<i>S. Kumaresan</i>
16	20BM019	LOGESHWARAN.A	<i>A. Logeshwaran</i>	<i>A. Logeshwaran</i>
17	20BM020	MANJU.R.E	<i>N. Manju. R.E.</i>	<i>N. Manju. R.E.</i>
18	20BM021	MITHRA K	<i>Mithra. K.</i>	<i>Mithra. K.</i>
19	20BM022	MOHAMMED ASWATH.L	<i>L. Mohammed Aswath</i>	<i>L. Mohammed Aswath</i>
20	20BM023	MOHANKUMAR.M	<i>Mohan. M.</i>	<i>Mohan. M.</i>
21	20BM024	MOHANPRASATH. B	<i>B. Mohan</i>	<i>B. Mohan</i>
22	20BM025	MONISH.S	<i>S. Monish</i>	<i>S. Monish</i>
23	20BM026	MOWLEESWARAN.V	<i>V. Mowleeswaran</i>	<i>V. Mowleeswaran</i>

24	20BM027	MOWNITHA TM	Mownitha T.M.	Mownitha T.M.
25	20BM030	NIRANJANA V	Niranjana V	Niranjana V
26	20BM031	NIROSHKUMAR.S	S. Niroshkumar	S. Niroshkumar
27	20BM032	PAVITHRA R	R. Pavithra	R. Pavithra
28	20BM033	PAVITHRA.S	S. Pavithra	S. Pavithra
29	20BM034	PRADEEP. S	S. Pradeep	S. Pradeep
30	20BM035	PRASANTH.M	M. Prasanth	M. Prasanth
31	20BM036	PRAVEEN KUMAR.D	D. Praveen	D. Praveen
32	20BM037	RUBA.P	P. Ruba	P. Ruba
33	20BM038	SAKTHIVEL K	K. Sakthivel	K. Sakthivel
34	20BM039	SAKTHIVEL P	P. Sakthivel	P. Sakthivel
35	20BM040	SANJAY. S	S. Sanjay	S. Sanjay
36	20BM042	SARANYA S	S. Saranya	S. Saranya
37	20BM043	SELVARAJ. R	R. Selvaraj	R. Selvaraj
38	20BM044	SHANMUGAPRIYA.M	M. Shanmugapriya	M. Shanmugapriya
39	20BM045	SHARMILA. K	K. Sharmila	K. Sharmila
40	20BM046	SHEIKCHAN. M	M. Sheikchan	M. Sheikchan
41	20BM047	SHIYAMALA S	S. Shiyamala	S. Shiyamala
42	20BM048	SOWMIYA.P	P. Sowmya	P. Sowmya
43	20BM049	SRIHARINI.B	B. Sriharini	B. Sriharini
44	20BM050	SRINITHI.A	A. Srinithi	A. Srinithi
45	20BM051	SUBASHREE.M	M. Subashree	M. Subashree
46	20BM052	V SUGANYA.V	V. Suganya	V. Suganya
47	20BM053	SUJAN.K	K. Sujana	K. Sujana
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49	20BM055	SWATHI.K	K. Swathi	K. Swathi
50	20BM056	SWETHA K	K. Swetha	K. Swetha
51	20BM057	VASANTH M	M. Vasanth	M. Vasanth
52	20BML01	THARANI G	G. Tharani	G. Tharani
53	20BML02	VILLIAM DAVID.R	R. William David	R. William David

DATE: 12/11/22

 12/11/22


 Industry Expert
 12/11/22



NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)
Namelist - Attendance Sheet

Degree: **B.E**
Branch/SEM: **BIOMEDICAL/V**

Subject Type: **VALUE ADDED COURSE**

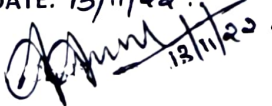
Subject Code: **17BM103**

Subject Title: **LABVIEW FOR BIOMEDICAL APPLICATIONS**

DATE: 13.11.2022

S. No.	Reg No.	Name	FN	AN
1	20BM001	AALIYA THASLIM.F	A.A. Ali	A.A. Ali
2	20BM002	AATHI SRI S S	S.S. Aathi	S.S. Aathi
3	20BM003	ABISHEK.M	M. Abhishek	M. Abhishek
4	20BM004	ABISHEK S	S. Abhishek	S. Abhishek
5	20BM005	BHARANI.M	M. Bharani	M. Bharani
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13	20BM016	KIRUTHIKA.S	S. Kiruthika	S. Kiruthika
14	20BM017	KOUSHIKA.V	V. Koushika	V. Koushika
15	20BM018	KUMARESAN S	S. Kumaresan	S. Kumaresan
16	20BM019	LOGESHWARAN.A	A. Logeshwaran	A. Logeshwaran
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21	20BM024	MOHANPRASATH. B	B. Mohan Prasath	B. Mohan Prasath
22	20BM025	MONISH.S	S. Monish	S. Monish
23	20BM026	MOWLEESWARAN.V	V. Mowleeswaran	V. Mowleeswaran

24	20BM027	MOWNITHTHA TM	N. Mowniththa TM.	N. Mowniththa TM.
25	20BM030	NIRANJANA V	N. Anjan V	N. Anjan V
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28	20BM033	PAVITHRA.S	P. Pavithra	P. Pavithra
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32	20BM037	RUBA.P	P. Ruba	P. Ruba
33	20BM038	SAKTHIVEL K	K. Sakthivel	K. Sakthivel
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44	20BM050	SRINITHI.A	A. Srinithi	A. Srinithi
45	20BM051	SUBASHREE.M	M. Subashree	M. Subashree
46	20BM052	V.SUGANYA.V	V. Suganya	V. Suganya
47	20BM053	SUJAN K	K. Sujana	K. Sujana
48	20BM054	SURESHKUMAR.V	V. Sureshkumar	V. Sureshkumar
49	20BM055	SWATHI.K	K. Swathi	K. Swathi
50	20BM056	SWETHA K	K. Swetha	K. Swetha
51	20BM057	VASANTH M	M. Vasanth	M. Vasanth
52	20BML01	THARANI G	G. Tharani	G. Tharani
53	20BML02	VILLIAM DAVID.R	R. David	R. David

DATE: 13/11/22

 13/11/22


 Industry Expert



NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)

Namelist - Exam Attendance Sheet

Degree: B.E
Branch/SEM : BIOMEDICAL/V
Subject Type : VALUE ADDED COURSE
Subject Code : 17BM103
Subject Title: LABVIEW FOR BIOMEDICAL APPLICATIONS

S. No.	Reg No.	Name	FN
1	20BM001	AALIYA THASLIM.F	<i>Aaliya</i>
2	20BM002	AATHI SRI.S.S	<i>S.S. Athi</i>
3	20BM003	ABISHEK.M	<i>Abhishek</i>
4	20BM004	ABISHEK S	<i>S. Abhishek</i>
5	20BM005	BHARANI.M	<i>M. Bharani</i>
6	20BM007	DHANUSH M	<i>M. Dh</i>
7	20BM009	GAYATHRI.N	<i>N. Gayathri</i>
8	20BM010	GIRIDHARAN.G	<i>G. Giridharan</i>
9	20BM011	HARIHARAN. R	<i>R. Hariharan</i>
10	20BM012	HARIHARASUDHAN.S	<i>S. Hariharasudhan</i>
11	20BM013	HARIPRASANTH	<i>Hari Prasanth</i>
12	20BM015	JEEVANANTHAN. S	<i>S. Jeevanantha</i>
13	20BM016	KIRUTHIKA.S	<i>S. Kiruthika</i>
14	20BM017	KOUSHIKA.V	<i>V. Koushika</i>
15	20BM018	KUMARESAN S	<i>S. Kumaresan</i>
16	20BM019	LOGESHWARAN.A	<i>A. Logeshwaran</i>
17	20BM020	MANJU.R E	<i>R. Manju</i>
18	20BM021	MITHRA K	<i>K. Mithra</i>
19	20BM022	MOHAMMED ASWATH.L	<i>L. Mohammed Aswath</i>
20	20BM023	MOHANKUMAR.M	<i>M. Mohankumar</i>
21	20BM024	MOHANPRASATH. B	<i>B. Mohanprasath</i>
22	20BM025	MONISH.S	<i>S. Monish</i>
23	20BM026	MOWLEESWARAN.V	<i>V. Mowleeswaran</i>

24	20BM027	MOWNITHA TM	Mownitha TM.
25	20BM030	NIRANJANA.V	Niranjanal
26	20BM031	NIROSHKUMAR.S	S. Niroshkumar
27	20BM032	PAVITHRA R	R. Pavithra
28	20BM033	PAVITHRA.S	P. Pavithra
29	20BM034	PRADEEP. S	S. Pradeep
30	20BM035	PRASANTH.M	Prasanth m.
31	20BM036	PRAVEEN KUMAR.D	D. P. V.
32	20BM037	RUBA.P	P. R.
33	20BM038	SAKTHIVEL K	K. Sakthivel
34	20BM039	SAKTHIVEL P	P. Sakthivel
35	20BM040	SANJAY. S	S. Sanjay
36	20BM042	SARANYA S	S. Saranya
37	20BM043	SELVARAJ. R	R. Selvaraj
38	20BM044	SHANMUGAPRIYA.M	M. Shanmugapriya
39	20BM045	SHARMILA. K	K. Sharmila
40	20BM046	SHEIKCHAN. M	M. Sheikchan
41	20BM047	SHIYAMALA.S	S. Shiyamala
42	20BM048	SOWMIYA.P	P. Sowmya
43	20BM049	SRIHARINI.B	B. Sriharini
44	20BM050	SRINITHI.A	A. Srinithi
45	20BM051	SUBASHREE.M	M. Subashree
46	20BM052	V.SUGANYA.V	V. Suganya
47	20BM053	SUJAN.K	K. Sujana
48	20BM054	SURESHKUMAR.V	V. Sureshkumar
49	20BM055	SWATHI.K	K. Swathi
50	20BM056	SWETHA K	K. Swetha
51	20BM057	VASANTH M	M. V. S.
52	20BML01	THARANI G	G. Tharani
53	20BML02	VILLIAM DAVID.R	R. David

DATE: 13/11/22 - AN (Exam)

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13/11/22

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13/11/22
Industry Expert

Comp



Register No.:



NANDHA ENGINEERING COLLEGE(AUTONOMOUS),

ERODE -52

Dept.:

BME

Ac.Yr. : 2022 – 2023

Course Code & Title	: 17BMI03	LABVIEW FOR BIOMEDICAL APPLICATIONS	
Year	: III	Semester : 05	Date : 13.11.2022 - AN
Assessment	: I	Duration : 1 hour 30 minutes	Maximum Marks : 50

Q.No.

Section - A (10 x 1 = 10 Marks) Answer All Questions

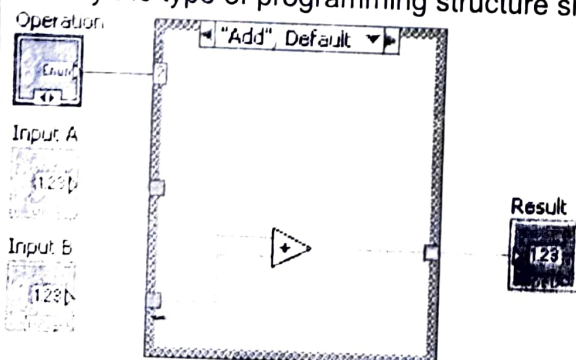
1. What is the full form of LabVIEW?
 (a) Laboratory Visual Instrumentation Engineering Workbench
 (b) Laboratory Video Instrumentation Engineering Workbench
 (c) Laboratory Virtual Instrumentation Engineering Work Platform
 (d) Laboratory Virtual Instrumentation Engineering Workbench

2. LabVIEW can be used for
 (a) Circuit Design and Simulation
 (b) Signal and Image processing
 (c) Embedded System
 (d) All the above

3. What kind of language, the LabVIEW is using?
 (a) C/C++
 (b) Python
 (c) G
 (d) None of the above

4. All mathematical features can be found in _____.
 (a) Front Panel
 (b) Example VI's
 (c) Block Diagram
 (d) Sub VI's

5. Identify the type of programming structure shown below.



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	<ul style="list-style-type: none"> (a) FOR loop (b) WHILE loop (c) CASE STRUCTURE (d) None of the above
6	<p>What kind of filter type can be applied in temperature measurement?</p> <ul style="list-style-type: none"> (a) Low Pass Filter (b) High Pass Filter (c) Smoothing Filter (d) None of the above
7	<p>How many analog inputs can be connected through Arduino to LabVIEW?</p> <ul style="list-style-type: none"> (a) 5 (b) 6 (c) 7 (d) 8
8	<p>Which structure is frequently used for real time data acquisition?</p> <ul style="list-style-type: none"> (a) Case structure (b) Timed structure (c) For loop (d) While loop
9	<p>Output of LM35 temperature sensor will be in_____.</p> <ul style="list-style-type: none"> (a) Analog (b) Digital (c) Discrete (d) Finite
10	<p>The fluctuation or sudden variation in the output signal can be controlled by using_____.</p> <ul style="list-style-type: none"> (a) Filtering (b) Mean (c) Standard Deviation (d) Amplification

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Q.No.	Section - B (5 x 2 = 10 Marks) Answer All Questions
11	What are the advantages of LabVIEW?
12	What is the difference between constant, control and indicator?
13	How to acquire real time data without using DAQ card?
14	What are the steps involved in configuring the hardware like myDAQ or arduino?
15	How to convert LM35 temperature data into celsius?

Q.No.	Section - C (3 x 10 = 30 Marks) Answer All Questions
16	Elucidate the flow of temperature monitoring system.
17	Outline the steps involved to convert the program in LabVIEW VI's to application.exe.
18	Build the flowchart of acquisition and processing in real time interface using biosignal acquisition kit.

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NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)
Degree: BE/B.Tech/M.E/MCA/MBA
Namelist - Mark Sheet

DATE : 13/11/2022

Branch		BIOMEDICAL ENGINEERING		
Elective Subject Type		VALUE ADDED COURSE		
Elective Subject Code		17BM103		
Elective Subject Title		LABVIEW FOR BIOMEDICAL APPLICATIONS		
S.No	Reg. No	Student Name	MARKS (50)	MARKS IN WORDS
1	20BM001	AALIYA THASLIM.F	28	TWO EIGHT
2	20BM002	AATHI SRI.S.S	32	THREE TWO
3	20BM003	ABISHEK.M	34	THREE FOUR
4	20BM004	ABISHEK S	39	THREE NINE
5	20BM005	BHARANI.M	31	THREE ONE
6	20BM007	DHANUSH M	38	THREE EIGHT
7	20BM009	GAYATHRI.N	27	TWO SEVEN
8	20BM010	GIRIDHARAN.G	28	TWO EIGHT
9	20BM011	HARIHARAN. R	39	THREE NINE
10	20BM012	HARIHARASUDHAN.S	27	TWO SEVEN
11	20BM013	HARIPRASANTH	26	TWO SIX
12	20BM015	JEEVANANTHAN. S	37	THREE SEVEN
13	20BM016	KIRUTHIKA.S	30	THREE ZERO
14	20BM017	KOUSHIKA.V	44	FOUR FOUR
15	20BM018	KUMARESAN S	45	FOUR FIVE
16	20BM019	LOGESHWARAN.A	40	FOUR ZERO
17	20BM020	MANJU R.E	42	FOUR TWO
18	20BM021	MITHRA K	40	FOUR ZERO
19	20BM022	MOHAMMED ASWATH.L	41	FOUR ONE
20	20BM023	MOHANKUMAR M	42	FOUR TWO
21	20BM024	MOHANPRASATH. B	40	FOUR ZERO
22	20BM025	MONISH.S	39	THREE NINE
23	20BM026	MOWLEESWARAN.V	29	TWO NINE
24	20BM027	MOWNITHTHA TM	30	THREE ZERO
25	20BM030	NIRANJANA.V	41	FOUR ONE
26	20BM031	NIROSHKUMAR.S	26	TWO SIX

28	20BM032	PAVITHRA R	43	FOUR THREE
29	20BM033	PAVITHRA.S	34	THREE FOUR
29	20BM034	PRADEEP.S	36	THREE SIX
30	20BM035	PRASANTH.M	45	FOUR FIVE
31	20BM036	PRAVEEN KUMAR.D	26	TWO SIX
32	20BM037	RUBA.P	28	TWO EIGHT
33	20BM038	SAKTHIVEL K	33	THREE THREE
34	20BM039	SAKTHIVEL P	38	THREE EIGHT
35	20BM040	SANJAY.S	34	THREE FOUR
36	20BM042	SARANYA S	41	FOUR ONE
37	20BM043	SELVARAJ.R	30	THREE ZERO
38	20BM044	SHANMUGAPRIYA.M	27	TWO SEVEN
39	20BM045	SHARMILA.K	34	THREE FOUR
40	20BM046	SHEIKCHAN.M	38	THREE EIGHT
41	20BM047	SHIYAMALA.S	45	FOUR FIVE
42	20BM048	SOWMIYA.P	28	TWO EIGHT
43	20BM049	SRIHARINI.B	29	TWO NINE
44	20BM050	SRINITHI.A	39	THREE NINE
45	20BM051	SUBASHREE.M	28	TWO EIGHT
46	20BM052	V.SUGANYA.V	40	FOUR ZERO
47	20BM053	SUJAN.K	36	THREE SIX
48	20BM054	SURESHKUMAR.V	44	FOUR FOUR
49	20BM055	SWATHI.K	40	FOUR ZERO
50	20BM056	SWETHA K	29	TWO NINE
51	20BM057	VASANTH M	37	THREE SEVEN
52	20BML01	THARANI G	32	THREE TWO
53	20BML02	VILLIAM DAVID.R	33	THREE THREE

INDUSTRY CO-ORDINATOR



Mr.A.AMARNATH PRABHAKARAN,
Assistant Professor/BME,
Nandha Engineering College (Autonomous),
Erode.

To

The Principal,
Nandha Engineering College (Autonomous),
Erode.

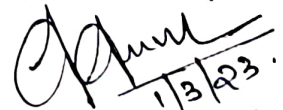
Respected Sir,

Sub: Requesting permission to conduct Value added course-Reg

As per the Autonomous regulations, the Department of Biomedical Engineering have planned to conduct Value added course for II year BME students. The Value added course will be handled by the Prashan Medical Technologies, Coimbatore on the title "17BMI03 -LabVIEW for Biomedical Application" on 11.03.23&12.03.23 at Block -3 Human Physiology Lab. The assessment for the same is tentatively planned on 12.03.2023 (AN). So I kindly request you to give permission to conduct the course.

Thanking you,

Yours Faithfully,


1/3/23.
(A. Amarnath Prabhakaran)

Place:NEC

Date: 01.03.2023


HOD/BME


1/3/23

NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (EVEN Semester 2022-23)

Namelist

Degree: B.E
Branch/SEM : BIOMEDICAL IV
Subject Type : Value Added Course
Subject Code : 17BM103
Subject Title: Labview for Biomedical Application

S. No.	Reg No.	Name
1	21BM001	AAKASH R
2	21BM002	ABISHEK T
3	21BM003	AKALYA K
4	21BM004	ARUL M
5	21BM005	BHARATHI K
6	21BM006	BHAVANAPRAVANTHIKA S
7	21BM007	BHUVANESWARI M
8	21BM008	BRIGHTON DANIEL R J
9	21BM009	DEVAPRASATH M
10	21BM010	DHANUSHMATHI S
11	21BM011	DHARANEESH S
12	21BM012	DHARANI K
13	21BM013	DIVYA S
14	21BM014	GAYATHRI P
15	21BM015	HARIHARAN B
16	21BM016	KOWSALYA K
17	21BM017	MAHARAJA N
18	21BM018	MANIKANDAN S
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M
20	21BM020	MOHAMED HUSSAIN S
21	21BM021	POORANI S
22	21BM022	RAMANIKA K
23	21BM023	ROJA M
24	21BM024	SANJAY KUMAR C
25	21BM025	SANJAY KUMAR N
26	21BM026	SANTHOSH N
27	21BM028	SUDALAIKUMAR P
28	21BM029	SUGANYA R
29	21BM030	SUSVINTH S
30	21BM031	VISHNU R
31	21BM032	WAHITHA BEGUM M
32	21BM033	YASAR ALI A

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1/3/23

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1/3/23

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1/3/23

To
The Head of Dept
Nandha Engineering College
Erode

Ref No: QT/PMT/029/22-23

Date : 14.02.2023

Subject: Quotation towards Value added course

Dear Sir,
Greetings from Prashan Medical Technologies!!!
Kindly find the below quotation

SR No	Product Description	HSN Code	Unit Price	No of students	CGST @9%	SGST @9%	Price in INR
1	Value added course on "LabVIEW for Biomedical Application"	999294	12,881.00	32	1,159.29	1,159.29	15,199.58
GST-18%					1,159.29	1,159.29	2,319
Total(Rupees fifty five thousand and two hundred only)							15,200

TERMS & CONDITIONS:

1. **Tax :** GST @18% Extra Included
2. **Validity:** This offer is valid for 1 month from the date of contract.
3. **Certificates** will be provided.

We assure you our best services.



Boopathi Sakthivel
Founder, CEO & Biomedical Engineer
Prashan Medical Technologies
Mobile: +91 8883774112





NANDHA ENGINEERING COLLEGE,(Autonomous)
DEPARTMENT OF BME
ACADEMIC YEAR(2022-2023) EVEN SEM
VALUE ADDED COURSE SCHEDULE

S.No	Year/Sem	Course code	Course Name	Course Conduct date	Registered count	Exam date	Company Name & Contact Person
1	II/4	17BM103	LabVIEW for Biomedical Application	11.03.2023 & 12.03.2023	32	12.03.2023	Prashan Medical Technologies, Coimbatore & Boopathi Sakthivel - Biomedical Engineer


11/3/23


HOD/BME


11/3/23
PRINCIPAL

NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (EVEN Semester 2022-23)

Namelist

Degree: B.E
Branch/SEM : BIOMEDICAL IV
Subject Type : Value Added Course
Subject Code : 17BMI03
Subject Title: Labview for Biomedical Application

S. No.	Reg No.	Name
1	21BM001	AAKASH R
2	21BM002	ABISHEK T
3	21BM003	AKALYA K
4	21BM004	ARUL M
5	21BM005	BHARATHI K
6	21BM006	BHAVANAPRAVANTHIKA S
7	21BM007	BHUVANESWARI M
8	21BM008	BRIGHTON DANIEL R J
9	21BM009	DEVAPRASATH M
10	21BM010	DHANUSHMATHI S
11	21BM011	DHARANEESH S
12	21BM012	DHARANI K
13	21BM013	DIVYA S
14	21BM014	GAYATHRI P
15	21BM015	HARIHARAN B
16	21BM016	KOWSALYA K
17	21BM017	MAHARAJA N
18	21BM018	MANIKANDAN S
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M
20	21BM020	MOHAMED HUSSAIN S
21	21BM021	POORANI S
22	21BM022	RAMANIKA K
23	21BM023	ROJA M
24	21BM024	SANJAY KUMAR C
25	21BM025	SANJAY KUMAR N
26	21BM026	SANTHOSH N
27	21BM028	SUDALAIKUMAR P
28	21BM029	SUGANYA R
29	21BM030	SUSVINTH S
30	21BM031	VISHNU R
31	21BM032	WAHITHA BEGUM M
32	21BM033	YASAR ALI A

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NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (EVEN Semester 2022-23)
Namelist - Attendance Sheet

Degree: B.E
Branch/SEM : BIOMEDICAL/IV
Subject Type : Value Added Course
Subject Code : 17BM103
Subject Title: LabVIEW for Biomedical Application

DATE:11.03.2023

S. No.	Reg No.	Name	FN	AN
1	21BM001	AAKASH R	R. Aakash.	R. Aakash... ?
2	21BM002	ABISHEK T	Abishak -T	Abishak.T
3	21BM003	AKALYA K	K. Akat	K. Akat
4	21BM004	ARUL M	Arul	Arul
5	21BM005	BHARATHI K	K. Bharathi	K. Bharathi
6	21BM006	BHAVANAPRAVANTHIKA S	Bhavanya	Bhavanya
7	21BM007	BHUVANESWARI M	M. Bhuvani	M. Bhuvani
8	21BM008	BRIGHTON DANIEL R J	Brighton	Brighton
9	21BM009	DEVAPRASATH M	M. Devaprasath	M. Devaprasath
10	21BM010	DHANUSHMATHI S	S. Dhanya	S. Dhanya
11	21BM011	DHARANEESH S	S. Dhanya	S. Dhanya
12	21BM012	DHARANI K	Dharani.K	Dharani.K
13	21BM013	DIVYA S	S. Divya	S. Divya
14	21BM014	GAYATHRI P	Gayathri	Gayathri
15	21BM015	HARIHARAN B	B. Hariharan	B. Hariharan
16	21BM016	KOWSALYA K	Kousalya.K	Kousalya.K
17	21BM017	MAHARAJA N	N. Mahara	N. Mahara
18	21BM018	MANIKANDAN S	S. Manikandan	S. Manikandan
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M	M. Sid	M. Sid
20	21BM020	MOHAMED HUSSAIN S	S. Hussain	S. Hussain
21	21BM021	POORANI S	S. Poorani	S. Poorani
22	21BM022	RAMANIKA K	Ramany	Ramany
23	21BM023	ROJA M	Raja M	Raja M

24	21BM024	SANJAY KUMAR C	C. Saijankumar	C. Saijankumar
25	21BM025	SANJAY KUMAR N	M. Sanjay Kumar	M. Sanjay Kumar
26	21BM026	SANTHOSH N	N. Santhosh	N. Santhosh
27	21BM028	SUDALAIKUMAR P	P. Sudalai	P. Sudalai
28	21BM029	SUGANYA R	R. Suganya	R. Suganya
29	21BM030	SUSVINTH S	S. Susvinth	S. Susvinth
30	21BM031	VISHNU R	(AB)	(AB)
31	21BM032	WAHITHA BEGUM M	Wahitha Begum M	Wahitha Begum M
32	21BM033	YASAR ALI A	Yasar Ali A	Yasar Ali A

DATE: 11.03.2023

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11/03/23
Industry Expert



NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (EVEN Semester 2022-23)
Namelist - Attendance Sheet

Degree: B.E
Branch/SEM : BIOMEDICAL/IV
Subject Type : Value Added Course
Subject Code : 17BMI03
Subject Title: LabVIEW for Biomedical Application

DATE:12.03.2023

S. No.	Reg No.	Name	FN	AN
1	21BM001	AAKASH R	Aakash. R	Aakash. R
2	21BM002	ABISHEK T	T. Abishek	T. Abishek
3	21BM003	AKALYA K	K. Akalya	K. Akalya
4	21BM004	ARUL M	M. Arul	M. Arul
5	21BM005	BHARATHI K	K. Bharathi	K. Bharathi
6	21BM006	BHAVANAPRAVANTHIKA S	S. Bhavanapravanthika	S. Bhavanapravanthika
7	21BM007	BHUVANESWARI M	M. Bhuvaneshwari	M. Bhuvaneshwari
8	21BM008	BRIGHTON DANIEL R J	Daniel	Daniel
9	21BM009	DEVAPRASATH M	M. Devaprasath	M. Devaprasath
10	21BM010	DHANUSHMATHI S	S. Dhannushmathi	S. Dhannushmathi
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13	21BM013	DIVYA S	S. Divya	S. Divya
14	21BM014	GAYATHRI P	P. Gayathri	Gayathri
15	21BM015	HARIHARAN B	B. Hariharan	B. Hariharan
16	21BM016	KOWSALYA K	K. Kowsalya	Kowsalya
17	21BM017	MAHARAJA N	N. Maharaja	N. Maharaja
18	21BM018	MANIKANDAN S	S. Manikandan	S. Manikandan
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M	M. Mohamed Abubakar Siddiq	M. Mohamed Abubakar Siddiq
20	21BM020	MOHAMED HUSSAIN S	S. Mohamed Hussain	S. Mohamed Hussain
21	21BM021	POORANI S	S. Poorani	S. Poorani
22	21BM022	RAMANIKA K	K. Ramani	K. Ramani
23	21BM023	ROJA M	M. Roja	M. Roja

	21BM024	SANJAY KUMAR C	<i>Sanjay Kumar C</i>	<i>Sanjay Kumar C</i>
25	21BM025	SANJAY KUMAR N	<i>N. Sanjay Kumar</i>	<i>N. Sanjay Kumar</i>
26	21BM026	SANTHOSH N	<i>N. Santhosh</i>	<i>N. Santhosh</i>
27	21BM028	SUDALAIKUMAR P	<i>P. Sudalai</i>	<i>P. Sudalai</i>
28	21BM029	SUGANYA R	<i>R. Suganya</i>	<i>R. Suganya</i>
29	21BM030	SUSVINTH S	<i>S. Susvith</i>	<i>S. Susvith</i>
30	21BM031	VISHNU R	<i>R. Vishnu</i>	<i>R. Vishnu</i>
31	21BM032	WAHITHA BEGUM M	<i>M. Wahitha Begum</i>	<i>M. Wahitha Begum</i>
32	21BM033	YASAR ALI A	<i>A. Yasar Ali</i>	<i>A. Yasar Ali</i>

DATE: 12-03-2023

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Industry Expert

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12/03/23



NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
OFFICE OF CONTROLLER OF EXAMINATIONS
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (EVEN Semester 2022-23)
EXAM - Attendance Sheet

Degree: B.E
Branch/SEM : BIOMEDICAL/IV
Subject Type : Value Added Course
Subject Code : 17BM103
Subject Title: LabVIEW for Biomedical Application

S. No.	Reg No.	Name	SIGNATURE
1	21BM001	AAKASH R	Aakash R.
2	21BM002	ABISHEK T	Abishek T
3	21BM003	AKALYA K	Akalya .k .
4	21BM004	ARUL M	M. ARUL
5	21BM005	BHARATHI K	Kumathi
6	21BM006	BHAVANAPRAVANTHIKA S	Bhavany
7	21BM007	BHUVANESWARI M	M. Bhuvi
8	21BM008	BRIGHTON DANIEL R J	Daniel
9	21BM009	DEVAPRASATH M	M. Devaprath
10	21BM010	DHANUSHMATHI S	S. Dhanya
11	21BM011	DHARANEESH S	Dharaneesh
12	21BM012	DHARANI K	K. Dhara
13	21BM013	DIVYA S	Divya S
14	21BM014	GAYATHRI P	Gayathri
15	21BM015	HARIHARAN B	H. Hariharan.
16	21BM016	KOWSALYA K	K. Kowsalya
17	21BM017	MAHARAJA N	N. Maharaja
18	21BM018	MANIKANDAN S	S. Manikandan
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M	M. Siddiq
20	21BM020	MOHAMED HUSSAIN S	S. Hussain
21	21BM021	POORANI S	S. Poorani
22	21BM022	RAMANIKA K	K. Ramani
23	21BM023	ROJA M	M. Roja

24	21BM024	SANJAY KUMAR C	C. Sanjay
25	21BM025	SANJAY KUMAR N	N. Sanjay Kumar
26	21BM026	SANTHOSH N	N. Santhosh
27	21BM028	SUDAI AIKUMAR P	P. Sudai
28	21BM029	SUGANYA R	R. Suganya
29	21BM030	SUSVINTH S	S. Susvith
30	21BM031	VISHNU R	R. Vishnu
31	21BM032	WAHITHA BEGUM M	M. Wahitha Begum
32	21BM033	YASAR ALI A	A. Yasar Ali

DATE: 12-03-23 (AN)

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Industry Expert




24	21BM024	SANJAY KUMAR C	
25	21BM025	SANJAY KUMAR N	C. Sankar
26	21BM026	SANTHOSH N	N. Sanjay Kumar
27	21BM028	SUDALAIKUMAR P	N. Santhosh
28	21BM029	SUGANYA R	P. S. S.
29	21BM030	SUSVINTH S	R. Suganya
30	21BM031	VISHNU R	S. S. S.
31	21BM032	WAHITHA BEGUM M	R. Vishnu
32	21BM033	YASAR ALI A	M. Wahitha Begum
			A. Y. Ali

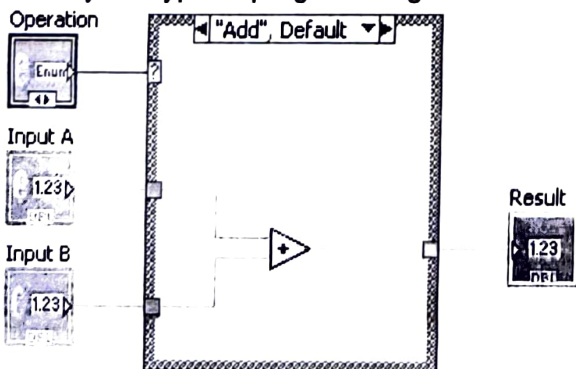
DATE: 12-03-23 (AN)

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Industry Expert



	NANDHA ENGINEERING COLLEGE(AUTONOMOUS),		Dept.:	BME
	ERODE -52		Ac.Yr. : 2022 – 2023	
Course Code & Title	:	17BMI03	LABVIEW FOR BIOMEDICAL APPLICATIONS	
Year	:	II	Semester : 04	Date : 12.03.2023 - AN
Assessment	:	I	Duration : 1 hour 30 minutes	Maximum Marks : 50

Q.No.	Section - A (10 x 1 = 10 Marks) Answer All Questions
1	<p>What is the full form of LabVIEW?</p> <p>(a) Laboratory Visual Instrumentation Engineering Workbench (b) Laboratory Video Instrumentation Engineering Workbench (c) Laboratory Virtual Instrumentation Engineering Work Platform (d) Laboratory Virtual Instrumentation Engineering Workbench</p>
2	<p>LabVIEW can be used for</p> <p>(a) Circuit Design and Simulation (b) Signal and Image processing (c) Embedded System (d) All the above</p>
3	<p>What kind of language, the LabVIEW is using?</p> <p>(a) C/C++ (b) Python (c) G (d) None of the above</p>
4	<p>All mathematical features can be found in _____.</p> <p>(a) Front Panel (b) Example VI's (c) Block Diagram (d) Sub VI's</p>
5	<p>Identify the type of programming structure shown below.</p> 



	<ul style="list-style-type: none"> (a) FOR loop (b) WHILE loop (c) CASE STRUCTURE (d) None of the above
6	<p>What kind of filter type can be applied in temperature measurement?</p> <ul style="list-style-type: none"> (a) Low Pass Filter (b) High Pass Filter (c) Smoothing Filter (d) None of the above
7	<p>How many analog inputs can be connected through Arduino to LabVIEW?</p> <ul style="list-style-type: none"> (a) 5 (b) 6 (c) 7 (d) 8
8	<p>Which structure is frequently used for real time data acquisition?</p> <ul style="list-style-type: none"> (a) Case structure (b) Timed structure (c) For loop (d) While loop
9	<p>Output of LM35 temperature sensor will be in_____.</p> <ul style="list-style-type: none"> (a) Analog (b) Digital (c) Discrete (d) Finite
10	<p>The fluctuation or sudden variation in the output signal can be controlled by using_____.</p> <ul style="list-style-type: none"> (a) Filtering (b) Mean (c) Standard Deviation (d) Amplification



Q.No.	Section - B (5 x 2 = 10 Marks) Answer All Questions
11	What are the advantages of LabVIEW?
12	What is the difference between constant, control and indicator?
13	How to acquire real time data without using DAQ card?
14	What are the steps involved in configuring the hardware like myDAQ or arduino?
15	How to convert LM35 temperature data into celsius?

Q.No.	Section - C (3 x 10 = 30 Marks) Answer All Questions
16	Elucidate the flow of temperature monitoring system.
17	Outline the steps involved to convert the program in LabVIEW VI's to application.exe.
18	Build the flowchart of acquisition and processing in real time interface using biosignal acquisition kit.



NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52
 OFFICE OF CONTROLLER OF EXAMINATIONS
 SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (EVEN Semester 2022-23)
 Degree: BE/B.Tech/M.E/MCA/MBA
 Namelist - Mark Sheet

DATE : 12.03.2022

Branch		BIOMEDICAL ENGINEERING		
Elective Subject Type		Value Added Course		
Elective Subject Code		17BMI03		
Elective Subject Title		LabVIEW for Biomedical Application		
S.No	Reg. No	Student Name	MARKS (50)	MARKS IN WORDS
1	21BM001	AAKASH R	30	THREE ZERO
2	21BM002	ABISHEK T	45	FOUR FIVE
3	21BM003	AKALYA K	36	THREE SIX
4	21BM004	ARUL M	37	THREE SEVEN
5	21BM005	BHARATHI K	33	THREE THREE
6	21BM006	BHAVANAPRAVANTHIKA S	37	THREE SEVEN
7	21BM007	BHUVANESWARI M	42	FOUR TWO
8	21BM008	BRIGHTON DANIEL R J	37	THREE SEVEN
9	21BM009	DEVAPRASATH M	34	THREE FOUR
10	21BM010	DHANUSHMATHI S	32	THREE TWO
11	21BM011	DHARANEESH S	30	THREE ZERO
12	21BM012	DHARANI K	40	FOUR ZERO
13	21BM013	DIVYA S	43	FOUR THREE
14	21BM014	GAYATHRI P	46	FOUR SIX
15	21BM015	HARIHARAN B	44	FOUR FOUR
16	21BM016	KOWSALYA K	42	FOUR TWO
17	21BM017	MAHARAJA N	29	TWO NINE
18	21BM018	MANIKANDAN S	41	FOUR ONE
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M	42	FOUR TWO
20	21BM020	MOHAMED HUSSAIN S	41	FOUR ONE
21	21BM021	POORANI S	36	THREE SIX
22	21BM022	RAMANIKA K	44	FOUR FOUR
23	21BM023	ROJA M	30	THREE ZERO
24	21BM024	SANJAY KUMAR C	33	THREE THREE
25	21BM025	SANJAY KUMAR N	28	TWO EIGHT
26	21BM026	SANTHOSH N	29	TWO NINE

	21BM028	SUDALAIKUMAR P	34	THREE FOUR
	21BM029	SUGANYA R	44	FOUR FOUR
29	21BM030	SUSVINTH S	41	FOUR ONE
30	21BM031	VISHNU R	34	THREE FOUR
31	21BM032	WAHITHA BEGUM M	41	FOUR ONE.
32	21BM033	YASAR ALI A	31	THREE ONE.

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14/03/23

INDUSTRY CO-ORDINATOR

