



# ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(A Unit of Alva's Education Foundation)

Shobhavana Campus, Mijar-574225, Moodbidri, D.K

Phone: 08258-262725, Fax: 08258-262726

Affiliated to VTU Belagavi and Approved by AICTE, New Delhi, Recognized by Govt. of Karnataka

## ATTENDANCE BOOK

Academic Year : 2018-2019

Semester : III - Sem Section B

Period of the Semester : From 1/08/2018 to 30/11/2018

Subject with Code : 17EC32

Name of the Faculty : Mrs. Nishma

Department : Electronics & Communication

### VISION OF THE INSTITUTE

"Transformative education by pursuing excellence in Engineering and Management through enhancing skills to meet the evolving needs of the community"

### MISSION OF THE INSTITUTE

- To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.
- To inculcate the best engineering practices through transformative education.
- To develop a knowledgeable individual for a dynamic industrial scenario.
- To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.

## VISION OF THE DEPARTMENT

Centre of Excellence to Empower the young minds in the field of Electronics & Communication Engineering With Research Focus & Skill development through Transformative Education catering to the needs of the society.

## MISSION OF THE DEPARTMENT

- M1:- To create a unique Learning Environment to enable the students for Excellence in the field of Electronics & Communication Engineering.
- M2:- To Empower the students with necessary skills for solving the complex technological Problems of social needs.
- M3:- To inculcate Research culture among Teaching-Learning Group by guiding them towards R&D Activities to bridge the gap between Industry & Academia.
- M4:- By Imbibing the students with Human Values & Ethics through Transformative Education & make them Socially Responsible professionals.

## COURSE OUTCOMES

|     |                                                                                                                                                                                                     |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CO1 | Describe instrument measurement errors & Calculate them                                                                                                                                             |
| CO2 | Describe the operation of ammeter, voltmeters, multimeters & develop circuits for multirange ammeters & voltmeters.                                                                                 |
| CO3 | Describe functional concepts & operation of digital voltmeters & instruments to measure voltage, frequency, time period, phase difference of signal, rotation speed, capacitance & pH of solutions. |
| CO4 | Describe functional concepts & operations of various analog measuring instruments to measure field strength, impedance, Stroboscopic speed, in/out of phase, Q of coils, insulation resistance.     |
| CO5 | Describe & discuss functioning & types of Oscilloscopes, Signal generators & transducers.                                                                                                           |
| CO6 | Utilize AC & DC bridges for passive components & frequency measurement                                                                                                                              |

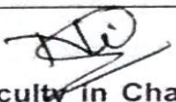
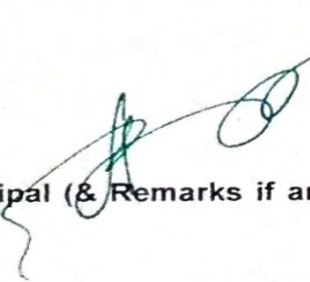
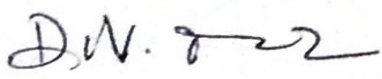
|     | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PS01 | PS02 | PS03 | PS04 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| CO1 | 3   | 2   | 1   | -   | 1   | -   |     |     |     |      | 1    | 1    | 3    | 1    | 1    |      |
| CO2 | 3   | 2   | 2   | 1   | 2   | 1   |     |     |     |      | 1    | 1    | 3    | 2    | 2    |      |
| CO3 | 3   | 2   | 1   | 1   | 2   | 1   |     |     |     |      | 1    | 1    | 3    | 1    | 2    |      |
| CO4 | 3   | 2   | 1   | 1   | 2   | 1   |     |     |     |      | 1    | 1    | 3    | 1    | 2    |      |
| CO5 | 3   | 2   | 1   | 1   | 2   | 1   |     |     |     |      | 1    | 1    | 3    | 2    | 2    |      |
| CO6 | 3   | 2   | 2   | 1   | -   | -   |     |     |     |      | 1    |      | 3    | 2    | -    |      |

| AIET                                          |      | Lesson Plan & Execution                                                                   |                        |                                                                        | Format No. |                          | ACD 08 |  |  |
|-----------------------------------------------|------|-------------------------------------------------------------------------------------------|------------------------|------------------------------------------------------------------------|------------|--------------------------|--------|--|--|
|                                               |      |                                                                                           |                        |                                                                        | Issue No.  |                          | 01     |  |  |
|                                               |      |                                                                                           |                        |                                                                        | Rev. No.   |                          | 00     |  |  |
| Name of the faculty                           |      |                                                                                           |                        | Mrs. Nishma                                                            |            |                          |        |  |  |
| Semester and Section                          |      |                                                                                           |                        | 3 <sup>rd</sup> Sem - 'A' Section                                      |            |                          |        |  |  |
| Date of Commencement                          |      |                                                                                           |                        | 1-08-2018                                                              |            |                          |        |  |  |
| Last Working Day of the Semester              |      |                                                                                           |                        | 30-11-2018                                                             |            |                          |        |  |  |
| Source Materials List                         |      |                                                                                           |                        |                                                                        |            |                          |        |  |  |
| 1. Electronic Instrumentation                 |      |                                                                                           |                        | H.S. Kalsi                                                             |            |                          |        |  |  |
| 2. Electronic Instrumentations & Measurements |      |                                                                                           |                        | David A. Bell                                                          |            |                          |        |  |  |
| 3. Electronics & Electrical Measurements      |      |                                                                                           |                        | - A.K. Sawhney                                                         |            |                          |        |  |  |
| 4.                                            |      |                                                                                           |                        |                                                                        |            |                          |        |  |  |
| 5.                                            |      |                                                                                           |                        |                                                                        |            |                          |        |  |  |
| Subject Name                                  |      |                                                                                           |                        |                                                                        |            |                          |        |  |  |
| Period                                        | Plan |                                                                                           |                        | Execution                                                              |            |                          |        |  |  |
|                                               | Date | Topics to be covered                                                                      | Source Material needed | Topics Covered                                                         | Date       | Source Material Referred |        |  |  |
| 1                                             | 1/08 | Module 1:-<br>Definitions,<br>Accuracy, Precision,<br>Resolution &<br>Significant figures | 1<br>2                 | Definitions,<br>Accuracy<br>Precision<br>Resolution<br>Significant fig | 6/08       | 1<br>2                   |        |  |  |
| 2                                             | 6/08 | Types of Errors,<br>Measurement<br>error<br>combinations                                  | 1<br>2                 | Types of<br>Errors                                                     | 7/08       | 1<br>2                   |        |  |  |
| 3                                             | 7/08 | DC Ammeter,<br>Multirange<br>Ammeter                                                      | 1<br>2                 | Measurement<br>Error<br>Combinations                                   | 7/08       | 1<br>2                   |        |  |  |
| 4                                             | 7/08 | The Ayrton shunt<br>or Universal Shunt,<br>Requirements of<br>shunt                       | 1<br>2                 | DC<br>Ammeter                                                          | 8/08       | 1<br>2                   |        |  |  |

| Period | Plan  |                                                                           |                        | Execution                                                |       |                          |
|--------|-------|---------------------------------------------------------------------------|------------------------|----------------------------------------------------------|-------|--------------------------|
|        | Date  | Topics to be covered                                                      | Source Material needed | Topics Covered                                           | Date  | Source Material Referred |
| 5      | 8/08  | Extending of Ammeter ranges, RF ammeter, Limitations of Thermocouple      | 1                      | Multirange ammeter                                       | 13/08 | 1/2                      |
| 6      | 13/08 | Voltmeter: Introduction Basic meter as a DC voltmeter, DC voltmeter       | 1<br>2                 | Aryton shunt or Universal shunt                          | 14/08 | 1/2                      |
| 7      | 14/08 | Multirange Voltmeter, Extending Voltmeter ranges, Loading                 | 1<br>2                 | Aryton shunt, Requirement of shunt, Extending of Ammeter | 14/08 | 1/2                      |
| 8      | 14/08 | AC Voltmeter using rectifiers, True RMS voltmeter, Multimeter             | 1                      | RF Ammeter Limitations of Thermocouple                   | 20/08 | 1                        |
| 9      | 20/08 | Module 2:- Introduction RAMP technique, Dual Slope integrating type DVM   | 1                      | Introduction Basic meter as ac voltmeter                 | 24/08 | 1/2                      |
| 10     | 21/08 | Integrating type DVM, Most commonly used principles of ADC                | 1                      | DC voltmeter                                             | 24/08 | 1/2                      |
| 11     | 21/08 | Successive Approximations, $3\frac{1}{2}$ -digit                          | 1                      | Multirange Voltmeter                                     | 27/08 | 1/2                      |
| 12     | 27/08 | Resolution & sensitivity of digital meters, General specifications of DVM | 1                      | Extending Voltmeter ranges                               | 28/08 | 1/2                      |
| 13     | 28/08 | Introduction, Digital Multimeters                                         | 1                      | Loading                                                  | 28/08 | 1/2                      |
| 14     | 28/08 | Digital Freq Meter, Digital Measurement of time                           | 1                      | Ac voltmeter using rectifiers                            | 29/08 | 1/2                      |
| 15     | 29/08 | Universal Counter, Digital Tachometer, PH meter                           | 1                      | True RMS Voltmeter & Multimeter                          | 3/09  | 1/2                      |
| 16     | 3/09  | Digital phase meter, Digital Capacitance meter                            | 1                      | Introduction                                             | 4/09  | 1                        |
| 17     | 4/09  | Module 3:- Introduction, Basic principles, CRT features                   | 1                      | RAMP Technique                                           | 5/09  | 1                        |

| Period | Plan  |                                                                        |                        | Execution                                        |       |                          |
|--------|-------|------------------------------------------------------------------------|------------------------|--------------------------------------------------|-------|--------------------------|
|        | Date  | Topics to be covered                                                   | Source Material needed | Topics Covered                                   | Date  | Source Material Referred |
| 18     | 4/09  | Block diagram of oscilloscope, Simple CRO, Vertical amplifier          | 1                      | Dual Slope Integrating type DVM                  | 10/09 | 1                        |
| 19     | 5/09  | Horizontal Deflecting System                                           | 1                      | Integrating type DVM                             | 11/09 | 1                        |
| 20     | 10/09 | Sweep or Time Base generator, Measurement of Freq. by Lissajous Method | 1                      | Most commonly used integrating principles of ADC | 11/09 | 1                        |
| 21     | 11/09 | Digital Storage Oscilloscope                                           | 1                      | Successive Approximations                        | 12/09 | 1                        |
| 22     | 11/09 | Introduction, Fixed & Variable AF Oscillator                           | 1                      | Successive Approximations                        | 18/09 | 1                        |
| 23     | 12/09 | Standard signal generator<br>Laboratory Type signal generator          | 1                      |                                                  |       |                          |
| 24     | 12/09 | AF Sine & Square wave generator, Function Generator                    | 1                      |                                                  |       |                          |
| 25     | 18/09 | Module 4:- Field Strength Meter Stroboscope                            | 1                      |                                                  |       |                          |
| 26     | 18/09 | Phase Meter                                                            | 1                      |                                                  |       |                          |
| 27     | 19/09 | Q Meter, Megger                                                        | 1                      |                                                  |       |                          |
| 28     | 24/09 | Module 4:- Bridges<br>Introduction<br>Wheatstone's bridge              | 1                      |                                                  |       |                          |
| 29     | 25/09 | Kelvin's Bridge<br>AC bridges                                          | 1                      |                                                  |       |                          |
| 30     | 25/09 | Capacitance comparison bridge, Inductance comparison bridge            | 1                      |                                                  |       |                          |

| Period | Plan  |                                                                              |                        | Execution      |      |                         |
|--------|-------|------------------------------------------------------------------------------|------------------------|----------------|------|-------------------------|
|        | Date  | Topics to be covered                                                         | Source Material needed | Topics Covered | Date | Source Material Referre |
| 31     | 26/09 | Maxwell's bridge                                                             | 1                      |                |      |                         |
| 32     | 1/10  | Wein's bridge                                                                | 1                      |                |      |                         |
| 33     | 3/10  | Module 5 - Introduction<br>Electrical transducers,<br>Selecting a transducer | 1                      |                |      |                         |
| 34     | 9/10  | Resistive transducer<br>Resistance position<br>transducer                    | 1                      |                |      |                         |
| 35     | 9/10  | Strain gauges                                                                | 1                      |                |      |                         |
| 36     | 10/10 | Resistance<br>Thermometer<br>Thermistor                                      | 1                      |                |      |                         |
| 37     | 22/10 | Inductive<br>transducer                                                      | 1                      |                |      |                         |
| 38     | 23/10 | LVDT                                                                         | 1                      |                |      |                         |
| 39     | 23/10 | Piezoelectric<br>transducer,<br>Photo cell                                   | 1                      |                |      |                         |
| 40     | 24/10 | Photo Voltaic cell,<br>Semiconductor photo<br>diode & transistor             | 1                      |                |      |                         |
| 41     |       |                                                                              |                        |                |      |                         |
| 42     |       |                                                                              |                        |                |      |                         |
|        |       |                                                                              |                        |                |      |                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                    |                        |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------|-------------|
| Others                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Planned            | Actual                 | Remarks :   |
| Special Classes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 01                 | 02                     |             |
| Tutorials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                    |                        |             |
| Assignments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 5                  | 5                      |             |
| Seminars                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                    |                        |             |
| IA Tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3                  | 3                      |             |
| Portions Covered in the entire Semester                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 100                |                        |             |
| Course Effectiveness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 100                |                        |             |
| Students Feedback                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                        |             |
| Students Responce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                        |             |
| Result                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No. of Students AP | No. of Students Passed | % of Result |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                    |                        |             |
| <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <p><br/>Faculty in Charge</p> <p><br/>Signature of Principal (&amp; Remarks if any)</p> </div> <div style="width: 45%; text-align: right;"> <p><br/>HOD's Signature</p> </div> </div> |                    |                        |             |

# ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MILAR,  
OODBIDRI - 574 225

## ATTENDANCE CUM INTERNAL

Class 3rd Sem - 'A'

Subject Electronics Instrumentation

No. of Classes held : 52

Subject Electronic Instrumentation

| No. of Classes held : 5 & 2 |           | Date / Month      |  |
|-----------------------------|-----------|-------------------|--|
| Sl No                       | U.S.N     | Name              |  |
| 1                           | HAIJEC004 | Abhishek          |  |
| 2                           | HAIJEC002 | Abhishek M Shetty |  |
| 3                           | HAIJEC003 | Abhishek Vasudev  |  |
| 4                           | HAIJEC004 | Ajith             |  |
| 5                           | HAIJEC005 | Akshay Sandeep    |  |
| 6                           | HAIJEC006 | Akshat M. D       |  |
| 7                           | HAIJEC007 | Akshat Ranganath  |  |
| 8                           | HAIJEC008 | Akshay            |  |
| 9                           | HAIJEC009 | Bhavith           |  |
| 10                          | HAIJEC010 | Bhoomika R H      |  |
| 11                          | HAIJEC011 | Bindushri         |  |
| 12                          | HAIJEC012 | Brunda H Y        |  |
| 13                          | HAIJEC013 | Brunda P D        |  |
| 14                          | HAIJEC015 | Chandan C         |  |
| 15                          | HAIJEC018 | Chandana G S      |  |
| 16                          | HAIJEC020 | Channabasava      |  |
| 17                          | HAIJEC021 | Chetan Kumar      |  |
| 18                          | HAIJEC022 | Cybil Prashanth   |  |
| 19                          | HAIJEC023 | Darshan H B       |  |
| 20                          | HAIJEC025 | Dharmini CL       |  |
| 21                          | HAIJEC026 | Dhanya Shetty     |  |
| 22                          | HAIJEC027 | Dhaval            |  |
| 23                          | HAIJEC029 | Disha             |  |
| 24                          | HAIJEC030 | Divyashree L V    |  |
| 25                          | HAIJEC031 | Divyashri B S     |  |
| 26                          | HAIJEC032 | Gagan M K         |  |
| 27                          | HAIJEC033 | Haravi Soujanya   |  |
| 28                          | HAIJEC034 | Harsha P          |  |
| 29                          | HAIJEC035 | Hemalatha Sanil   |  |
| 30                          | HAIJEC036 | Jagadeesha H      |  |
| Staff Initials              |           |                   |  |

| Sl No | U.S.N     | Name              | 6/08 | 7/08 | 8/08 | 9/08 | 10/08 | 11/08 | 12/08 | 13/08 | 14/08 | 15/08 | 16/08 | 17/08 | 18/08 | 19/08 | 20/08 | 21/08 | 22/08 | 23/08 | 24/08 | 25/08 | 26/08 | 27/08 | 28/08 | 29/08 | 30/08 | Total | Average |    |
|-------|-----------|-------------------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|----|
|       |           |                   |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |         |    |
|       |           |                   |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |         |    |
| Sl No | U.S.N     | Name              | 6/08 | 7/08 | 8/08 | 9/08 | 10/08 | 11/08 | 12/08 | 13/08 | 14/08 | 15/08 | 16/08 | 17/08 | 18/08 | 19/08 | 20/08 | 21/08 | 22/08 | 23/08 | 24/08 | 25/08 | 26/08 | 27/08 | 28/08 | 29/08 | 30/08 | Total | Average |    |
| 1     | HAIJEC004 | Abhishek          | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 28      | 28 |
| 2     | HAIJEC002 | Abhishek M Shetty | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 3     | HAIJEC003 | Abhishek Vasudev  | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 33      | 33 |
| 4     | HAIJEC004 | Ajith             | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 5     | HAIJEC005 | Akshay Sandeep    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 33      | 33 |
| 6     | HAIJEC006 | Akshat M. D       | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 7     | HAIJEC007 | Akshat Ranganath  | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 8     | HAIJEC008 | Akshay            | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 9     | HAIJEC009 | Bhavith           | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 10    | HAIJEC010 | Bhoomika R H      | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 11    | HAIJEC011 | Bindushri         | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 12    | HAIJEC012 | Brunda H Y        | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 13    | HAIJEC013 | Brunda P D        | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 14    | HAIJEC015 | Chandan C         | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 15    | HAIJEC018 | Chandana G S      | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 16    | HAIJEC020 | Channabasava      | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 17    | HAIJEC021 | Chetan Kumar      | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 18    | HAIJEC022 | Cybil Prashanth   | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 19    | HAIJEC023 | Darshan H B       | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 20    | HAIJEC025 | Dharmini CL       | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 21    | HAIJEC026 | Dhanya Shetty     | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 22    | HAIJEC027 | Dhaval            | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 23    | HAIJEC029 | Disha             | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 24    | HAIJEC030 | Divyashree L V    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 25    | HAIJEC031 | Divyashree B S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 26    | HAIJEC032 | Divyashree C S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 27    | HAIJEC033 | Divyashree D S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 28    | HAIJEC034 | Divyashree E S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 29    | HAIJEC035 | Divyashree F S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 30    | HAIJEC036 | Divyashree G S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 31    | HAIJEC037 | Divyashree H S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 32    | HAIJEC038 | Divyashree I S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 33    | HAIJEC039 | Divyashree J S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 34    | HAIJEC040 | Divyashree K S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 35    | HAIJEC041 | Divyashree L S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 36    | HAIJEC042 | Divyashree M S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 37    | HAIJEC043 | Divyashree N S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 38    | HAIJEC044 | Divyashree O S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 39    | HAIJEC045 | Divyashree P S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 40    | HAIJEC046 | Divyashree Q S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 41    | HAIJEC047 | Divyashree R S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 42    | HAIJEC048 | Divyashree S S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 43    | HAIJEC049 | Divyashree T S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 44    | HAIJEC050 | Divyashree U S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 45    | HAIJEC051 | Divyashree V S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 46    | HAIJEC052 | Divyashree W S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 47    | HAIJEC053 | Divyashree X S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 48    | HAIJEC054 | Divyashree Y S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 49    | HAIJEC055 | Divyashree Z S    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 50    | HAIJEC056 | Divyashree AA S   | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 51    | HAIJEC057 | Divyashree AB S   | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 52    | HAIJEC058 | Divyashree AC S   | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 53    | HAIJEC059 | Divyashree AD S   | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 39      | 39 |
| 54    | HAIJEC060 | Divyashree AE S   | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14</  |       |       |       |       |       |       |       |       |       |       |       |       |         |    |

## ATTENDANCE CUM INTERNAL

Subject : Electronic Instrumentation

Class : 3<sup>rd</sup> Sem - 'A'

Subject : Electronic Instrumentation

No. of Classes held : 52

| No. of Classes held |           | 52                 |              |
|---------------------|-----------|--------------------|--------------|
| Sl No               | USN       | Name               | Date / Month |
| 1                   | HAUTEC032 | Jyoti S Dornur     | 6/2          |
| 2                   | HAUTEC033 | K Murthu           | 7/2          |
| 3                   | HAUTEC034 | K Vishal Parade    | 8/2          |
| 4                   | HAUTEC040 | Kanya M            | 9/2          |
| 5                   | HAUTEC041 | Kishan Sathya      | 10/2         |
| 6                   | HAUTEC042 | Kishore N          | 11/2         |
| 7                   | HAUTEC043 | Kavanya B          | 12/2         |
| 8                   | HAUTEC044 | Kapaki T Y         | 13/2         |
| 9                   | HAUTEC045 | M V Ranya          | 14/2         |
| 10                  | HAUTEC046 | M. Akshata N       | 15/2         |
| 11                  | HAUTEC047 | M. Manjunatha      | 16/2         |
| 12                  | HAUTEC048 | Mahesh H           | 17/2         |
| 13                  | HAUTEC049 | Manatha VR         | 18/2         |
| 14                  | HAUTEC050 | Manjunatha HK      | 19/2         |
| 15                  | HAUTEC051 | Nayya Shanthakumar | 20/2         |
| 16                  | HAUTEC053 | Mohana babu DG     | 21/2         |
| 17                  | HAUTEC054 | Monica S           | 22/2         |
| 18                  | HAUTEC055 | Mouni tha DM       | 23/2         |
| 19                  | HAUTEC057 | Naga Ganesh N      | 24/2         |
| 20                  | HAUTEC059 | Namrata J Naik     | 25/2         |
| 21                  | HAUTEC060 | Nayya              | 26/2         |
| 22                  | HAUTEC061 | Bhargavi           | 27/2         |
| 23                  |           |                    |              |
| 24                  |           |                    |              |
| 25                  |           |                    |              |
| 26                  |           |                    |              |
| 27                  |           |                    |              |
| 28                  |           |                    |              |
| 29                  |           |                    |              |
| 30                  |           |                    |              |

| Arts<br>Dance |       | No. of<br>Class<br>Attended | % of<br>Atten-<br>dance | Internal Assessment (25) |     |    | Average<br>Marks |
|---------------|-------|-----------------------------|-------------------------|--------------------------|-----|----|------------------|
| acted         | 1     |                             |                         | II                       | III |    |                  |
| 50            | 94.1  | 10                          | 21½                     | 23                       | 22  | 33 |                  |
| 51            | 98.1  | 10                          | 30                      | 28                       | 25  | 38 |                  |
| 52            | 87.1  | 9                           | 14½                     | 11                       | 20  | 25 |                  |
| 53            | 98.1  | 10                          | 27                      | 24.5                     | 27  | 38 |                  |
| 54            | 88.1  | 10                          | 23½                     | 19                       | 21  | 32 |                  |
| 55            | 87.1  | 9                           | 23                      | 22                       | 21  | 31 |                  |
| 56            | 98.1  | 10                          | 27½                     | 19                       | 23  | 34 |                  |
| 57            | 88.1  | 10                          | 23                      | 28                       | 26  | 36 |                  |
| 58            | 92.1  | 10                          | 21                      | 14                       | 25  | 30 |                  |
| 59            | 100.1 | 10                          | 26                      | 27                       | 22  | 35 |                  |
| 60            | 87.1  | 10                          | 26½                     | 26                       | 20  | 35 |                  |
| 61            | 87.1  | 10                          | 9.5                     | 16.5                     | 14  | 24 |                  |
| 62            | 98.1  | 10                          | 12                      | 14.5                     | 19  | 26 |                  |
| 63            | 90.1  | 9                           | 14                      | 13.5                     | 13  | 23 |                  |
| 64            | 94.1  | 9                           | 13                      | 22.5                     | 08  | 24 |                  |
| 65            | 87.1  | 10                          | 17                      | 14                       | 20  | 27 |                  |
| 66            | 90.1  | 9                           | 14                      | 06                       | 22  | 29 |                  |
| 67            | 92.1  | 10                          | 21½                     | 22                       | 21  | 32 |                  |
| 68            | 90.1  | 9                           | 13½                     | 14                       | 17  | 28 |                  |
| 69            | 92.1  | 10                          | 26                      | 19                       | 24  | 33 |                  |
| 70            | 96.1  | 10                          | 28½                     | 27                       | 28  | 38 |                  |
| 71            | 96.1  | 10                          | 27½                     | 27                       | 28  | 38 |                  |

[illegible]

|                       |                               |                    |      |       |       |           |               |                     |
|-----------------------|-------------------------------|--------------------|------|-------|-------|-----------|---------------|---------------------|
| AIET                  | INTERNAL EXAM RESULT ANALYSIS |                    |      |       |       |           | Format No     | ACD 12              |
|                       |                               |                    |      |       |       |           | Issue No      | 01                  |
|                       |                               |                    |      |       |       |           | Rev. No.      | 00                  |
| Department            | Electronics & Communication   |                    |      |       |       |           | Semester      | 3 <sup>rd</sup> Sem |
|                       |                               |                    |      |       |       |           | Subject Code  | 17EC32              |
| Total No. of Students | 52                            |                    |      |       |       |           | Academic Year | 2018-19             |
| Test                  | Date                          | Number of Students |      |       |       | Signature |               | Remarks             |
|                       |                               | Attended           | 0-13 | 14-24 | 25-30 | Faculty   | HOD           |                     |
| T <sub>1</sub>        | 6-09-18                       | 52                 | 4    | 26    | 22    |           |               |                     |
| T <sub>2</sub>        | 15-10-18                      | 52                 | 6    | 30    | 15    |           |               |                     |
| T <sub>3</sub>        | 26-11-18                      | 52                 | 3    | 37    | 12    |           |               |                     |
| T <sub>4</sub>        |                               |                    |      |       |       |           |               |                     |
| T <sub>5</sub>        |                               |                    |      |       |       |           |               |                     |

Signature of Staff in - charge

HOD's Signature

### PROGRAM OUTCOMES (POs)

|      |                                                                                                                                                                                                                                                                                                          |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PO1  | <b>Engineering knowledge:</b> Apply the knowledge of mathematics, science, Engineering fundamentals and an engineering specialization to the solution of complex engineering problems.                                                                                                                   |
| PO2  | <b>Problem analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.                                                                  |
| PO3  | <b>Design/development of solutions:</b> Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal and environmental considerations.          |
| PO4  | <b>Conduct investigations of complex problems:</b> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.                                                                |
| PO5  | <b>Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.                                                                 |
| PO6  | <b>The engineer and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.                                                               |
| PO7  | <b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.                                                                                   |
| PO8  | <b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.                                                                                                                                                                    |
| PO9  | <b>Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.                                                                                                                                                   |
| PO10 | <b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions. |
| PO11 | <b>Project management and finance:</b> Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.                                               |
| PO12 | <b>Life-long learning:</b> Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.                                                                                                                 |

### PROGRAM SPECIFIC OUTCOMES (PSOs)

|      |                                                                                                                                                                                                                 |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PSO1 | Understand & apply the principles of mathematics, physics & core engineering in the field of Electronics & Communication                                                                                        |
| PSO2 | Ability to design & implement systems using the concepts of Analog & Digital Electronics, Communication & Networking, Signal processing, Embedded Systems & Semiconductor technology to solve complex problems. |
| PSO3 | Acquire the proficiency in the usage of modern hardware & software applt tools in the areas of E&C Engineering.                                                                                                 |

### PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

|      |                                                                                                                                                                                                        |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PEO1 | To prepare graduates with solid foundation in mathematical, scientific & engineering fundamentals required to develop problem solving ability in the field of Electronics & Communication Engineering. |
| PEO2 | To provide adequate exposure to emerging technologies & cutting edge area in Electronics & Communication Engineering among the students professionals to pursue higher studies & research.             |
| PEO3 | To equip Engineering graduates with technical & professional skills & groom them to be aspired candidates with progressive career looked up by the industry.                                           |
| PEO4 | To inculcate professional & ethical attributes among students graduates who will contribute to society as responsible professionals or successful entrepreneurs & become worthy global citizens.       |