

**SEMESTER-I****KARNATAKA STATE BOARD OF TECHNICAL EXAMINATION, BENGALURU.**

Teaching and Examination Scheme for Diploma Programme

Programme Name: **ELECTRONICS & COMMUNICATION ENGINEERING**Scheme: **C-15**Pattern: **FULLTIME**Duration of Programme: **3 years (6 semesters)**Programme Code: **EC**

Sl. no	Course Name	Course / QP code	Teaching Scheme					Examination Scheme						
			Contact Hours					Exam Paper Duration in Hrs	Semester End Exam		CIE Marks	Total Marks	Min Marks for passing (including CIE marks)	
			TH	TU	PR	Total	Credit		Max Marks	Min Marks				
<b>Theory</b>														
1	<b>ENGINEERING MATHEMATICS - I</b>	<b>15SC01M</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>100</b>	<b>35</b>	<b>25</b>	<b>125</b>	<b>45</b>	
2	<b>APPLIED SCIENCE</b>	<b>15SC03S</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>100</b>	<b>35</b>	<b>25</b>	<b>125</b>	<b>45</b>	
3	<b>BASICS OF ELECTRICAL &amp; ELECTRONIC ENGG.</b>	<b>15EC11T</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>100</b>	<b>35</b>	<b>25</b>	<b>125</b>	<b>45</b>	
<b>Practical</b>														
4	<b>APPLIED SCIENCE LAB</b>	<b>15SC04P</b>		<b>2</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>50</b>	<b>25</b>	<b>25</b>	<b>75</b>	<b>35</b>	
5	<b>BASICS OF ELECTRICAL &amp; ELECTRONIC ENGG LAB</b>	<b>15EC12P</b>		<b>2</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>50</b>	<b>25</b>	<b>25</b>	<b>75</b>	<b>35</b>	
6	<b>CONCEPTS OF COMPUTER LAB</b>	<b>15EC13P</b>		<b>2</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>50</b>	<b>25</b>	<b>25</b>	<b>75</b>	<b>35</b>	
<b>Total</b>			<b>12</b>	<b>6</b>	<b>12</b>	<b>30</b>	<b>21</b>		<b>450</b>	<b>180</b>	<b>150</b>	<b>600</b>	<b>240</b>	

**1 Hr Theory = 1 Credit: 2Hrs Practical/TU = 1 Credit. QP Code- Question Paper code: TH-Theory Hours: TU-Tutorial: PR-Practical**

## SEMESTER- II

### KARNATAKA STATE BOARD OF TECHNICAL EXAMINATION, BENGALURU.

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Programme Name: **ELECTRONICS & COMMUNICATION ENGINEERING**

Scheme: **C-15**

Pattern: **FULLTIME**

Duration Of Programme: **3 years (6 semesters)**

Programme Code: **EC**

Sl. no	Course Name	Course / QP code	Teaching Scheme					Examination Scheme					
			Contact Hours					Exam Paper Duration in Hrs	Semester End Exam		CIE Marks	Total Marks	Min Marks for passing (including CIE marks)
			TH	TU	PR	Total	Credit		Max Marks	Min Marks			
<b>Theory</b>													
1	<b>ENGINEERING MATHEMATICS - II</b>	<b>15SC02M</b>	4	-	-	4	4	3	100	35	25	125	45
2	<b>COMMUNICATION SKILLS IN ENGLISH</b>	<b>15CPO1E</b>	4	-	-	4	4	3	100	35	25	125	45
3	<b>BASICS OF SEMICONDUCTOR DEVICES</b>	<b>15EC21T</b>	4	-	-	4	4	3	100	35	25	125	45
<b>Practical</b>													
4	<b>SEMICONDUCTOR DEVICES LAB</b>	<b>15EC22P</b>		2	4	6	3	3	50	25	25	75	35
5	<b>DIGITAL ELECTRONICS LAB-I</b>	<b>15EC23P</b>		2	4	6	3	3	50	25	25	75	35
6	<b>MATHEMATICAL SIMULATION LAB</b>	<b>15EC24P</b>		2	4	6	3	3	50	25	25	75	35
<b>Total</b>			<b>12</b>	<b>6</b>	<b>12</b>	<b>30</b>	<b>21</b>		<b>450</b>	<b>180</b>	<b>150</b>	<b>600</b>	<b>240</b>

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QP Code- Question Paper code: TH-Theory Hours: TU-Tutorial: PR-Practical.

## SEMESTER - III

### KARNATAKA STATE BOARD OF TECHNICAL EXAMINATION, BENGALURU.

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Programme Code: **EC**

Sl. No	Course Name	Course / QP code	Teaching Scheme					Examination Scheme						
			Contact Hours/Week					Exam Paper Duration in Hrs	Semester End Exam		CIE Marks	Total Marks	Min Marks for passing (including CIE marks)	
			TH	TU	PR	Total	Credit		Max Marks	Min Marks				
<b>Theory</b>														
1	<b>ANALOG ELECTRONIC CIRCUITS</b>	<b>15EC31T</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>100</b>	<b>35</b>	<b>25</b>	<b>125</b>	<b>45</b>	
2	<b>DIGITAL ELECTRONICS</b>	<b>15EC32T</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>100</b>	<b>35</b>	<b>25</b>	<b>125</b>	<b>45</b>	
3	<b>ANALOG COMMUNICATION</b>	<b>15EC33T</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>100</b>	<b>35</b>	<b>25</b>	<b>125</b>	<b>45</b>	
4	<b>ELECTRONIC MEASUREMENTS AND INSTRUMENTATION</b>	<b>15EC34T</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>100</b>	<b>35</b>	<b>25</b>	<b>125</b>	<b>45</b>	
<b>Practical</b>														
5	<b>ANALOG ELECTRONICS AND COMMUNICATION LAB</b>	<b>15EC35P</b>	<b>-</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>50</b>	<b>25</b>	<b>25</b>	<b>75</b>	<b>35</b>	
6	<b>DIGITAL ELECTRONICS LAB-II</b>	<b>15EC36P</b>	<b>-</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>50</b>	<b>25</b>	<b>25</b>	<b>75</b>	<b>35</b>	
7	<b>C- PROGRAMMING LAB</b>	<b>15EC37P</b>	<b>-</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>50</b>	<b>25</b>	<b>25</b>	<b>75</b>	<b>35</b>	
<b>Total</b>			<b>16</b>	<b>6</b>	<b>12</b>	<b>34</b>	<b>25</b>		<b>550</b>	<b>215</b>	<b>175</b>	<b>725</b>	<b>285</b>	

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**SEMESTER -IV**

**KARNATAKA STATE BOARD OF TECHNICAL EXAMINATION, BENGALURU.**

Teaching and Examination Scheme for Diploma Programme

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Pattern: **FULL TIME**

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Programme Code: **EC**

Sl. no	Course Name	Course / QP code	Teaching Scheme					Examination Scheme						
			Contact Hours/Week					Exam Paper Duration in Hrs	Semester End Exam		CIE Marks	Total Marks	Min Marks for passing (including CIE marks)	
			TH	TU	PR	Total	Credit		Max Marks	Min Marks				
<b>Theory</b>														
1	<b>PROFESSIONAL ETHICS &amp; INDIAN CONSTITUTION</b>	<b>15EC41T</b>	4	-	-	4	4	3	100	35	25	125	45	
2	<b>MICROCONTROLLERS &amp; APPLICATIONS</b>	<b>15EC42T</b>	4	-	-	4	4	3	100	35	25	125	45	
3	<b>DIGITAL COMMUNICATION</b>	<b>15EC43T</b>	4	-	-	4	4	3	100	35	25	125	45	
4	<b>DATA COMMUNICATION &amp; COMPUTER NETWORKS</b>	<b>15EC44T</b>	4	-	-	4	4	3	100	35	25	125	45	
<b>Practical</b>														
5	<b>PROFESSIONAL PRACTICE LAB</b>	<b>15EC45P</b>	-	2	4	6	3	3	50	25	25	75	35	
6	<b>MICROCONTROLLER LAB</b>	<b>15EC46P</b>	-	2	4	6	3	3	50	25	25	75	35	
7	<b>DIGITAL COMMUNICATION AND NETWORKING LAB</b>	<b>15EC47P</b>	-	2	4	6	3	3	50	25	25	75	35	
<b>Total</b>			<b>16</b>	<b>6</b>	<b>12</b>	<b>34</b>	<b>25</b>		<b>550</b>	<b>215</b>	<b>175</b>	<b>725</b>	<b>285</b>	

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## SEMESTER - V

Programme Name: **ELECTRONICS & COMMUNICATION ENGINEERING**

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Programme Code: **EC**

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Duration of Programme: **3 years (6 semesters)**

Sl. no	Course Name	Course / QP code	Teaching Scheme					Examination Scheme						
			Contact Hours					Exam Paper Duration in Hrs	Semester End Exam		CIE Marks	Total Marks	Min Marks for passing (including CIE marks)	
			TH	TU	PR	Total	Credit		Max Marks	Min Marks				
<b>Theory</b>														
1	<b>ORGANIZATION MANAGEMENT</b>	<b>15EC51T</b>	4	-	-	4	4	3	100	35	25	125	45	
2	<b>ARM CONTROLLER</b>	<b>15EC52T</b>	4	-	-	4	4	3	100	35	25	125	45	
3	<b>ADVANCED COMMUNICATION</b>	<b>15EC53T</b>	4	-	-	4	4	3	100	35	25	125	45	
4	<b>APPLICATIONS OF ELECTRONICS ENGINEERING</b>	<b>15EC54T</b>	4	-	-	4	4	3	100	35	25	125	45	
<b>Practical</b>														
5	<b>ARM CONTROLLER LAB</b>	<b>15EC55P</b>	-	2	4	6	3	3	50	25	25	75	35	
6	<b>PCB DESIGN AND FABRICATION LAB</b>	<b>15EC56P</b>	-	2	4	6	3	3	50	25	25	75	35	
7	<b>ELECTRONICS SERVICING LAB</b>	<b>15EC57P</b>	-	2	4	6	3	3	50	25	25	75	35	
8	<b>PROJECT WORK-I</b>	<b>15EC58P</b>	-	1	2	3	-	-	-	-	25	25	-	
<b>Total</b>			<b>16</b>	<b>7</b>	<b>14</b>	<b>37</b>	<b>25</b>		<b>550</b>	<b>215</b>	<b>200</b>	<b>750</b>	<b>285</b>	

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## SEMESTER - VI

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Programme Code: **EC**

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			Contact Hours/Week					Exam Paper Duration in Hrs	Semester End Exam		CIE Marks	Total Marks	Min Marks for passing (including CIE marks)	
			TH	TU	PR	Total	Credit		Max Marks	Min Marks				
<b>Theory</b>														
1	<b>INDUSTRIAL AUTOMATION</b>	<b>15EC61T</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>100</b>	<b>35</b>	<b>25</b>	<b>125</b>	<b>45</b>	
2	<b>EMBEDDED SYSTEMS</b>	<b>15EC62T</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>100</b>	<b>35</b>	<b>25</b>	<b>125</b>	<b>45</b>	
3	<b>ELECTIVE-II</b> <b>a) MEDICAL ELECTRONICS</b> <b>b) ADVANCED MICROPROCESSORS</b> <b>c) OOPs USING C++</b>	<b>15EC63A</b> <b>15EC63B</b> <b>15EC63C</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>100</b>	<b>35</b>	<b>25</b>	<b>125</b>	<b>45</b>	
<b>Practical</b>														
4	<b>INDUSTRIAL AUTOMATION LAB</b>	<b>15EC64P</b>	<b>-</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>50</b>	<b>25</b>	<b>25</b>	<b>75</b>	<b>35</b>	
5	<b>VERILOG LAB</b>	<b>15EC65P</b>	<b>-</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>50</b>	<b>25</b>	<b>25</b>	<b>75</b>	<b>35</b>	
6	<b>PROJECT WORK-II</b>	<b>15EC66P</b>	<b>-</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>50</b>	<b>25</b>	<b>25</b>	<b>75</b>	<b>35</b>	
7	<b>INPLANT TRAINING</b>	<b>15EC67P</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>-</b>	
<b>Total</b>			<b>12</b>	<b>6</b>	<b>16</b>	<b>34</b>	<b>23</b>		<b>450</b>	<b>205</b>	<b>175</b>	<b>625</b>	<b>240</b>	

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