Physics-1

Code: PH-201

Contact: 3L + 1T

Credits: 4

Syllabus

Course outcome:

|  |  |
| --- | --- |
| CO | Statement |
| C01 | Able to explain the different types of vibrations. |
| C02 | Able to apply the laser principles to holography. |
| C03 | Able to analyze the problems of black body radiation. |
| CO4 | Able to evaluate X-ray in different experiments/processes. |

**PSO:**

**PSO1:**Ability to Identify, Formulate & Solve problems of basics of Electronics & Communication Engineering and to apply them to various areas like Analog & digital Circuits, Signal & systems, Communication, VLSI, Embedded System etc.

**PSO2:**Ability to design the systems of Electronics & Communication Engineering using advanced hardware and software tools with analytical skills to achieve the Soceital needs.

**PSO3:** Knowledge of social & environmental awareness along with ethical responsibility to achieve a successful career addresses the real world applications using optimal resources as an entrepreneur.

Mapping with CO with PSO

|  |  |  |  |
| --- | --- | --- | --- |
|  | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 1 |
| CO2 | 3 | 3 | 1 |
| CO3 | 3 | 3 | 1 |
| CO4 | 3 | 3 | 1 |
| AVG OF PH-201 | 3 | 3 | 1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| COs | Class test (T1)  (30) | Slot test-1 (T2) (30) | Assignment  (T3) (30) | Slot test-2 (T4) (30) | Quiz |
| CO1 | Q1,Q2, | Q1 | Q1 | Q1, Q2 | √ |
| CO2 | Q3 | Q2,Q3, | Q2 | Q1,Q2,Q3, Q4, Q5 | √ |
| CO3 | Q4 | - | Q3, Q5 | Q4 | √ |
| CO4 | - | Q4,Q5 | Q4 | Q4 | √ |

**CO attainment for a course PH 201:**

Target level 1: 60% students must score 60% and above

Target level 2: 70% students must score 60% and above

Target level 3: 80% students must score 60% and above

Total number of student for the batch 2015-2019 in I year = 118

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Course outcome | Avg. grading on scale of 3 | Distribution % | | |
| 3 | 2 | 1 |
| CO1 |  | 90/118=76.27% |  |  |
| CO2 |  | 100/118=84.75% |  |  |
| CO3 |  | 85/118=72.03% |  |  |
| CO4 |  | 72/118=61.01% |  |  |

|  |  |  |
| --- | --- | --- |
| CO and PO Scale | 3 | Strongly Related |
| 2 | Moderately Related |
| 1 | Low |

CO achieved if percentage (%) of students is greater than or equal to 60

|  |  |  |
| --- | --- | --- |
| Course outcomes | % of students achieved CO | CO result (achieved) (Y/N) |
| CO1 | 76.27% | Y |
| CO2 | 84.75% | Y |
| CO3 | 72.03% | Y |
| CO4 | 61.01% | Y |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CO** | **Statement** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** |
| PH-201.  1 | Able to explain the different types of vibrations. | 3 | 3 | 3 | 3 | 3 | - | - | - | 2 | 2 | 2 | 3 |
| PH-201.  2 | Able to apply the laser principles to holography. | 3 | 3 | 3 | 3 | 3 | - | - | - | - | - | 2 | 3 |
| PH-201.  3 | Able to analyze the problems of black body radiation. | 3 | 3 | 3 | 3 | 3 | - | - | - | - | 2 | 1 | 3 |
| PH-201.  4 | Able to evaluate X-ray in different experiments/processes. | 3 | 3 | 3 | 3 | 3 | - | - | - | 2 | 3 | 3 | 3 |
|  |  | 3 | 3 | 3 | 3 | 3 |  |  |  |  | 2 | 2 | 3 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| PH-201 | 3 | 3 | 3 | 3 | 3 |  |  |  |  | 2 | 2 | 3 |

Result of attainment of POs (CIE)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course | COs | CO Attainment | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| PH-201 | CO1 | 76.27% | 76.27% | 76.27% | 76.27% | 76.27% | 76.27% |  |  |  |  | 50.85% | 50.85% | 76.27% |
| CO2 | 84.75% | 84.75% | 84.75% | 84.75% | 84.75% | 84.75% |  |  |  |  | 56.5% | 56.5% | 84.75% |
| CO3 | 72.03% | 72.03% | 72.03% | 72.03% | 72.03% | 72.03% |  |  |  |  | 48.02% | 48.02% | 72.03% |
| CO4 | 61.01% | 61.01% | 61.01% | 61.01% | 61.01% | 61.01% |  |  |  |  | 40.67% | 40.67% | 61.01% |
| AVG of  PH-201 |  |  | 73.52% | 73.52% | 73.52% | 73.52% | 73.52% |  |  |  |  | 49.01% | 49.01% | 73.52% |

Result of POs (SEE: Semester End Examination )

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SL No. | Course | % of students achieved >=60% | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| 1 | PH-201 | 45.76% | 45.76% | 45.76% | 45.76% | 45.76% | 45.76% |  |  |  |  | 30.50% | 30.50% | 45.76% |

**CO-PSO mapping**

|  |  |  |  |
| --- | --- | --- | --- |
|  | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 1 |
| CO2 | 3 | 3 | 1 |
| CO3 | 3 | 3 | 1 |
| CO4 | 3 | 3 | 1 |
| AVG OF PH-201 | 3 | 3 | 1 |

**Result of attainment of PSOs (CIE) ( NB : The following table to be generated considering mapping of COs with PSOs)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Course | COs | CO Attainment | PSO1 | PSO2 | PSO3 |
| PH-201 | CO1 | 76.27% | 76.27% | 76.27% | 25.42% |
| CO2 | 84.75% | 84.75% | 84.75% | 28.25% |
| CO3 | 72.03% | 72.03% | 72.03% | 24.01% |
| CO4 | 61.01% | 61.01% | 61.01% | 20.33% |
| AVG of PH-201 |  | 73.52% | 73.52% | 73.52% | 24.50% |

**Result of attainment of PSOs (SEE: Semester End Examination) ( NB : The following table to be generated considering mapping of COs with PSOs)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SL No. | Course | % of students achieved >=60% | PSO1 | PSO2 | PSO3 |
| 1 | PH-201 | 45.76% | 45.76% | 45.76% | 15.25% |