

## Theory online Classes Details of April Month

| S.No | Year/Sem | Subject             | Date of Lecture & Class Timings | Topic  | App Used    | Link |
|------|----------|---------------------|---------------------------------|--|-------------|------|
| 1    | I-II     | Engineering Physics | 03-04-2020 & 1:20 PM            | Claussius -Mosotti equation  | zoom app    |      |
| 2    | I-II     | Engineering Physics | 04-04-2020 & 1:20 PM            | Applications of Dielectrics  | zoom app    |      |
| 3    | I-II     | Engineering Physics | 06-04-2020 & 1:20 PM            | Introduction to Magnetic Materials, Definitions: Magnetic dipole moment, Magnetic induction, Magnetic field, magnetic flux | zoom app    |      |
| 4    | I-II     | Engineering Physics | 06-04-2020 & 2:15 PM            | Magnetization, Magnetic susceptibility and permeability, Origin of permanent magnetic moment due orbital motion            | zoom app    |      |
| 5    | I-II     | Engineering Physics | 07-04-2020 & 1:20 PM            | Origin of permanent magnetic moment due to Spin motion, Classification of magnetic materials: dia & para                   | zoom app    |      |
| 6    | I-II     | Engineering Physics | 08-04-2020 & 1:20 PM            | Classification of Magnetic materials: Ferro, Antiferro and ferri   | zoom app    |      |
| 7    | I-II     | Engineering Physics | 09-04-2020 & 1:20 PM            | Domain theory of Ferromagnetism  | zoom app    |      |
| 8    | I-II     | Engineering Physics | 13-04-2020 & 1:20 PM            | Hysteresis loop, Types of magnetic materials: soft and hard magnetic materials   | zoom app    |      |
| 9    | I-II     | Engineering Physics | 16-04-2020 & 1:20 PM            | Magnetic device applications   | zoom app    |      |
| 10   | I-II     | Engineering Physics | 17-04-2020 & 1:20 PM            | Introduction to lasers, Characteristics of Laser   | zoom app    |      |
| 11   | I-II     | Engineering Physics | 20-04-2020 & 1:20 PM            | Stimulated absorption, Spontaneous and Stimulated emission of radiation  | zoom app    |      |
| 12   | I-II     | Engineering Physics | 20-04-2020 & 2:15 PM            | Laser Construction, Types of pumping mechanism   | zoom app    |      |
| 13   | I-II     | Engineering Physics | 21-04-2020 & 1:20 PM            | Derivation for Einstein's coefficients   | zoom app    |      |
| 14   | I-II     | Engineering Physics | 22-04-2020 & 1:20 PM            | Population inversion, Different types of Pumping mechanisms  | zoom app    |      |
| 15   | I-II     | Engineering Physics | 23-04-2020 & 1:20 PM            | Working and Construction of He-Ne Laser  | Cisco Webex |      |
| 16   | I-II     | Engineering Physics | 27-04-2020 & 1:20 PM            | Working and Construction of Nd-YAG Laser   | Cisco Webex |      |
| 17   | I-II     | Engineering Physics | 29-04-2020 & 11:30 AM           | Working and Construction of Semiconductor Laser  | Cisco Webex |      |
| 18   | I-II     | Engineering Physics | 30-04-2020 & 11:45 PM           | Applications of lasers   | Cisco Webex |      |
| 19   | I-II     | Engineering Physics | 27-04-2020 & 2:15 PM            | Problems on Lasers   | Cisco Webex |      |
| 20   | I-II     | Engineering Physics | 28-04-2020 & 1:20 PM            | Introduction to Optical Fibers, Working Principle- Total Internal Reflection   | Cisco Webex |      |
| 21   | I-II     | Engineering Physics | 30-04-2020 & 1:20 PM            | Construction of optical fibers, Critical angle of propagation  | Cisco Webex |      |

Theory online Classes Details of May Month

| S.No | Year/Sem | Subject             | Date of Lecture & Class Timings | Topic  | App Used    | Link |
|------|----------|---------------------|---------------------------------|--|-------------|------|
| 1    | I-II     | Engineering Physics | 04-05-2020 & 10:50 AM           | Derivation for Acceptance angle-Numerical Aperture                     | Cisco Webex |      |
| 2    | I-II     | Engineering Physics | 06-05-2020 & 11:50 AM           | Types of Fibers: Mode of Propagation, Refractive Index Profile         | Cisco Webex |      |
| 3    | I-II     | Engineering Physics | 07-05-2020 & 8:30 AM            | Step Index Fibers and their wave propagation in Single and multimode   | Cisco Webex |      |
| 4    | I-II     | Engineering Physics | 08-05-2020 & 11:50 AM           | Graded Index Fibers and their wave propagation in Single and multimode | Cisco Webex |      |
| 5    | I-II     | Engineering Physics | 11-05-2020 & 10:50 AM           | Importance of V- numbers in Mode of Propagation, Refractive Index      | Cisco Webex |      |
| 6    | I-II     | Engineering Physics | 13-05-2020 & 11:50 AM           | Fiber Optics Communication system Block diagram                        | Cisco Webex |      |
| 7    | I-II     | Engineering Physics | 14-05-2020 & 8:30 AM            | Medical Applications of Optical Fiber                                  | Cisco Webex |      |
| 8    | I-II     | Engineering Physics | 15-05-2020 & 8:30 AM            | Introduction to Sensors, Characteristics of Sensors                    | Cisco Webex |      |
| 9    | I-II     | Engineering Physics | 18-05-2020 & 10:50 AM           | Basic Sensor system working, Types of Sensors and their applications   | Cisco Webex |      |
| 10   | I-II     | Engineering Physics | 20-05-2020 & 11:50 AM           | Strain and Pressure sensors,   | Cisco Webex |      |
| 11   | I-II     | Engineering Physics | 21-05-2020& 8:30 AM             | Piezoelectric, magnetostrictive sensors                                | Cisco Webex |      |
| 12   | I-II     | Engineering Physics | 22-05-2020 & 8:30 AM            | Fibre optic methods of pressure sensing                                | Cisco Webex |      |
| 13   | I-II     | Engineering Physics | 26-05-2020 & 10:50 AM           | Temperature sensors ,bimetallic strip                                  | Cisco Webex |      |
| 14   | I-II     | Engineering Physics | 28-05-2020 & 11:50 AM           | pyroelectric detectors, Hall-effect sensor                             | Cisco Webex |      |
| 15   | I-II     | Engineering Physics | 29-05-2020 & 8:30 AM            | Smoke Detectors  | Cisco Webex |      |
| 16   | I-II     | Engineering Physics | 30-05-2020 & 8:30 AM            | Fire detectors.  | Cisco Webex |      |