



# PRAGATI ENGINEERING COLLEGE

(Autonomous)

1-378, ADB Road, Surampalem - 533 437 Near Peddapuram, E G Dist., (A.P.)

(Approved by AICTE, New Delhi & Permanently Affiliated to JNTUK & Accredited by NAAC 'A' Grade)

## DEPARTMENT OF PHYSICS

PEC/ DEPARTMENT OF PHYSICS/BOARD OF STUDIES MEETING-1/2016-2017

Date: 10-7-2016

### BOARD OF STUDIES - MINUTES OF MEETING

Minutes of the meeting of the Board of Studies in Physics held on 9<sup>th</sup> & 10<sup>th</sup> July 2016 in the Physics laboratory.

#### Members Present:

S.No	Name of the Faculty	Role	Signature
1	Sri.P.Raj Shekhar Phaneendra	Chairman	P. Raj Shekhar
2	Dr. G.Padmaja Rani, Professor & HOD UCEK, INTUK, Kakinada	Affiliating University Nominated Member	G. Padmaja Rani 9/7/16
3	Prof.K.Chandra Mouli, Professor, Engineering Physics, UCE, Andhra University	External Expert Member	
4	Dr.M.Ravi Kumar, Assoc Prof. of Engg Physics, GITAM Institute of Technology, GITAM University	External Expert Member	M. Ravi Kumar
Internal Faculty Representation			
5	Mr G.Ravi Prasad	Member	G. Ravi Prasad
6	Mr.G.Bhakara Rao	Member	G. Bhakara Rao
7	Mr.N.Ramakrishna	Member	N. Ramakrishna

#### AGENDA:

1. Welcome Address by Chairman-Board of Studies of the Department
2. Discussion on proposed course structure and formulation of syllabus.
3. Discussion on proposed B.Tech First Year Applied Physics & Engineering Physics both Theory & laboratory course syllabus and ratification of the same.
4. Ratification of the proposed modal papers for internal and external examinations of theory & laboratory courses.
5. Recognition of reputed institutions for selecting the Examiners for semester end paper setting & valuation of papers and also for laboratory practical external examiners.
6. Finalization of text books and reference books.
7. Any other item.

### Suggestions offered in syllabus:

#### Applied Physics:

- To add introduction in each chapter.
- To specify thin films concept as film of uniform thickness and Wedge shaped film in unit-I.
- To add classifications of fibers in unit-IV Fiber optics).
- To incorporate Density of states in unit-V(Free electron theory).
- To incorporate Assumptions of Classical free electron theory in unit-V(Free electron theory).

#### Engineering Physics:

- To add introduction in each chapter.
- To specify thin films concept as film of uniform thickness and Wedge shaped film in unit-I.
- To delete holography topic in unit-III (polarization).
- To add detection of ultrasonic's in unit-IV (Ultrasonics).
- To delete SONAR and Endoscopy topics in unit-IV(Ultrasonics).
- To specify condition for good hall, defects & remedies, types of production –Piezo electric effect, Detection-Piezo electric method in unit-IV(Ultrasonics).
- To add Absorption coefficient and its Measurements in Unit-IV (Acoustics).
- To add Bragg's X-ray spectrometer in unit-V (Crystallography & X-ray diffraction).
- To remove basis of magnetization & Origin of Magnetization and add introduction in unit-VI(Magnetism)..
- To add Diamagnetism& Para magnetism in unit-VI(Magnetism).
- To specify soft& Hard Magnetic materials unit-VI(Magnetism).

#### Suggestions offered in Weight age to Virtual lab-assignments:

- To allot 5 marks for Virtual lab assignment, 5 marks for unit wise assignments in each mid, instead of giving 10 marks for assignments.
- To delete record marks and replace it by precautions in External lab examinations.

#### Suggestions for text book /References:

- To introduce Engineering physics –Resnick&Halliday&Krane, Volume I&II, John Wiley& Sons.



## Revisions offered in syllabus

(APPLIED PHYSICS)

- To add introduction in each chapter
- To add classifications of fibers in unit IV (Fiber optics)
- To incorporate "Density of states" in unit V
- To incorporate Assumptions of classical free electron theory in unit (V) - Free electron theory.
- To specify thin film as film of equal thickness & wedge shaped film in unit I

## Engineering Physics

- To add introduction in each chapter.
- To delete holography III
- To add detection of ultrasonics in unit IV
- To delete SONAR & Endoscopy in unit IV
- To add Absorption coefficient & its measurements in unit IV
- To remove Basis of magnetism & origin of magnetism & add introduction in unit VI
- To add diamagnetism & Paramagnetism in unit VI
- To add Bragg's X-ray spectrometer in unit V
- To specify thin films as film of equal thickness & wedge shaped film in unit I
- To specify condition for good hall, defects & remedies, Type of Production - Piezoelectric effect, detection - Piezoelectric method
- To specify soft & Hard magnets

Suggestions offered in weightage to virtual lab - Assignments

- To allot 5 marks for virtual Lab Assignment for each MID out of '10' marks for Assignment. Remaining 5 marks for submitting unit wise Assignments
- To delete Record mark submission & replace it by Precaution in External Lab examination.

Suggestions for text book/References

- To introduce "Engineering Physics" - Resnick, Halliday for reference book

P. Rajkumar,  
K. Srinivasan,  
K. Srinivasan

~~G. Srinivasan~~  
Ravikiran.