



VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
Ibrahimbagh, Hyderabad – 500031

DEPARTMENT OF PHYSICS

07.06.2017

**MINUTES OF THE MEETING OF THE BOARD OF STUDIES IN PHYSICS HELD ON 07.06.17 AT
11:00 AM IN CONFERENCE HALL, VASAVI COLLEGE OF ENGINEERING.**

The following members were present:

1. Prof. J. Siva kumar, Professor, HOD, Department of Physics, OU, Hyderabad, Subject Expert
2. Prof. C. Vishnuvardhan Reddy, Chairman, BOS in Physics, OU, Subject expert
3. Dr. V. Satyanarayana, Asst. Professor, BITS, Hyderabad, Subject Expert
4. Prof. P. Madusudhan Rao, Former Professor and HOD, JNTU, Hyderabad, Subject Expert
5. Prof A. S. Sai Prasad, Professor, HOD& Chairman in BOS, Department of Physics, VCE, Hyd
6. Dr. P. Venkateswara Rao, Assoc. Prof. Department of Physics, VCE, Hyderabad
7. Dr. V .Ravi Kumar, Assoc. Prof. Department of Physics, VCE, Hyderabad
8. Dr. G. Ramadevudu, Sr. Asst. Prof. Department of Physics, VCE, Hyderabad
9. Mr T. Satish Kumar, Asst. Prof. Department of Physics, VCE, Hyderabad

Prof. Anjan Kumar Giri, Head, Department of IIT-H, University Nominee could not able to attend the meeting.

Prof. A. S. Sai Prasad, Head and chairman, BOS in Physics welcomed the members. He informed the members that the college started implementing Choice Based Credit System (CBCS) with effect from the Academic Year 2016-17. Now, to reinforce the teaching learning, some new changes were contemplated. To meet the requirements, it is proposed to revise the curriculum of Physics offered to first year B.E students in I and II semesters and also open electives at II and III year levels in Physics. He outlined the salient features proposed syllabi to the members. He further added that the proposed syllabi are prepared in consultation with the Heads of Engineering Departments of the college.

The following items are taken up for consideration:

1. Approval of $\frac{1}{4}$ B.E Scheme of Instruction & Examination under CBCS with effect from academic year 2017-2018

The Chairman, BOS presented the $\frac{1}{4}$ B.E, I and II semesters Scheme of Instruction and Examination under CBCS with effect from academic year 2017-2018. He explained that in the Academic year the percentage of marks for Semester End Examination (SEE) and continuous internal assessment (CIE) are in the ratio 70:30. Now it is proposed to change this ratio as 60:40. This enables the students to acquire knowledge continuously throughout the semesters and discourages rote learning. He proposed that

1. Engineering Physics theory course in I semester and Applied Physics theory course in II semester of each 2 credits (with 2 lecture hours + one tutorial hour) will be conducted to all the branches of engineering.
2. Physics laboratory is conducted for half of the sections in I semester and for the remaining half of sections in semesters i.e. effectively students will have only one physics lab in the first-year B.E

The members enquired for the method of assessment. The Head clarified that there will be no change from the previous of conducting three quizzes, three assignments and two internal examinations and one SEE.

Prof., J, Siva Kumar, Head, Department of Physics and Prof. C. Vishnuvardhan Reddy, Chairman, BOS in Physics, O.U suggested

- to check whether the basics Sciences with this scheme can meet minimum credits requirement as recommend by AICTE.
- to follow AICTE norms, in which AICTE curriculum recommended to have physics labs in both the semesters as full lab courses.
- That the students taking admissions into engineering program after completing their intermediate, do not have sufficient practical exposure and hence physics lab may be extended to both the semesters.

Members of BoS approved the proposed scheme of instructions and examination for first year BE (I-semester and II-semester) under CBCS for the academic year 2017-2018.

2. Approval of contents of Physics theory curriculum of ¼ B.E for first and second semesters

The chairman, BOS in Physics presented the syllabus contents of the proposed curriculum of ¼ B.E first and second semesters to the members.

The following suggestion are made by the members:

- a. The contents of the syllabi framed for the ¼ B.E course are selected to suit the requirements of Engineering students.
- b. However, the sequencing of Units of the syllabi may be reorganised for better understanding of the subject by the students.
- c. As the department is proposing open elective courses of physics to the students at II and III year level, there is no need to the prepare the syllabus separately for various branches in the II semester. The fundamental knowledge of physics shall be common to the students of the branches of engineering.
- d. The following modifications in I semester Engineering Physics curriculum have been made by the members:
 - i. Appreciated for giving the course objectives and outcomes at the beginning of the syllabus
 - ii. In unit-I, "Superposition of two mutually perpendicular simple harmonic vibrations of same frequency" shall be revised as "Superposition of simple harmonic vibrations of same frequency"
 - iii. In unit-III add "evanescent field" in the optical fibre chapter
 - iv. In unit-IV include "pumping" in the laser chapter
 - v. In unit-V add "skin depth," in the EM theory chapter

The following modifications in II semester Applied Physics curriculum have been made by the members:

- vi. In unit-III include "Fermi energy and Hall effect" in the band theory chapter

The above suggestions have been incorporated in the curriculum.

It is resolved to approve the proposed syllabi First BE Engineering Physics (I-semester) and Applied Physics (II-semester) under CBCS for the academic year 2017-2018 with above suggestions.

3. Withdrawal of Physics Bridge Course to the lateral entry students with effect from 2017-18 academic year.

The Head, department of Physics, Prof. A. S. Sai Prasad informed that the Osmania university has removed the Bridge course in Physics offered at 2/4 BE level to the lateral entry students and therefore, it is proposed to withdraw the course offered by the department of Physics.

It is resolved to approve the withdrawal of Physics course to lateral entry students at 2/4 BE level with effect from academic year 2017-18.

4. Approval of contents of Physics laboratory for $\frac{1}{4}$ B.E

The Head, department of Physics, Prof. A. S. Sai Prasad informed that Physics laboratory is conducted for half of the sections in I semester and for the remaining half of sections in semesters i.e. effectively students will have only one physics lab in the first-year B.E. The contents of the laboratory experiments are placed before the members of BOS.

It is resolved to approve the proposed syllabi of Physics laboratory for $\frac{1}{4}$ B.E under CBCS for the academic year 2017-2018.

5. Approval of syllabi of one and two credit open electives

It is proposed to offer **four one credit** open electives and **three two credit** in Physics to the students under CBCS at II and III-year levels. Students are at liberty to choose any one from the list. Students of any branch can opt for the open electives and shall complete three credits from physics and chemistry open electives put together. The following **one credit open** electives are proposed:

1. FUNDAMENTALS OF CRYOGENICS
2. DISPLAY DEVICES
3. FUNDAMENTALS OF VACUUM TECHNOLOGY
4. NON- DESTRUCTIVE TESTING

The following **two credit open** electives are proposed:

1. QUANTUM MECHANICS FOR ENGINEERS
2. SMART MATERIALS AND APPLICATION
3. FUNDAMENTALS OF THIN FILM TECHNOLOGY

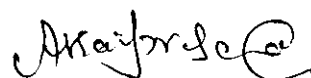
The contents of the above electives are presented to the members.

The members appreciated introduction of open electives. The choice of titles and contents of the proposed open electives are most suitable and relevant to the engineering students. The open electives courses must be delivered at higher level so that students will understanding the importance and appreciate the contents.

The members made minor changes to the contents of the above open electives and all the changes are incorporated in the contents.

It is resolved to approve the syllabi of the above one credit and two credit open elective courses to be offered at II and III year level by the department of Physics.

The meeting ended with vote of thanks





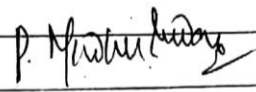
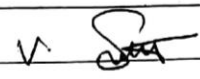
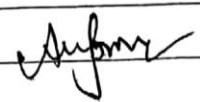
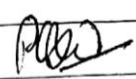
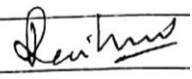

Prof. A.S. Sai Prasad
Head and chairman
Department of Physics

Vasavi College of Engineering

Department of Physics

Meeting of Board of Studies in Physics

7.06.2017

Name	Designation	Signature
1. Prof. J. Sivakumar	Head, Department of Physics, Osmania University Member- BOS.	
2. Prof. C. Vishnuvardhan Reddy	Chairman BOS in Physics, DU Member- BOS	
3. Prof. P. Madhusudhana Rao	Former Professor JNTU - H, Hyd. Member- BOS	
4. Dr. J. V. Satyanarayana Murthy	Asst. Prof BITS PALANI Member - BOS.	
5. Prof. A. S. Saiprasad	Head & Chairman BOS, Dept. of Physics Vasavi College of Engg.	
6. Dr. P. Venkateswara Rao		
7. Dr. V. Ravi Kumar		
8. Dr. G. Ramadevudu		
9. Mr. T. Satish Kumar		