

## ACTION TAKEN REPORT

[Meeting held on 28<sup>th</sup> Sept. 2019]

### 1. T.Y.B.Sc. Physics – Curriculum:

As per the suggestions made by Prof. Ajay Patwardhan regarding course and unit titles and the syllabus of the courses for both the semesters are prepared. As per the suggestions made by Prof. Ajay Patwardhan and by looking at the opportunities, the new course on 'Applied Physics' in place of 'Relativity' course is included in Sem-VI. In continuation, "Fluid dynamics' and 'Relativistic dynamics' are included in Unit-III & Unit-IV of 'Classical Mechanics'.

As per the suggestions made by Dr. S. B. Kulkarni, the topics on 'Dielectrics', Magnetism and 'Solid State Devices' are included in Unit-I, Unit-IV and Unit-III respectively.

As per the suggestions made by Prof. Ajay Patwardhan, the topics on 'Fourier series' and 'Matrices' are included in 'Mathematical, Thermal and Statistical Physics' course. In addition to this, Unit-III of this course is devoted to 'Thermodynamical Potentials' in place of 'Statistical Thermodynamics' for the completeness of the course.

Regarding 'Electrodynamics' Course and as per the suggestions made by Dr. S. B. Kulkarni and Dr. Pujari, the rearrangement of the topics under the suitable units are made and a topic on 'Electromagnetic Induction' is also included in this course. As far as 'Electronics' course is concerned and as per the suggestions made by Dr. Pujari and Dr. S. B. Kulkarni that one Unit (Unit-IV) is devoted to 'Communication Electronics' and in addition to this and as per the suggestions made by Prof. Ajay Patwardhan, one Unit (Unit-III) is devoted to 'Consumer Electronics' which is of great practical importance in day to day life is concerned.

As per the suggestions made by Prof. Ajay Patwardhan that the topic on 'Nuclear Reactions' is included in 'Nuclear Physics' course and the remaining topics are appropriately reshuffled.

By looking at the applications of 'Physics' and occupation oriented courses and as per the suggestions made by Prof. Ajay Patwardhan and Dr. S. B. Kulkarni that the entire course on 'Relativity' is replaced with 'Applied Physics' Course, which will consists of: Chemical Physics, Bio-Physics, Environmental Physics and Geo-Physics'. The course on 'Atomic & Molecular Physics', as the units are appropriately arranged is kept as it is.

- Course-wise, list of experiments for Physics Laboratory Courses will be prepared and new experiments, if any, will be included.
- For the sake of uniformity with the Practical Laboratory courses of FYBSc and SYBSc, the 'Skill Experiments' and 'Demonstration Experiments' of TYBSc Physics will be divided in two groups and both the groups be placed along with the regular experiments in both the Semesters – V & VI.

## 2. T.Y.B.Sc. Applied Component - Course Structure Titles and Unit titles:

As per the suggestions made by Prof. Ajay Patwardhan, the names of the applied components courses are changed as 'Instrumentation - I' (Sem-V) and 'Instrumentation - II' (Sem-VI) instead of 'Electronic Instrumentation-I & II'. The reason is to include the syllabus on other instruments besides electronic instruments in these papers.

As per the suggestions made by Dr. Pujari and Dr. S. B. Kulkarni, as far as 'Instrumentation – I' course is concerned, the signal generation part and the topic on 2<sup>nd</sup> order active filters are included in Unit-II, since it is devoted to signal conditioning. In addition to this and as per the suggestions made by Prof. Ajay Patwardhan, the 'basic analytical instruments' are included in Unit-III (in addition to data acquisition and conversion techniques). Furthermore, as per the suggestions made by Dr. S. B. Kulkarni, that the consumer appliances are included in Unit-IV since it is devoted to modern techniques and consumer appliances which are of great importance in day to day life.

As per the suggestions made by Dr. S. B. Kulkarni, Dr. Pujari and Prof. Ajay Patwardhan, as far as 'Instrumentation –II' course is concerned, the first two Units (Unit-I & II) will be devoted to 'Introduction to Microcontrollers and its interfacing' and Unit-III and Unit-IV will be devoted to 'Introduction to Python and Python programming'.

- Course-wise, list of experiments for 'Instrumentation – I' & and programs for 'Instrumentation - II' courses will be prepared.

## 3. Practical Exams of UG - Odd Semester (I, III & V) be made as Continuous Internal Assessment:

The concerned issues regarding practical examinations of odd semesters of UG courses (Sem - I, III & V) including their rubrics are discussed thoroughly and being it is the policy matter of science stream and all courses / subjects and for the sake of uniformity, the said practical examinations are made as Continuous Internal Assessment kind.

## 4. Skill based courses (TYBSc):

The following certificate (supplementary) courses are made for TYBSc Physics, one of these will be offered to the students in addition to their regular curriculum.

1. Bio-electronics
2. Basic Analytical Instruments

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