

**Kongunadu Arts and Science College (Autonomous)**  
**Coimbatore 641029**

**Department of Physics**

**Minutes of the 16<sup>th</sup> Board of Studies**

The 16<sup>th</sup> Board of Studies meeting in Physics was held on 03.05.2021 in online mode. Dr.M.Dhanam, Associate Professor and Head welcomed and greeted the members and requested to take up the agenda for discussion and approval.

**Item 1a. To consider revision in the Curriculum, Scheme of Examination and Syllabi of UG courses and approval.**

Proposal of having existing syllabus (2020-2021) of UG programme for the students admitted in the academic year (2021-2022) onwards has been approved with the following modifications.

1. Proposal of introduction of two units (Unit I - Concept of Temperature, Unit II - Second Law of Thermodynamics) in Core paper 2 - Heat and Thermodynamics (20UPH202).
2. Addition of few topics in theory papers as per the proposal submitted to **DBT - STAR College scheme**
  - (i) The topics, e/m Magnetron method and e/m Thomson method are introduced in Unit V of Core Paper 4 – Electricity and Magnetism (20UPH404).
  - (ii) The topic, Television Standards is added in Unit V of Major Elective Paper 1 - Principles of Communication Systems (20UPH5E1).
  - (iii) The topic, Bidirectional shift register is added in Unit IV of Core Paper 10 - Fundamentals of Digital Electronics (20UPH610).
3. Addition of few experiments in Core practical papers as per the proposal submitted to **DBT - STAR College scheme**
  - (i) Determination of wavelength of laser - Diffraction method in Core Practical 1.
  - (ii) Determination of specific rotation of light and concentration of the solution - Polarimeter experiment in Core Practical 2.
  - (iii) Determination of particle size - Laser diffraction method in Core Practical 3.
  - (iv) Determination of quantization of angular momentum - Stern Gerlach experiment in Core Practical 3.

**Item 1b. Proposal of introducing new certificate courses for UG Programme.**

Based on the feedback on curriculum received from the faculty members and considering the employability, entrepreneurship and skill development in versatile fields, the introduction of certificate courses (1. Certificate course in Electronic Instrumentation, 2. Certificate course in Astrophysics and 3. Certificate course in Non-Conventional Energy) has been placed for approval and the board approved the same.

**Item 1c. To consider revision in the Curriculum, Scheme of Examination and Syllabi of PG courses and approval.**

Proposal of having existing syllabus (2020-2021) of PG programme for the students admitted in the academic year (2021-2022) onwards has been approved with the following modification.

The core paper 12 - Nuclear and Particle Physics (20PPH412) is revamped based on the latest edition of prescribed text book, "Elements of Nuclear Physics by M.L.Pandya, R.P.S.Yadav, Amiya Das, Kedar Nath Ram Nath Publications (2020).

**Item 2. The proposal of ratification for conversion of student's internship to mini project for the students admitted during the year 2019-2020 owing to the prevailing pandemic situation wherein students may not be allowed to go for internships in industries.**

As per the recommendation of curriculum development cell, the proposal of ratification of conversion of student's internship to mini project for II B.Sc Physics (2020-2021) at the end of 4<sup>th</sup> semester in UG programme and also to evaluate the same in the 5<sup>th</sup> semester was placed in the board for approval and the board approved the same.

**Item 3. The proposal of ratification for introducing few topics in the theory of UG programme as per the proposal submitted to DBT – STAR College scheme for the students admitted during the year 2019-2020 and 2020-2021.**

The proposal of ratification for introducing few topics Carnot engine, Petrol engine in Core Paper 2 - Heat and Thermodynamics (20UPH202), e/m Magnetron method and e/m Thomson method in Unit V of Core Paper 4 - Electricity and Magnetism (20UPH404), Bidirectional shift register in Unit IV of Core Paper 10 - Fundamentals of Digital Electronics (20UPH610) and Television Standards in Unit V of Major Elective Paper 1 - Principles of Communication Systems (20UPH5E1) was placed in the board and the same was approved.

**Item 4. To suggest the panel of names for appointment of examiners.**

The board approved the proposed list of examiners for ESE question papers setting, practical/project examinations and evaluation of theory answer scripts.

**Item 5. Other academic activities in the department.**

As per the suggestions and recommendations given by the various stakeholders on the above items discussed, the existing/revised the Scheme of Curriculum / Scheme of Examination / Syllabi and Panel of Examiners are to be followed is annexed herewith for the implementation from the commencement of the Academic year 2021 – 2022.

The members after careful scrutiny of the changes to be made, unanimously accorded approval for the proposed changes/modifications. They also resolved to authorize the Chairman of Board of Studies to place the changes/modifications now approved by the BOS before the Standing Committee on Academic affairs and Academic Council.

**Programme: BSc Physics**

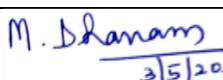
Semester	Course Code	Name of the Course	Changes made
2	20UPH202	Heat and Thermodynamics	Units 1 and 2
4	20UPH404	Electricity and Magnetism	Addition : e/m Magnetron method and e/m Thomson method Deletion : Motion of charged particles in crossed electric and magnetic fields
5	20UPH5E1	Principles of Communication Systems	Addition: Television Standards
6	20UPH610	Fundamentals of Digital Electronics	Addition: Bidirectional shift register
2	20UPH2CL	Core Practical - I	Addition: Determination of wavelength of laser - Diffraction method
4	20UPH4CL	Core Practical - II	Addition: Determination of specific rotation of light and concentration of the solution - Polarimeter experiment
6	20UPH6CL	Core Practical - III	Addition: 1. Determination of particle size - Laser diffraction method 2. Determination of quantization of angular momentum – Stern Gerlach experiment

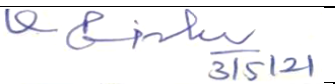
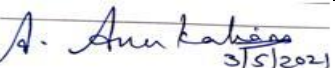
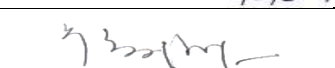
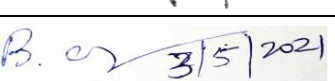
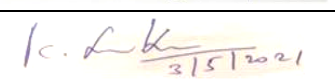

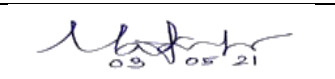
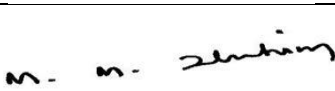
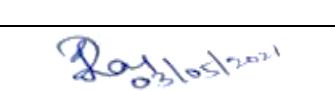
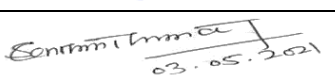
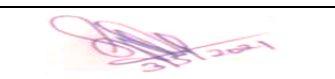

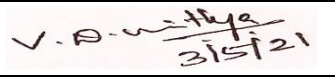



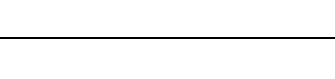
**Programme: MSc Physics**


Semester	Course Code	Name of the Course	Changes made
3	20PPH412	Nuclear and Particle Physics	50 % of the syllabus in Nuclear and Particle Physics has been revamped

As per the recommendations made by the curriculum development cell, the students of UG and PG programme will be motivated to do SWAYAM-MOOC online courses.

**Signature of the Board Members:**

S.No.	Name	Designation	Signature
1	Dr.M.Dhanam	Associate Professor and Head	 3/5/2021

2	Dr.K.Rajasekhar	Associate Professor	 3/5/21
3	Dr.A.Anu Kaliani	Associate Professor	 3/5/2021
4	Mr.K.Karuppusamy	Assistant Professor	
5	Dr.B.Chandar Sekhar	Assistant Professor	 3/5/2021
6	Dr.K.Saravanakumar	Assistant Professor	 3/5/2021
7	Dr.M.Seetha	Assistant Professor	 03/05/21
8	Dr.P.Matheswaran	Assistant Professor	 03/05/21
9	Dr.M.Mohamed Ibrahim	Assistant Professor	 M. M. Ibrahim
10	Dr.A.Ranjitha	Assistant Professor	 03/05/2021
11	Dr.N.Senthil kumar	Assistant Professor	 03.05.2021
12	Dr.S.Selvi	Assistant Professor	 3/5/2021
13	Dr.B.Gokul	Assistant Professor	 03/05/21
14	Dr.V.D.Nithya	Assistant Professor	 3/5/21
15	<b>Subject Expert 1</b> Dr.M.Sridharan	Professor in Physics, Centre for Nanotechnology and advanced biomaterials, Sastra deemed to be University, Tanjavur - 613401	 03/05/2021
16	<b>Subject Expert 2</b> Dr.G.Viruthagiri	Associate Professor , Department of Physics, Government Arts College for Women, Kumbagonam - 612001	
17	<b>Expert Nominee by Vice-chancellor</b> Dr.J.Chandrashekar	Associate Professor and Head, Department of Physics, Sri Ramakrishna Mission Vidyalaya College of Arts and Science, Coimbatore – 641020	 3/5/2021
18	<b>Representative from Industry</b>	Founder and CEO, Delving R&D, Coimbatore - 641006	 R. Chirra

	Dr.R.Chitra		
19	<b>Alumni</b> Dr.V.Selthilkumar	Associate Professor and Head, Department of Physics, Karpagam Academy of Higher Education, Coimbatore - 641021	Leave of absence
20	<b>PG Student Member</b> Reshma.S	I M.Sc Physics	
21	<b>UG Student Member</b> Lydia Joe Danisca.M	II B.Sc Physics	M Lydia Joe Danisca 03/05/2024

  
**Dr. M. DHANAM, M.Sc., M.Phil., Ph.D.,**  
 Associate Professor & Head,  
 Department of Physics,  
 Kongunadu Arts and Science College,  
 Coimbatore - 641 029.

**Signature of the Chairman of the Board**