



KONGU ARTS AND SCIENCE COLLEGE

(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore)

ERODE – 638 107

Department of Physics



KONGU ARTS AND SCIENCE COLLEGE (Autonomous)



Affiliated to Bharathiar University, Coimbatore
Approved by UGC, AICTE, New Delhi & Re accredited by NAAC, DBT STAR College Scheme
(An ISO 9001:2015 Certified Institution)
NANJANAPURAM, ERODE – 638 107

DEPARTMENT OF PHYSICS


BOARD OF STUDIES MEETING

AGENDA

DATE: 15.07.2020

1. To consider and approve the syllabi for the students admitted during the academic year 2018-2019 and 2019-2020 and onwards.
2. To consider and approve the syllabi of III and IV Semesters Non-major Elective Courses for other UG students admitted during the academic year 2019 - 2020 and onwards.
3. To consider and approve the Panel of Examiners.
4. To consider and discuss any other subjects with the permission of the chair.




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The meeting of the Board of Studies in Physics (UG) was conducted on 15.07.2020 at
10.15 a.m. through online mode (ZOOM Cloud Meeting).


The following members were present:

Chairman : Ms.K.Maithilee

Members :

1. Dr.M.Lavanya – University Nominee
Assistant Professor
PSGR Krishnammal College for Women (Autonomous)
Coimbatore
2. Dr. L.Palaniappan – Subject Expert
Professor
Annamalai University, Annamalainagar
3. Ms. R.Chitra – Member
4. Mr.T.Akashnarayana – Member
5. Ms.P.Visali – Member





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Subject related to CBCS, Outcome based Syllabus, Advanced Learners Course and Attendance Marks in CIA were discussed and the following are the resolutions:

1. It is resolved to approve there is no change in the syllabi of I and II Semesters for B.Sc. Physics and Allied Courses for B.Sc. Mathematics students admitted during the academic year 2020-2021 and onwards be approved.
2. It is resolved to approve there is no change in the syllabi of I and II Semesters Allied Courses for B.Sc. Mathematics students admitted during the academic year 2020-2021 and onwards be approved.
3. It is resolved to approve there is no change in the syllabi of IV & V Semester Advanced Learners Course for B.Sc. Physics students admitted during the academic year 2019-2020 & 2018-2019 and onwards be approved.
4. It is resolved to approve there is a modification in the syllabi of III & IV Semesters for B.Sc. Physics students admitted during the academic year 2019-2020 and onwards be approved. The approved modification has been enclosed as **Annexure a & b**
5. It is resolved to approve there is a modification in the syllabi of V and VI Semesters for B.Sc. Physics students admitted during the academic year 2018-2019 and onwards be approved. The approved modification has been enclosed as **Annexure a & b**
6. It is resolved to approve there is a modification in the syllabi of III and IV Semesters Non-major Elective Courses for other UG students admitted during the academic year 2019 - 2020 and onwards be approved.
7. It is resolved to approve the additional name for the panel of the question paper setters and examiners be approved.




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Details of modifications in the Courses offered under the Programme


B. Sc Physics

Modification by addition and removal of topics are carried out in the syllabi of III, IV, V & VI semesters of B.Sc., Physics based on the feedback obtained from Stakeholders and recommendations of the BOS Panel Members.

- Project is incorporated under Elective III in the VI semester for B.Sc. Physics students admitted during the academic year 2018-2019 onwards. **(Annexure b)**

Modification by addition and removal of topics are carried out in the syllabi of III, IV, V & VI Semesters. **(Annexure b)**

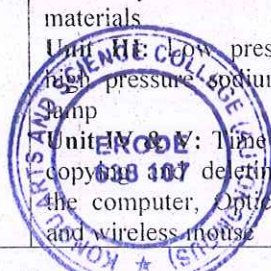



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Details of modifications with specific topics in the Syllabus with % of revision

B. Sc Physics

S.No	Course Name	Course Code	Topics introduced	Topics removed	% of Revision
1	Introduction to Electricity and Electronics (NME)	19UAONT304	Zener diode and UJT – comparison of Ics based on MOS and Bipolar transistor technology	Classification of ICs based on structure	10%
2	Electricity and Magnetism	19UAOCT301	Unit IV: Comparison between series and parallel Resonant circuit – Wattless current Unit V: Self inductance of coaxial cylinder	-	15%
3	Scientific Facts I (SBS)	19UAOST302	Unit I: Aurora Polaris Unit II: Elliptical orbit of planets, Cooling of fingers in winter season, East coast more often affected than west coast, Determination of latitude and longitude of a given place on earth Unit III: Energy from tidal waves Unit IV: Moon and sun appear larger at the horizon Unit V: Spark generation from a gas stove lighter, necessity of switching off mobile phones in air plane	Unit I: Origin of dust Unit II: Age of fossils, Height of mountains, Monsoons, Rainfall Unit IV: Earliest sunrise and latest sun set with longest day	21%
4	Optics	19UAOCT401	Unit IV: Distinction between Interference and Diffraction – Fresnel diffraction at a circular aperture	-	10%
5	Core Practical – II	19UAOCP402	Hall effect – Determination of Hall coefficients 2. Multimeter – i) Ammeter, Voltmeter and Ohm meter ii) Verification of Electronic components	-	10%
6	Electrical and Electronic Appliances (NME)	19UAONT405	Vehicle head lights – Induction Stove – Electric water heater- Silicon in electronics Wireless mouse	-	5%
7	Scientific Facts II (SBS)	19UAOST404	Unit I: Induction stove, Acids in battery, Passage of electric current through wire, Copper for electromagnets, Tarnishing of silver, Flexiglass Unit II: Functioning of thermostat, Production of electricity from Nuclear materials Unit III: Low pressure and high pressure sodium vapour lamp Unit IV & V: Time taken for copying & deleting file in the computer, Optical mouse and wireless mouse	Unit II: Electrical Appliances Unit III: Role of choke and starter in tubelight	20%



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8	Mathematical Physics	20UAOCT501	Unit V: Principle of Least Action.	Unit IV: Application of Gauss theorem	5%
9	Quantum Mechanics and Relativity	20UAOCT502	Unit II: Orthogonality of Eigen Functions: Proof of energy Eigen values are real and two eigen functions corresponding to different eigen values are orthogonal to each other	Unit II: Eigen Values of J ₂ & J _Z	7%
10	Atomic Physics and Spectroscopy	20UAOCT503	Unit IV: Lenard's method to determine e/m for photoelectrons	-	5%
11	Basic Electronics	20UAOCT504	---	Unit V: Scaler	-
12	Solid State Physics	20UAOCT601	Unit I: HCP structure – Miller indices – important features of Miller indices Unit IV: Frequency dependence of Polarizability Unit V: New Materials: Metallic Glasses – Fiber reinforced Plastics and Fiber Reinforced Metals – Biomaterials – High Temperature Materials – SMART Materials.	Unit I: Diamond & NaCl structure	25%
13	Nuclear Physics	20UAOCT602	Unit III: Determination of e/m of alpha particles – Determination of wavelength of Gamma rays (Du Mond curved crystal spectrometer)	-	6%
14	Fundamentals of Digital Electronics	20UAOCT603	Unit I: Excess-3 Code Unit II: Parallel Binary Adder – Parallel Binary Subtractor	Unit I: Laws and Rules of Boolean Algebra	5%
15	Core Practical – III	20UAOCP604	Demonstration 1. He – Ne Laser – Wavelength of laser source 2. Nano particle preparation	-	30%
16	Core Practical – IV	20UAOCP605	1. Microprocessor – 8085 – Multiplication and Division Demonstration (any 2) 1. CRO – Lissajous Pattern Formation 2. Hartley Oscillator 3. BCD to Seven segment display	-	35%
17	Elective II: Project	20UAOEV608	New Course		100%

- In overall, there had been a 8% of revision in the syllabus of the B. Sc., Physics programme.



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All the above resolutions are approved

1. *K.M.P*

2.

3.

4. *R. Ch*

5. *Pras*

6.



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