KONGU ARTS AND SCIENCE COLLEGE

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

ERODE - 638 107

Department of Physics



KONGU ARTS AND SCIENCE COLLEGE

(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore) Nanjanapuram, Erode – 638 107.



DEPARTMENT OF PHYSICS

BOARD OF STUDIES MEETING

AGENDA

DATE: 26.03.2021

- 1. To consider and approve the Scheme and Syllabi for the students admitted during the academic year 2019 2020, 2020-2021 and 2021-2022 and onwards.
- 2. To consider and approve the new course Professional English of I and II Semesters for the students admitted during the academic year 2021-2022 and onwards.
- 3. To consider and approve the new pattern of question papers for the academic year 2021 2022 and onwards.
- 4. To consider and approve the Panel of Examiners.
- 5. 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 26.03.2021 at 10.00 a.m. through Google Meet.

The following members were present:

Chairman

: Ms. R. Chitra

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. K. P. Mayil Shree

- Alumni Representative

4. Ms. K. Maithilee

- Member

5. Mr. T. Akashnarayana

- Member

6. Ms. P. Visali

- Member



Subject related to CBCS, Outcome based Syllabus, Continuous Internal Assessment, End Semester Examinations and Panel of Examiners were discussed and the following are the resolutions:

- 1. It is resolved to approve
 - a. there is a change in the Scheme of Examination and Syllabi of I and II Semesters for the B.Sc., Physics students admitted during the academic year 2021 2022 and onwards. (Modifications are listed in **Annexure a & b**)
 - b. there is no change in the syllabi of III and IV semesters for the B.Sc., Physics students admitted during the academic year 2020-2021 and onwards.
 - c. the syllabi of 2018-2019 batch of V and VI semesters is followed for the B.Sc., Physics students admitted during the academic year 2019-2020 and onwards.
 - d. there is a change in the syllabi of Allied Physics courses of I and II semesters for the B.Sc., Mathematics students admitted during the academic year 2021-2022 and onwards.

 (Annexure a & b)
- 2. It is resolved to follow the norms of TANSCHE to incorporate Professional English I and II under part III for the students to be admitted during the academic year 2021-2022 and onwards.
- 3. It is resolved to approve the new question paper pattern to be followed during the academic year 2021 2022 and onwards. (Annexure I & II)
- It is resolved to approve the procedure of taking the average marks of both First and Second Internal tests for Continuous Internal Assessment to be admitted from the academic year 2021-2022 and onwards. (Annexure - III)
- 5. It is resolved to approve the changes made in CIA marks for attendance for the students to be admitted during the academic year 2021-2022 and onwards.(Annexure IV)
- 6. It is resolved to approve to have a grade system for Internship/Institutional training for the UG Programme to be admitted from the academic year 2021-2022 and onwards.(Annexure V)
- It is resolved to approve the marks distribution for the Extension Activities for the Semesters for the B.Sc., Physics students admitted during the academic year 2021 – 2022 and onwards. (Annexure -VI)
- 8. Extra credits will be awarded minimum 1 credit and maximum of 2 credits to the students who have completed 4 weeks SWAYAM / MOOC courses for the students admitted during the academic year 2021 2022 and onwards.

9. It is resolved to approve the additional name for Panel of Members for Question Paper Setting and Central Valuation. (Annexure –VII)

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Details of modifications in the Courses offered under the Programme

B. Sc Physics

The following modifications are done in the Syllabi of I and II Semesters for the B.Sc., Physics students admitted during the academic year 2021-2022 and onwards based on the feedback obtained from Stakeholders and recommendations of the BOS Panel Members.

- The Course "Heat and Thermodynamics" has been changed as "Thermal and Statistical Physics". Further, a new unit Statistical Physics has been incorporated as Unit V.

 (Annexure b)
- Modification in core courses in the syllabi of I and II semesters (B.Sc., Physics) has been done and the same is provided in the table. (Annexure b)
- Modification in Allied Physics I, II & Allied Physics Practical of I and II semesters for the B.Sc., Mathematics students was carried out. (Annexure b)



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	Professional English I	21UAOCT101	All the 5 units are introduced		100%
2	Mechanics, Properties of Matter and Sound	21UAOCT102	Unit I: Introduction- Significance of Conservation laws- Concepts of Work, Power and Energy-Conservative Forces-Energy- Conservative force as negative gradient of potential energy-Non- conservative forces: General Law of conservation of energy- Conservation of Linear momentum Unit II: Motion of a Planet in an elliptical orbit around the sun-Radius of Gyration-Analogous parameters in Translational and Rotational motion - Spherical Shell.	Projectile Motion— Projectile Motion— Translatory Motion— Rotatory Motion— Centripetal Force— Centrifugal Force— Impact—Direct and Oblique Impact—Final Velocity and Loss of Kinetic Energy Unit II: Triangular lamina - Bar pendulum	25%
3	Chemistry I	21UAOAT10 3	Nuclear fusion and Nuclear Fission Laboratory Principles Unit V: Completely new - Photochemistry & Metallic Bond	Basic Properties of Iodine Agricultural Chemistry - SOM, Insecticides & Herbicides	40%
4	Professional English II	21UAOCT201	All the 5 units are introduced		100%
5	Thermal and Statistical Physics (Course "Heat and Thermodynamics" has been changed as "Thermal and Statistical Physics")	21UAOCT202	Unit III: Low Temperature Physics Unit V: Statistical Physics	Unit I: Calorimetry	40%
6	Core Practical – I	21UAOCP203	Young's Modulus - Non - uniform bending -Optic Lever Comparison of Viscosities - Capillary flow Method Surface tension of a liquid - Drop Weight Method		5%
7	Allied Chemistry II		NIL NIL	Laboratory Principles Applications of RAM quantitative prepared qualitative analysis of EN coordination compounds Saccharin & Aspartame	CE COLLE

8	Allied Chemistry Practical I	21UAOAP205	Estimation of Calcium, Magnesium Determination of Hardness of water by EDTA	Estimation of Oxalic acid using standard Ferrous Sulphate Estimation of Potassium Permanganate using standard Sodium Hydroxide	25%
9	Allied Physics I	21UANAT104	Unit I: Different moduli of elasticity, Torsion of a cylinder (Expression for torque per unit twist), Determination of Rigidity modulus, Static Torsion method (Searle's Apparatus —scale and Telescope) Unit II: Gravitation Field and Gravitation Field and Gravitation Potential, Gravitation field and potential due to a spherical shell, Compound Pendulum, Equivalent Simple pendulum Unit IV: Detection of Ultrasonic waves Unit V: Experiment to draw M-H curve (Horizontal method)	Unit I: Depression of Cantilever Unit V: Potential at a Point due to a Uniformly Charged Conducting Sphere, Electrical images, Poisson's and Laplace equation, Electron Theory of Magnetism, Magnetic Circuits	35%
10	Allied Physics II	21UANAT204	Unit IV: Semiconductor: Bonds in Semiconductors, Energy Band description of Semiconductors, Effect of temperature on semiconductors, Intrinsic semiconductor, Extrinsic semiconductor: n type and p type semiconductor	Unit II: Elementary Particles: Leptons, mesons, baryons, Quark model Unit III: Purity of spectral line Unit IV: Transistor Characteristics (CE mode), Applications of diode Unit V: Binary subtraction, multiplication and	20%
-11	Allied Physics Practical	21UANAP205	Poisuille's Flow - Coefficient of viscosity of a given liquid	Division Verification of De-	5%

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



All the above resolutions are approved.

1. Ms.R.Chitra/Chairman

- 2 ch 26/2021

2. Ms.M.Lavanya / University Nominee

3. Dr.L.Palaniappan/ Subject Expert

4. Ms.K.P.Mayil Shree / Alumni Representative

5. Ms.K.Maithilee/ Member

6. Mr.T.Akashnarayana/ Member

7. Ms.P.Visali/ Member

- Jen 26/3/2021 - Jun 26/3/21 - P. Q: 24/3/2021