



RANI CHANNAMMA UNIVERSITY

VIDYASANGAMA, NATIONAL HIGHWAY-04,
BELAGAVI-591156

- **PROGRAMME OUTCOMES(POs)**
- **PROGRAMME SPECIFIC OUTCOMES(PSOs)**
- **COURSE OUTCOMES(COs)**

DEPARTMENT OF PHYSICS

(2019-20)



Letter No: RCU/BGM/PHY/2020-21/

Date: 29-08-2020

To,
The Director,
IQAC, Rani Channamma University,
Belagavi

Dear Sir

Sub: Detailed information about Criterion 2.6.2 of Physics department

With respect to the above subject, write-up pertaining to 2.6.2 is prepared as follows and submitted for the further action:

- Attainment of Program Outcomes

Two years of M.Sc., Physics program is divided in to four semesters of 4 months each. The program consists of core subjects, general subjects and specialization: theory, practical and projects. Students are assessed based on internal assessment, written theory examination, practical examinations and project viva voce.

- Program Specific Outcomes

At the end of M.Sc., Physics program, students will understand the advanced Physics subjects through theory, hands-on practical experiments and through research projects which will help them in getting admission for higher education like Ph.D., and competitive examinations and jobs in industry.




- Course Outcomes for each Semester and paper wise

| Semester | | Course Paper | Course Outcomes |
|------------|--------------|---|--|
| Semester-1 | Revised | Course Paper I <i>Mathematical Methods of Physics</i> | Understand the mathematical tools required for solving physics problems and applications |
| | | Course Paper II <i>Classical Mechanics</i> | Understand the physical concept of Newtonian mechanics and link to quantum mechanics. |
| | | Course Paper III <i>Nuclear and Particle Physics (General)</i> | Understand the basic concept of nuclear energy and its applications. |
| | | Course Paper IV <i>Condensed Matter Physics (General)</i> | Understand the basic concept of condensed matter Physics/Solid state physics and its applications. |
| | | ... | |
| Semester-2 | Revised | Course Paper I <i>Quantum Mechanics-I</i> | Understand the theoretical concept of particle and wave duality and equation of motion of microscopic particles. |
| | | Course Paper II <i>Atomic, Molecular & Optical Physics (General)</i> | Understand the basic theory of electromagnetic spectrum, laser, optical fiber and their applications. |
| | | Course Paper III <i>Electronics (General)</i> | Understand the basics of analog and digital electronics and experimentation. |
| | | Course Paper IV <i>Modern Physics</i> | Open elective course in which non Physics students learn the basic las of Physics and its theory. |
| | | ... | |
| Semester-3 | Old Syllabus | Course Paper I <i>Statistical Mechanics</i> | Understand the theoretical aspect of statistical mechanics of sub atomic matter and application to physics |
| | | Course Paper II <i>Classical Electrodynamics</i> | Impart knowledge of electrostatics and magnetohydrodynamics |



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|-------------------------|--|---|
| | | and their applications. |
| | Course Paper III Condensed Matter Physics-I | Understand the properties of condensed matters and its structure. |
| | Course Paper IV Physics of Nanomaterials | Non physics students learn the basics of nano materials, synthesis and applications. |
| | ... | |
| Semester-4 Old Syllabus | Course Paper I Quantum Mechanics - II | Impart the knowledge of quantum mechanics and application to complex physics problems. |
| | Course Paper II Advanced Mathematical Methods in Physics | Understand how mathematical methods are used in solving Physics problems. |
| | Course Paper III Condensed Matter Physics-II | Impart the knowledge of matter and understand the physics of magnetic materials and their applications. |
| | Course Paper IV Condensed Matter Physics-III | Impart the knowledge of fabrication of thin films and understand the physics of semiconductor and low dimensional matter. |
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 Chairman
 Department of Physics
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 Department of Physics
 Rani Channamma University
 Belagavi

