

Board of Studies - U.G. Physics - Meeting

05-02-18

Agenda:

To discuss the syllabus to be followed from the academic year 2018-2019 onwards.

Members present:

- 1) Mr. K. RABI AHMED
- 2) Dr. S.H. MOHAMED AMEEN
- 3) Dr. S.M. ABDUL KADER
- 4) Dr. S. NAZARATH BEGUM
- 5) Mr. A. JENUFA BEGUM
- 6) Dr. B. SUNDARA KANNAN
- 7) Dr. S. JEYAKUMARI
- 8) Ms. M. IRFANA AMRIN

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It is resolved:

1) to follow the CBCS new pattern introduced by the University Grants Commission from the academic year 2018-19 onwards with the following Course structure: DSC-12, DSE-4, DSCP-6, DSEP-2 and SEC-4

2) to make changes in the proposed Syllabi of the following Courses. Addition and deletion is prefixed by (+) and (-) respectively. Title changes, rearrangements and newly introduced Courses are prefixed by 'x'.

Discipline Specific Core (DSC):

i) Semester I DSC1: Thermal physics:

(+) unit III: Low temperature physics (+) Thermodynamics

ii) Semester II DSC2: physical optics & Spectroscopy

(-) unit IV: Principles and types of lasers, unit V Applied of lasers (+) unit IV Microwave Spectroscopy

(+) unit V IR and Raman Spectroscopy

iii) Semester III DSC3: Electrodynamics, Electromagnetism and Electro magnetic theory.

(-) Anderson bridge in unit IV (+) x Coulomb's law - Electrostatics

field - Electric potential - Coulomb's law from Gauss law in unit iii

* Biot-Savart's law - magnetic field due to wire carrying current - Ampere's law in unit iv

* Unit v: Maxwell's equation and electro magnetic propagation

iv) Semester ii: PSC4: Mechanics & Astrophysics
⊕ projectiles (Definition of range, time of flight, Maximum range and angle of projection) in unit iii
Cranialtation

v) Semester iii: PSC6: Laser and its application
⊕ absorption, Spontaneous and stimulated emission of radiation - pumping in unit ii

vi) Semester v: PSC7: Modern physics
The syllabus for this course is completely revamped and adapted from the book "Concept of Modern physics" by Arthur Beiser

vii) Semester v: PSC8: Basic Electronics
⊖ Unit v: Power electronics and SCRs
* Unit i, ii, iii and iv are rearranged as unit iv, i, ii and iii respectively in the new syllabus

viii) Semester v: PSC9: Digital Electronics
⊕ Unit v: OP amp characteristics & Applications
* Title of unit i is changed as number system Codes, Arithmetic circuits

* Title of unit ii is changed as Combinational logic and Data Processing Circuits
* The contents of unit i, ii and iii are rearranged

ix) Semester vi: PSC10: Quantum Mechanics & Statistical Mechanics

Unit I: wave mechanics is deleted.
* unit II, III, IV & V are rearranged on
unit I, II, III & IV

Unit V: Ensembles

x) Semester VI: DSE II Solid state physics
* This Course is newly added.

DSE I

ii) Semester III DSE 1A Introduction to
Computer

* unit II, unit III, and unit IV are restricted

* unit V: Internet security is newly added

ii) Semester III DSE 1B: Radiation Safety
* This Course is newly added

iii) Semester III DSE 2A: programming in C++
* pointer declaration, pointer arithmetic
pointers and arrays, arrays of pointers
in unit V

* pointer to object & pointer to derived class

iv) Semester IV DSE 2B Mathematical physics
* This Course is newly added

v) Semester V DSE 3B Microprocessor & A
programming

* This Course is newly added

vi) Semester VI DSE 4B Numerical
Methods

i) Semest III Sec 1. Weather forecasting
* This Course is newly added

ii) Semest IV Sec 2. Basic industrial
skills

This Course is hereby added.

iii) Semest V: SEC-3 Medical physics.

This Course is hereby added.

iv) Semest VI: SEC-4 Energy physics.
& Completely restricted Syllabus is included for this Course.

Allied physics:

i) Semest IV: A112: Allied physics II.

⊖ determination by Rayleigh method,
determination of Mutual inductance using
BC is not in.

⊕ HCR series circuit - LCR II' circuit in it.

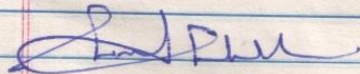
The board has approved the above
modification and correction.

M. V.
Dean of Science



Chairman (K-RABI AHAMEDI)

Hand Am



S. A. X
B. Gundappa
S. J. J. J.


PRINCIPAL
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Annexure - I

Department of Physics (UG)

The Board of Studies of Department of Physics (UG) was held on 5.2.2018 for the approval of 2018-2021 syllabus. The number of new courses, courses focussing on Skill Development / Employability / Entrepreneurship, the percentage of revision are mentioned below.

New Courses introduced

S. No.	Title of the Course	Course Code
1	Radiation Safety	18UEPH3B
2	Laser and its application	18UCPH41
3	Mathematical Physics	18UEPH4B
4	Applied Physics	18UNPH41
5	Microprocessor and Programming	18UEPH5B
6	Solid State Physics	18UCPH62

Courses focused on Skill Development /Employability / Entrepreneurship

S. No.	Title of the Course	Course Code	Category
1.	Physics Practical – I	18UCPH1P1	Skill Development
2.	Physics Practical – II	18UCPH2P1	Skill Development
3.	Physics Practical – III	18UCPH3P1	Skill Development
4.	Physics Practical – IV	18UCPH4P1	Skill Development
5.	Physics Practical - V	18UCPH5P1	Skill Development
6.	Physics Practical VI	18UCPH5P2	Skill Development
7.	Physics Practical VII	18UCPH6P1	Skill Development
8.	Physics Practical VIII	18UCPH6P2	Skill Development
9.	Allied Physics Practical – I	18UAPH3P1	Skill Development
10.	Allied Physics Practical – II	18UAPH4P1	Skill Development
11.	Laser and its Applications	18UCPH41	Employability
12.	Medical Physics	18USPH51	Employability
13.	Project	18UCPH63	Entrepreneurship

Percentage of Revision

S. No.	Courses	Course Code	Percentage %
1.	Thermal Physics	18UCPH11	25%
2.	Physics Practical – I	18UCPH1P1	25%
3.	Physical Optics and Spectroscopy	18UCPH21	30%
4.	Mechanics and Astrophysics	18UCPH22	5%
5.	Physics Practical – II	18UCPH2P1	25%



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6	Electricity, Electromagnetism and Electromagnetic theory	18UCPH31	40%
7	Physics Practical – III	18UCPH3P1	25%
8.	Introduction to Computers	18UEPH3A	25%
9.	Radiation safety	18UEPH3B	100%
10	Laser Physics	18UNPH31	100%
11.	Laser and its Application	18UCPH41	100%
12	Physics Practical – IV	18UCPH4P1	25%
13	Programming in C++	18UEPH4A	10%
14	Mathematical Physics	18UEPH4B	100%
15	Allied Physics – II	18UAPH41	20%
16.	Allied Physics Practical – II	18UAPH4P1	25%
17.	Applied Physics	18UNPH41	100%
18.	Modern Physics	18UCPH51	40%
19.	Basic Electronics	18UCPH52	20%
20	Digital Electronics	18UCPH53	10%
21	Physics Practical V	18UCPH5P1	25%
22.	Physics Practical VI	18UCPH5P2	25%
23.	Introduction to Nanotechnology	18UEPH5A	5%
24	Microprocessor and programming	18UEPH5B	100%
25	Medical Physics	18USPH51	50%
26.	Quantum Mechanics and Statistical Mechanics	18UCPH61	20%
27	Solid State Physics	18UCPH62	100%
28.	Physics Practical – VII	18UCPH6P1	25%
29	Physics Practical – VIII	18UCPH6P2	25%
30.	Energy Physics	18USPH61	50%

Total Percentage of Revision: 35.14%

Total number of Courses: 35


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