

Minutes of the Board of Studies Meeting

To be implemented from 2022-2023 onwards

Venue: A1

Convened on 23-03-2022 at 2pm

Members Present:

1. Dr. A. Sheela Vimala Rani Head of the Dept
A. Sheela Vimala Rani
University
Nominee
2. Dr. Basherrudin Mahmud Ahmed
Asst. Prof. School of Physics
Madurai Kamaraj University
Madurai
ABent
3. Dr. K. Marimuthu
Asst. Prof
Department of Physics
Grandhigram Rural Institute
- Deemed University
Grandhigram
Subject Expert
K. Marimuthu
4. Dr. M. Umadevi
Associate Professor & Head
Department of Physics
Mother Teresa Women's University
Attuvampatti, Kodaikanal
Subject Expert
Umadevi
23/03/22

4. Mr. Ramprakash
Industrial Electronics
Corporation No. 1,
Industrial Estate
Madurai

Industrialist

VRamprakash

5. Dr. R. Vishnu Priya
Asst. Prof.
Dept. of Physics
The Madura College
Madurai

Alumnae

Rm priya

7. Dr. Malathi
Asst. Prof.
Dept. of Zoology
Fatima College

Dean of Academic Affairs

Malathi
23/3/2022

8. Dr. L. Caroline Sugirtham
Associate Prof.

L. Caroline Sugirtham

9. Mrs. R. Alphonsa Fernando
Associate Professor

R. A. Fernando

10. Dr. M. V. Leena Chandra
Asst. Prof.

leena chandra

11. I Jayashree
Asst. Prof.

I. Jayashree

12. Dr. Ancemnia Joseph
Asst. Prof.

Ancemnia Joseph

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| 13. Dr. M. Ragam
Asst. Prof. | <i>M. Ragam</i> |
| 14. Dr. G. Jenita Rani
Asst. Prof. | <i>G. Jenita Rani</i> |
| 15. Dr. R. Jothimani
Asst. Prof. | <i>R. Jothimani</i> |
| 16. Ms. I. Janet Sherly
Asst. Prof. | <i>I. Janet Sherly</i> |
| 17. Ms. J. R. Sofia
Asst. Prof. | <i>J. R. Sofia</i> |
| 18. Dr. R. Niranjana Devi
Asst. Prof. | <i>R. Niranjana Devi</i> |

AGENDA FOR BOARD OF STUDIES

1. Preparation of Action taken report
2. To carry out at least 5-10% changes in a minimum - 20% or more in the courses offered (Approximately 8-10 courses minimum)
 - (a) courses with revision less than 20% - same code
 - (b) courses with revision more than 20% - New code - to be prefixed with 22...
3. New Courses to be introduced
 - Course code to be prefixed with 22...

4. New Value - Added Courses can be introduced or the titles can be changed
5. Each department to offer at least one Value - Added Courses per year
6. Frequency of the courses to be increased
7. Possibilities of the Credit Transfer of SWAYAM MOOC Course to be explored
8. Both the Elective Courses have to be offered simultaneously.

MINUTES OF THE BOARD OF STUDIES

1. Presentation of Action taken report.

Action taken report for 2021-22
UG PHYSICS

S. No.	SUGGESTIONS IN THE PREVIOUS BOARD	ACTION TAKEN IN THE ACADEMIC YEAR 2021-22
1.	Self learning papers for all UG students namely "Amazing Universe and Indian Space Missions" (2IP2SL1) offered by Physics dept.	These papers were introduced with the suggested syllabus

S.No.	SUGGESTIONS IN THE PREVIOUS BOARD	ACTION TAKEN IN THE ACADEMIC YEAR 2021-22
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	Interdepartmental self learning papers "Microprocessor and Programming" (2IP4SLB2) offered by Physics and Computer Science, "Space Science" (2IP6SLM3) offered by Physics and Maths department were passed and syllabus were suggested	from the academic year 2021-22 onwards
2.	Reference book for Self learning paper "Microprocessor and Programming" by Ramesh Gaonkar shall be appended	The suggested book is included
3.	Board suggested to introduce "Physics for Competitive Exams" as Self Learning paper in the forth coming year	It will be introduced in the next year
4	Reference book by S.O. Pillai suggested for "Solid State Physics" paper	Reference book is included

S.No.	SUGGESTIONS IN THE PREVIOUS BOARD	ACTION TAKEN IN THE ACADEMIC 2021-22
5	Board suggested to introduce Skill embedded Certificate courses on "Non conventional energy sources"	A Skill based course "Solar cell and its applications" introduced
6	Syllabus for allied papers of BCA department on "Digital Principles and Computer Organization" (19P4AC14) and IT department on "Digital Principles and Computer Architecture" (19P3AC13) are passed	It was implemented
7	Reference book Malvino and Gates are recommended as reference book in Digital Electronics and Communication (19P5CC13)	The book is included

PG PHYSICS

S.No.	SUGGESTIONS IN THE PREVIOUS BOARD	ACTION TAKEN IN THE ACADEMIC YEAR 2021-22
1.	The title "Principles in advanced Mathematical Physics" can be changed to Advanced Mathematical Physics as the term "Principles" is a misnomer in Mathematical Physics	Title is changed
2.	The following reference books were suggested for Quantum Mechanics and Advanced Quantum Mechanics (i) Principles in Quantum Mechanics - A. Shankar (ii) Introduction to Quantum Mechanics - Powell and Grafton (iii) Quantum Mechanics: Concepts and applications - Nouredine Zettili	The books are included
3.	Industrialistic suggested to replace the currently existing self learning paper	

S.No.	SUGGESTIONS IN THE PREVIOUS BOARD	ACTION TAKEN IN THE ACADEMIC YEAR 2021-22
	for advanced learners entitled on "Instrumentation and experimental methods" by paper entitled on "Digital Signal Processing"	This paper is to be passed in this board

2. REVISION OF COURSES:

S.No.	Course Code	Units revised	% of revision	Course Title
1.	19P1ACCV/ 19M3ACP1/ 19G3ACP1	Unit II - Bernoulli theorem, Unit III entropy, unit IV ohm's laws =	15%	Allied Physics - I
2.	19P2ACC3/ 19M4ACP2/ 19G4ACP2	Unit II - Frank-Hertz expt	18%	Allied Physics - II
3	19P5CC14	Unit II - Lasers removed Unit V Spectroscopy included	15%	OPTICS
4	19P6CC17	Unit I - Work done included	5%	Thermodynamics & Statistical Mechanics
5	19P5CC16	Non-electronics Practicals	15%	Revised

S.No.	Course Code	Units revised	% revision	Course Title
6	19PGME2	Medical Physics - Unit V - Imaging Techniques	10%	Medical Physics
7	19PG1P2	Unit V - Semiconductor memories included	10%	Applied Electronics
8	19PG3P13	Unit V - Quantum Electrodynamics, SU3 symmetry included	10%	Nuclear and Particle Physics

3. NEW COURSES INTRODUCED:

	PROGRAM	COURSE CODE	COURSE TITLE
1.	B.Sc.	22P4CC11	Mathematical Methods
2.	B.Sc.	22P4SB2	Solar Cell and its Applications
3.	M.Sc.	22PGSL2	Batteries and its Applications
4.	M.Sc.	22PGSLP1	Digital Signal Processing

4. NEW VALUE ADDED COURSE:

Course Code	Course Title
22PGVAPC1	PG Diploma in Instrumentation on Electrochemical Workstation

5. Approval of Ph.D. Course Work

Syllabus:

Course work paper and Core paper for the Research Scholar are as follows:

Ph.D. Scholar	Course work paper	Core paper
P. Mohanaa Muthuselvi	22PHDCWP01 Solid State Ionics	22PHDCPP02 Materials Science

6. SUGGESTIONS GIVEN BY THE BOARD MEMBERS:

U.G.

- * The new course Mathematical Methods can be offered as elective / skill based paper
- * The nomenclature for the above paper can be changed into Numerical Methods
- * A paper on Mathematical Physics can be included as core paper which will form a basis to studying papers like Mechanics, Quantum theory, Solid State Physics etc.
- * "Interference" can be shifted from Allied Physics-II to Allied Physics-I to be on-par with the practicals

- * The Board suggested to include "Principles of Electronics" by Mehta as one of the reference books.
- * In the elective paper (19P6ME1), instead of Timer and Counter Assemblers and Compilers can be included.

PG

- * The nomenclature for the New Value added course was discussed in detail.
- * The above course can be offered as "certificate course".
- * So the title of the New Value added course is
Certificate Course on Instrumentation on Electrochemical techniques.
- * In the Nuclear and Particle Physics course, the Board

suggested to include

"Nuclear Physics - Theory and Experiments" by Roy and Nigam as reference book.

* In the Applied Electronics paper,

the Industrialist suggested that Pulse width Modulation and Switching regulators can be introduced instead of registers and counters.

* Mr. Ramprakash also recommended to include Assemblers and Simulators in the course "Instrumentation and Microcontroller" 21PR2P10 and to reduce the content of programming in 8051.

* The subject experts strongly recommended to specify the details of sections in the books for study in all the units of the syllabus for both UA and PA programs.

The specifications of the sections would enable the students to learn more precisely. The detailed sections in all units would facilitate the examiner also.

* CREDIT TRANSFER OF SWAYAM MOOC COURSE:

The board members suggested the credit transfer of Swayam-MOOC course is possible:

- 1) Both the syllabus should be same
- 2) Number of hours should match

- 1) Dr. A. Sheela Vimala Rani A. Sheela V. Rani
- 2) Dr. Bashiruddin Mahmud Ahmed A. Bashir.
- 3) Dr. K. Marimuthu K. Maruthu
- 4) Dr. M. Umadevi M. Umadevi 23/03/22
- 5) Mr. Ramprakash V. Ramprakash
- 6) Dr. R. Vishnu Priya R. Vishnu 23/03/22
- 7) Dr. Malathi Malathi 23/03/22
- 8) Dr. L. Caroline Sugirtham L. Caroline Sugirtham
- 9) Mrs. R. Alphonsa Fernando R. A. Lendo
- 10) Dr. M. V. Leena Chandra Leena Chandra
- 11) Mrs. I. Jeyasheela I. Jeyasheela
- 12) Dr. Ancemna Joseph Ancemna Joseph
- 13) Dr. M. Ragam M. Ragam
- 14) Dr. Sr. G. Jenita Rani G. Jenita Rani
- 15) Dr. R. Jothamani R. Jothamani
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J. R. Sofia

18) Dr. R. Niranjana Devi

R. Nj -

for 23/3/22