Minutes of the Meeting of the Board of Studies (Physics)

The meeting of the Board of Studies (Physics) was held on 25th April, 2019 in the Department of Physics at 11.30 a.m. The meeting followed with the following concerns on the agenda.

Agenda

i. To welcome all the members of BoS.
ii. To review old syllabus for F.Y.B.Sc.
iii. To discuss the changes in the syllabus.
iv. To discuss the criteria of the internal assessment of F. Y. B. Sc. students.
v. To discuss the patterns related with the Semester end external examination for theory and practicals.
vi. To prepare the panel of paper setters and external examiners.
vii. To commence value added as well as skill based courses.
viii. Any other subject with the permission of the Chairman.

The following members were present for the meeting.

i.	Principal Dr. N. P. Tendolkar	(Chairman of the BoS)
ii.	Principal Dr. Sandesh Gurav	(VC Nominee: Member BoS)
iii.	Dr. Pushpinder Bhatia	(Invited Subject Expert)
iv.	Dr. M. M. Karanjakar	(Subject Expert: other than parent University)
v.	Dr. M. R. Kale	(Member of the BoS)
vi.	Mr . U. B. Bhatye	(Member of the BoS)
vii.	Mr. P. P. Jadhav	(Member of the BoS)
viii.	Mr. A. C. Dhware	(Member of the BoS)

Dr. Meera Rajesh Kale, Member of the BoS, heartily welcomed all the external members present for the meeting. She further on introduced all the members with each other by expressing her sense of gratitude. She commenced the meeting with a thorough overview on the agenda.

Agenda-

i) To review and change in the current syllabus for F.Y.B.Sc.

Dr. Meera Kale overviewed the old syllabus of the F. Y. B. Sc. She extended her views by saying that some of the topics be replaced by the new ones due to the extreme difficulty level. Therefore, she deliberately emphasized on the changes be taken place in the current syllabus. She discussed that some topics related with theory viz. Mathematical physics, Nuclear physics etc. in the current syllabus be replaced by Laser, fiber optics, acoustic of buildings etc. For the sake of convenience and acquaintance, one unit from the second semester i.e. digital electronic and power supply be shifted to the first semester with theory and practicals. The detailed information of the reforms made in the new syllabus is attached hereto as the Annexure I.

Resolution:

It is unanimously resolved that the changes made in the syllabus were accepted.

Proposed by: Dr. M. R. Kale Seconded by: Dr. Pushpinder Bhatia

ii) To discuss the criteria of the internal assessment of F. Y. B. Sc. students.

Mr. Uday Bhatye, the BoS member, initiated the discussion about the pattern of the internal examination. He furthered on that the pattern for the internal assessment for the F. Y. B. Sc. students be of 30 marks comprising of 1 class test for 10 marks. He evoked that the 10 marks be assigned for the various classroom activities such as seminar, research projects, problem solving, participation in online courses, open book examination etc. and the rest 10 marks be classified into such as the 5 marks for attendance and 5 marks for active participation in the classroom. Mr. P. P. Jadhav, the BoS member, extended this discussion by adding the views that the additional

examination be conducted for the students who remain absent for the internal test, wherever they represent the college.

Resolution:

It is unanimously resolved that the evaluation criteria for the internal examination were accepted.

Proposed by: Mr. U. B. Bhatye Seconded by: Dr. M. M. Karanjakar

iii) To discuss the criteria for the External examination of F. Y. B. Sc. students.

Continuing with the previous one, Dr. N. P. Tendolkar, Chairman of the BoS, initiated the discussion regarding the external examination of the F. Y. B. Sc. He suggested that the paper pattern for the external examination for 70 Marks be as following:

Q. No		Type of question	Expected question	Marks
1		Multiple choice questions (05)	Problem and theory (based on unit I, II and III)	10
2	a)	Long answer question (01 out of 02)	Theory (based on unit I)	07
	b)	Short answer question (01 out of 02)	Theory(based on unit I)	04
	c)	Short answer (01 out of 02)	Problem(based on unit I)	04
3	a)	Long answer question (01 out of 02)	Theory(based on unit II)	07
	b)	Short answer question (01 out of 02)	Theory(based on unit II)	04
	c)	Short answer (01 out of 02)	Problem(based on unit II)	04
4	a)	Long answer question (01 out of 02)	Theory(based on unit III)	07
	b)	Short answer question (01 out of 02)	Theory(based on unit III)	04
	c)	Short answer (01 out of 02)	Problem(based on unit III)	04
5		Six short answer question (attempt three)	Theory/problem (based on unit I, II and III)	15

He extended his hand by saying that the practical examination for the nominated semester be conducted before theory examination.

Resolution:

It is unanimously resolved that the paper pattern for the external examination was accepted.

Proposed by: Dr. N. P. Tendolkar Seconded by: Dr. Sandesh Gurav

iv) To prepare the panel of external paper setters and examiners

Mr. A. C. Dhawre, as the BoS member, stepped ahead regarding the discussion about the need of external paper setters and examiners. He suggested that the two paper setters for each paper from other colleges in the vicinity around for both the sake of building the quality ratio and the convince. It was accelerated that the responsibility of the question paper and evaluation be shouldered by the subject faculty for allotted curriculum. It was, hereafter, conveyed that the examiners for both the theory and practicals be from the colleges vicinity around for the sake of convenience and availability.

Resolution:

It is unanimously resolved that the list of external paper setters and examiners was finalized.

Proposed by: Dr. A. C. Dhawre Seconded by: Mr. P. P. Jadhav

v) To commence value added as well as skill based courses

Dr. Pushpinder Bhatia, the BoS member, advised that the department as a whole should commence the value added as well as skill based courses as per its convenience. She extended her views by saying that it is a need of era in which the employability fundamentals relied on the skills. Related with this, the BoS put-forth some of the courses such as:

Value added courses

i) Basics of Quantum Mechanics (to be conducted by IIT Kanpur, from August 2019)

ii) Uses and awareness about Renewable Energy Resources, Focus on Solar Energy.

iii) Foundation course for Physics:-

a) Use of scientific calculators
b) Units of physical quantities and conversions
c) Basics of mathematical problem solving
d) Various simple circuit connection
e) Identification of electronic components viz. diode, capacitor, resistance, transistor etc.
f) Use of multimeter, power supply, signal generator etc

Skill based courses

I) Repairing and making of basics electronic equipment

II) Maintenance of home appliances like Fan, Mixer etc

III) Mobile repairing

and expected to be conducted in the current academic year as per the convenience.

Resolution:

It is unanimously resolved that the lists of value added as well as skill based courses were finalized.

Proposed by: Dr. Pushpinder Bhatia Seconded by: Dr. M. R. Kale

Vi) Any other subject with the permission of the Chairman.

Mr. P. P. Jadhav, being an in-charge of T. Y. B. Sc. practicals and the member of the BoS, initiated the discussion through his observation that the two experiments in fifth semester be replaced by the two that were in the sixth semester. The practicals for fifth semester were suggested as follows:

TYBSc practicals(2019-20)
sem V

ASPPHP501	ASPPHP502
Determination of 'g' by Kater's pendulum	Solar cell characteristics and determinatio of Voc,Isc an Pmax
R. I. by total internal reflection	Hall effect
Velocity of sound in air using CRO	Hysteresis loop by CRO
Determination of e/m by Thomson's method	Diode as tepm. sensor
Determination of dielectric constant	Band gap energy of Ge diode
Logarithmic decrement	Design and study of transistorized astable multivibrator (BB)
Searle's Goniometer	Shift resister
Determination of Rydberg's constant	Desigen and study of first order active low pass filter circuit(BB)
Edser's 'A' pattern	Design and study of first order avtive high pass filter (BB)
Determination of wavelength of laser using grating	Application of IC555 timer as a ramp generator(BB)
Thermal conductivity by Lee's method	LM317 as constant current source
Elastic constant of rubber tube	Counters Mod 2,5,10
Determination of h/e by using LED	Design and study of Wien bridge ascillator

Resolution:

It is It is unanimously resolved that the practicals for fifth semester were finalized.

Proposed by: Mr. P. P. Jadhav Seconded by: Mr. A. C. Dhawre

Mr. U. B. Bhatye expressed vote of thanks on behalf of the department as well as the college regarding the incredible contribution of all the members of the BoS for their valuable suggestions in designing the new curriculum.

The meeting summed up at 1.30 p.m.