

*Progressive Education Society's*  
**Modern College of Arts, Science and  
Commerce,**  
Shivajinagar, Pune 5  
(An Autonomous College Affiliated to Savitribai Phule Pune University)

## **Framework of Syllabus**

**For B.Sc. Physics**

**(2019-20 Course)**

**(with effect from 2019-20 )**

**CIA:** Continuous Internal Evaluation

**Semester 1 (First Year)**

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-1	19ScPhyU101	Mechanics	03	02	40	60	100
CCT-2	19ScPhyU102	Modern Physics	03	02	40	60	100
CCP-1	19ScPhyU103	Practical Course-I	03	02	40	60	100
<b>Total Credits</b>			-	<b>06</b>			

**Semester 2 (First Year)**

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-9	19ScPhyU201	Heat and Thermodynamics	03	02	40	60	100
CCT-10	19ScPhyU202	Electricity and Magnetism	03	02	40	60	100
CCP-5	19ScPhyU203	Practical Course-II	03	02	40	60	100
<b>Total Credits</b>			-	<b>06</b>			

**Semester 3 (Second Year)**

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-19	19ScPhyU301	Mathematical Methods in Physics-I	04	2.5	40	60	100
CCT-20	19ScphyU302	Electronics/Instrumentation	04	2.5	40	60	100
CCP-9	19ScPhyU303	Practical Course- III	04	02	40	60	100
<b>Total Credits</b>			-	<b>07</b>			

**Semester 4 (Second Year)**

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-25	19ScPhyU401	Oscillations and Waves	04	2.5	40	60	100
CCT-26	19ScPhyU402	Optics	04	2.5	40	60	100
CCP-13	19ScPhyU403	Practical Course- IV	04	02	40	60	100
<b>Total Credits</b>			-	<b>07</b>			

**Semester 5 (Third Year)**

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
DSET-1	19ScPhyU501	Mathematical Methods in Physics- II	04	2.5	40	60	100
DSET-2	19ScPhyU502	Classical Mechanics 2	04	2.5	40	60	100
DSET-3	19ScPhyU503	Classical Electrodynamics	04	2.5	40	60	100
DSET-4	19ScPhyU504	Atomic and Molecular Physics	04	2.5	40	60	100
DSET-5	19ScPhyU505	C Programming and Computational Physics	04	2.5	40	60	100
DSET-6	19ScPhyU506	Elective- Material Science	04	2.5	40	60	100
DSEP-1	19ScPhyU507	Practical Course- V	04	2	40	60	100
DSEP-2	19ScPhyU508	Practical Course –VI	04	2	40	60	100
SECP-3	19ScPhyU509	Practical Course VII	04	2	40	60	100
		<b>Total Credits</b>	<b>-</b>	<b>21</b>			

**Semester 6 (Third Year)**

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
DSET-7	19ScPhyU601	Quantum Mechanics	04	2.5	40	60	100
DSET-8	19ScPhyU602	Solid State Physics	04	2.5	40	60	100
DSET-9	19ScPhyU603	Statistical Mechanics and Thermodynamics	04	2.5	40	60	100
DSET-10	19ScPhyU604	Nuclear Physics	04	2.5	40	60	100
DSET-11	19ScPhyU605	Electronics	04	2.5	40	60	100
DSET-12	19ScPhyU606	Elective- Physics of Nano Particles	04	2.5	40	60	100
DSEP-4	19ScPhyU607	Practical Course- VIII	04	2	40	60	100
DSEP-5	19ScPhyU608	Practical Course- IX	04	2	40	60	100
SECP-6	19ScPhyU609	Practical Course- X	04	2	40	60	100
		<b>Total Credits</b>	<b>-</b>	<b>21</b>			