



// Education is a ladder to gather fruits of knowledge //

Tuljabhavani Mahila Mandal's

**Hemuji Chandele College, Shelgaon (R),**

Tal. Barshi, Dist. Solapur (Maharashtra) 413222



## Department of Computer Science Year - 2023-2024

### CROSS CUTTING ISSUES

Sr.No	Paper No.	Name of course	Class	Activity
1	III	Introduction to web design	B.sc. I	Lecture
2	VI	Software Engineering	B.sc.II	Lecture
4	I	Computer Fundamental	B.sc.I	Lecture on Green IT And Recycle ,e- waste and reuse
5	VI	Data Structure	B.sc.II	Lecture
	II	Web Technology	B.sc.I	Lecture

*Surwase J. R.*  
NAME OF HOD

*[Signature]*  
SIGN OF HOD



*[Signature]*  
SIGNATURE OF PRINCIPAL  
PRINCIPAL

Hemuji Chandele College Shelgaon (R)  
Tal-Barshi, Dist-Solapur





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**Department of physics**

**1.3.1 crosscutting issues relevant to professional ethics, gender, human values, environment an sustainability into the curriculum**

**B.Sc -I and II (2023-24)**

Sr.no.	Name of the textbook prescribed for curriculum	Gender related topics	Environmenta and sustainability topics	Human values topics	Professuibak ethics topics
1	<b>Mechanics and properties of matter</b>		<ul style="list-style-type: none"> <li>• Surface tension</li> </ul>		<ul style="list-style-type: none"> <li>• Viscosity and Fluid dynamics (Bernoulli theorem and applications)</li> </ul>
2	<b>Optics</b>				<ul style="list-style-type: none"> <li>• Optical instruments</li> <li>• Laser</li> </ul>
3	<b>General physics , heat and sound</b>		<ul style="list-style-type: none"> <li>• Thermodynamics</li> <li>• Refrigerator</li> </ul>		<ul style="list-style-type: none"> <li>• Liquification of gases</li> <li>• Heat engines</li> </ul>
4	<b>Electronics</b>				<ul style="list-style-type: none"> <li>• Electronic devices</li> </ul>
5	<b>Heat and thermodynamics</b>		<ul style="list-style-type: none"> <li>• Heat</li> </ul>		<ul style="list-style-type: none"> <li>• Sound</li> <li>• Elasticity</li> </ul>
6	<b>Electricity magnetism and basic electronics</b>				<ul style="list-style-type: none"> <li>• Electronic instruments</li> </ul>

<b>Optics</b>				<ul style="list-style-type: none"> <li>• Resolving power</li> <li>• Optical fibres</li> </ul>
<b>Modern physics</b>		<b>Theory of relativity</b> <b>Nuclear energy sources</b>		

*Palare*  
**Principal**

**Hemuji Chandele College**  
 Shelgaon(R) Tal-Barshi Dist-Solapur

*Priyanka*  
 Head

Department of Physics  
 Head of the Department  
 Physics

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Department of Botany Year - 2023-2024  
Botany.  
CROSS CUTTING ISSUES

Paper No.	Name of course	Class	Activity
I	Microbiology	B.sc. I	Lecture
I	Phycology	B.sc. I	Lecture
II	Fungi	Bsc I	
III	Plant communities, Ecosystem & Ecological succession	Bsc I	Lecture
IV	Angiosperms	Bsc I	Lecture
VI	Plant growth regulators	B.sc. II	Lecture
VII	Photosynthesis	B.sc. II	Lecture
VIII	Pollination and fertilization	B.sc. II	Lecture

Jadhav R. P.  
Head of the Department  
Botany

G. D. Gore,  
Principal  
Hemuji Chandele College  
Shelgaon(R) Tal-Barshi Dist-Solapur



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## DEPARTMENT OF MICROBIOLOGY

### CROSS CUTTING ISSUES

Sr.no.	Paper no.	Name of course	Point	Class	Activity
1	XI	Immunology	Complement system	B.Sc.III	Lecture
2	XII	Microbial genetics	Mutation in bacteria	B.Sc.III	Lecture
3	XV	Environment microbiology	Marine Microbiology	B.Sc.III	Lecture
4	I	Introduction microbiology	Industrial Fermentation media	B.Sc.I	Lecture
5	II	Basic techniques in microbiology	Microscope	B.Sc.I	Lecture
6	VII	Medical microbiology	Immunity	B.Sc.II	Lecture
7	X	Agriculture Microbiology	Composting	B.Sc.III	Lecture
8	VI	Bacterial genetics	Molecular biology	B.Sc.II	Lecture
9	V	Bacterial cytology and physiology	Environmental factor	B.Sc.II	Lecture on plant one tree by each student in their house

*Galare*

Head of the Department  
Microbiology

*Galare*

Principal

Hemuji Chandele College  
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**Department of Mathematics**

1.3.1 crosscutting issues relevant to professional ethics, gender, human values, environment and sustainability into the curriculum

**B.Sc –I and II**

1	<b>Algebra</b>	<ul style="list-style-type: none"><li>• Matrices</li><li>• Application of linear equation</li></ul>	<ul style="list-style-type: none"><li>• Matrices</li><li>• Linear Equation</li></ul>
2	<b>Calculus</b>		<ul style="list-style-type: none"><li>• Differentiation</li></ul>
3	<b>Geometry</b>		<ul style="list-style-type: none"><li>• Plane</li><li>• Sphere</li><li>• Change of Axis</li></ul>
4	<b>Differential Equation</b>		<ul style="list-style-type: none"><li>• Differential Equation of first order and first degree(I&amp;II)</li><li>• Linear Differential Equation with constant coefficient(I&amp;II)</li></ul>
5	<b>Differential Calculus</b>		<ul style="list-style-type: none"><li>• Tangent &amp; Normal</li><li>• Curvature</li><li>• Jacobian</li><li>• Maxima &amp; Minima</li></ul>
6	<b>Laplace Transform</b>		<ul style="list-style-type: none"><li>• Laplace transform</li><li>• Inverse Laplace Transform</li><li>• Application of Laplace Transform</li></ul>
7	<b>Differential Equation</b>		<ul style="list-style-type: none"><li>• Differential Equation of First and higher than first order</li><li>• Total differential</li></ul>