

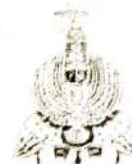


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Tuljabhavani Mahila Mandal's

Hemuji Chande College, Shelgaon (R),

Tal. Barshi, Dist. Solapur (Maharashtra) 413222



Department of chemistry year 2022-2023

Cross cutting issues

sr no	Paper No.	Name of course	Point	Class	Activity
1	IV	Analytical chemistry	Analysis of food product	B.sc I	Lecture
2	X	Inorganic chemistry	Bioinorganic chemistry	B.sc III	Lecture
3	XII	Methodology and materials of industrial importance	Nanomaterials	B.sc III	Lecture
4	XII	Methodology and materials of industrial importance	Compositematerials	B.sc III	Lecture on a plant one tree by each student in their house
5	XV	Organic chemistry	Vitamins and hormons	B.sc III	Lecture
6	XV	Organic chemistry	carbohydrates	B.sc III	Lecture
7	XV	Organic chemistry	pharmaceuticals	B.sc III	Lecture
8	XV	Organic Chemistry	Synthetic Dyes	B.sc III	Lecture
9	XVI	Organic Chemistry	Soap and detergents	B.sc III	Lecture
10	XV	Organic Chemistry	Agrochemicals	B.sc III	Lecture
11	XVI	Analytical	Green chemistry	B.sc III	Lecture

12	XVI	Analytical chemistry	Sugar and alcoholic faculty	B.sc III	Lecture
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Barhate
Head of the Department
Chemistry

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



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Tal. Barshi, Dist. Solapur (Maharashtra) 413222



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
	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 Computer Science Year - 2022-2023

CROSS CUTTING ISSUES

Sr.No	Paper No.	Name of course	Class	Activity
1	III	Introduction to web design	B.sc. I	Lecture
	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

J.R. Surwase

NAME OF HOD

[Signature]

SIGN OF HOD

Head of the Department
Computer Science

[Signature]
PRINCIPAL

Hemuji Chande College Shelgaon (R)
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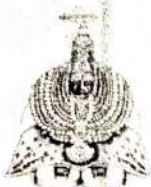
Department of ~~Zoology~~ ^{Botany} Year - 2022-2023

CROSS CUTTING ISSUES

Sr.No	Paper No.	Name of course	Class	Activity
1	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
2	VI	Plant growth regulators	B.sc. II	Lecture
	VII	Photosynthesis	B.sc. II	Lecture
3	VIII	Pollination and fertilization	B.sc. II	Lecture

Jadhav R.P.
Head of the Department
Botany

Gopare,
Principal
Hemuji Chandele College
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Tal. Barshi, Dist. Solapur (Maharashtra) 413222



Department of zoology Year - 2022-2023

CROSS CUTTING ISSUES

Sr.No	Paper No.	Name of course	Class	Activity
1	III	Comparative anatomy of vertebrates	B.sc. I	Lecture
2	VI	Principles of ecology	B.sc.II	Lecture
3	I	Animal diversity	Bsc I	Lecture
4	VIII	Animal physiology	B.sc.II	Lecture
5	V	Cell biology	B.sc.II	Lecture

Madhun'
Head of the Department
Zoology

Gatare.
Principal
Hemuji Chandele College
Shelgaon(R) Tal-Barshi Dist-Solapur



Department of Mathematics


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


B.Sc –I and II

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

			Equation
8	Abstract Algebra		<ul style="list-style-type: none"> • Groups • Groups & Homomorphism • Equivalence

Name of HOD - Nagtilak Rupali

Signature of HOD - 
Head of the Department
Mathematics


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

SIGNSTURE OF PRINCIPLE

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

B.Sc –I and II (2022-23)

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

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

Patil
Principal
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 Shelgaon(R) Tal-Batshi Dist-Solapur

Privanka
 Head
 Department of Physics
 Head of the Department
 Physics