



संहती कार्यसाधिका । शिलं परं भूषणम्

Shetkari Shikshan Prasarak Mandal's

KRISHNA MAHAVIDYALAYA, RETHARE BK.

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NAAC "B+" Grade (CGPA 2.65)



Founder : **Hon. Jaywantrao Bhosale**

President : **Dr. Suresh Jaywantrao Bhosale**

Principal : **Dr. Salunkhe C. B.,** M.Sc; Ph.D.

2.6.1 - Teachers and students are aware of the stated Programme and course outcomes of the Programmes offered by the institution.

2021-22

Sr.No	Department
1	Chemistry
2	Physics
3	Zoology
4	Mathematics
5	Marathi
6	Geography
7	History
8	Commerce
9	Economics
10	Hindi



Dr. Salunkhe C. B.
Principal
Krishna Mahavidyalaya, Rethare Bk.
Tal. Karad : 415 108 (M.S)



॥संहतीकार्यसाधिका, शिल्म परमभूषणं॥

**Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALYA RETHARE BK.**

Department of Chemistry
PROGRAM SPECIFIC OUTCOMES
AND
COURSE OUTCOMES
FOR OUTCOME-BASED EDUCATION
(Academic year 2021-22)



Shetkari Shikshan Prasarak Mandal's

KRISHNA MAHAVIDYALAYA, RETHARE BK

PROGRAMME OUTCOMES

DEPARTMENT OF CHEMISTRY

Academic Year 2021-2022

After completion of the B. Sc programme, the students will develop ability:

- A. The B.Sc Programme develops an insight of scientific inquisitiveness among students.
- B. It increases **scientific** temperament and attitude among science graduates.
- C. It creates a systematic method of study ie. Observation, Experiment, and Conclusion which is a basic principle of scientific research.
- D. The qualities of a science – observation, precision, analytical mind, logical thinking, clarity of thought and expression, systematic approach, qualitative and quantitative decision making are enlarged.
- E. The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.
- F. It trains the learners to extract information, formulate a scientific method of study and solve problems in a systematic and logical manner
- G. This programme enables the learners to perform jobs in diverse fields such as agriculture, industries, engineering , education,



banking, development-planning, business, public service, self-business etc., efficiently.

- H. The programme also helps the students to perform their carrier in the field of basic and applied research.
- I. Understood the basic concepts, fundamental principles, and scientific theories related to various scientific phenomena and their relevancies in the day to-day life.

After completion of the programme, the students will develop ability:



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DEPARTMENT OF Chemistry

PROGRAMME SPECIFIC OUTCOMES

Academic Year 2021-2022

PSO-A . The students will understand basic facts and concepts in chemistry

PSO-B . To make students aware about analytical industrial knowledge.

PSO-C . To develop problem solving skills in chemistry.

PSO-D .To acquire the knowledge of terms, facts, concept, processes and principles of chemistry.

PSO-E . To expose and to develop interest in the field of chemistry.

PSO-F. To develop knowledge and apply to society.

PSO-G. This programme enables the learners to perform jobs in diverse fields such as agriculture, industries, engineering, education, development-planning, business, public service, self-business etc., Efficiently.

PSO-H. The programme also helps the students to perform their carrier in the field of basic and applied chemical research.



Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF CHEMISTRY
CHEMISTRY COURSE OUTCOMES

Academic Year 2021-2022

B.Sc. (Chemistry)

Annexure-C

Course Outcomes: B.Sc. I Paper I: DSC -3A :Inorganic Chemistry

By the end of this Course students should be able to know about:

- CO1. The student will understand atomic structure, the nature, applications of element of S block elements.
- CO2. The student will understand the ionic solid and their crystal structure.
- CO3. The student will get the knowledge of VBT.
- CO 4. The student will get the knowledge of MOT.

Paper II: DSC-4A: Organic Chemistry

By the end of this Course students should be able to know about:

- CO1. The students will able to discuss Fundamentals of organic reactions and
- CO2. The students will able to discuss the concept of stereochemistry.
- CO3. The student will get the knowledge of aromatic and non-aromatic compounds
- CO4. The student will explain cycloalkanes , cycloalkenes and alkadienes.

Paper III: DSC-3B: Physical chemistry.

By the end of this Course students should be able to know about:

- CO1. The students will understand, thermodynamics and thermochemistry .
- CO2. The students will learn chemical equilibrium.
- CO3. The student will explain kinetic theory of gases.



CO4. The student will study rate of reaction and various order of reactions .

Paper IV: DSC-4B: Analytical Chemistry

By the end of this Course students should be able to know about:

CO1. The students will able to understand the concept of analytical chemistry.

CO2. The students will able to understand the qualitative and quantitative methods of Chromatography.

CO3. Students will understand basics of titrations methods.

CO4. The students will able to discuss water analysis.

CO5. The students will able to discuss about fertilizer analytical methods.

Paper V: DSC-C3: Physical Chemistry

By the end of this Course students should be able to know about:

CO1. Learning and understanding conductivity and transport number of the aqueous solutions with different applications.

CO2. To provide a good knowledge of physical properties of liquids.

CO3. Learning and understanding surface phenomena at heterogeneous surfaces.

CO4. Learning the various Nuclear phenomena and measurement of nuclear radiations.

CO5. Learning and understanding the knowledge about third order reaction and theories of reaction rates.

Paper VI : DSC-C4: Industrial Chemistry

By the end of this Course students should be able to know about:



CO1. The students will be able to discuss the Scope and basic concept of industrial chemistry.

CO2. The students will explain Knowledge of some unit operations

CO3. The student will explain applications Understanding the process of corrosion and Knowledge of prevention from corrosion processes.

CO4. The student will get the knowledge of Knowledge of Indian paper industry

CO5. The student will get Knowledge about the chemical nature and cleansing action of soap

Paper VII: DSC-D3 :Inorganic Chemistry

By the end of this Course students should be able to know about:

CO1. The student will get the knowledge of coordination compounds and their applications.

CO2. The student will get the knowledge chelation and applications in day today life.

CO3. The student will understand the nature, applications of P - block elements.

CO4. Student will be capable of understanding the properties of 3d series elements

CO5. The student will learn the basic knowledge about the qualitative analysis of inorganic compounds

Paper VIII : DSC-D4: Organic Chemistry

By the end of this Course students should be able to know about:



CO1. The students will To impart knowledge about the synthesis, reactivity and applications of carboxylic acids.

CO2. The students will able to discuss Knowledge about classification, preparation and applications of amines and diazonium salts.

CO3. Understanding the classification, configuration and structure of carbohydrates.

CO4. The students are able to understand the nomenclature and reactivity of aldehydes and ketones.

CO5. The students will understand importance of stereochemistry in the processes of industries.

Paper IX: DSE-E5: Inorganic Chemistry

By the end of this Course students should be able to know about:

CO1. Students will able to understand Hard and Soft acids and Bases (HSAB)

CO2. Students will able to understand metal ligand bonding in transition metal complexes and their applications in industrial word.

CO3. Students will able to understand the concept of metal semiconductor and superconductor and its uses.

CO4. Students will able to understand the Organometallic chemistry.

CO5. The classification, types, mechanism and applications of catalyst in industrial fields is explained.

PaperX: DSE-E6: Organic chemistry

By the end of this Course students should be able to know about:

CO1. The students will able to understand the physical methods of analysis.

CO2. The students will able to discuss the data analysis and deductions of the structure of unknown organic compounds.



CO3. The students will understand importance of spectroscopy in the manufacturing

processes of industries. It has wide applications in Research and developments section of various industries.

CO4. The students are able to understand importance data analysis and the confirmation of structure of unknown organic compounds.

CO5. The students will understand the concept and need of spectroscopy in chemical industry.

PaperXI: DSE-E7: Physical Chemistry

By the end of this Course students should be able to know about:

CO1. Students will able to understanding quantum Chemistry

CO2. Students will able to understand Knowledge about spectroscopy

CO3. Students will know Learning and understanding photochemical laws, reactions and various photochemical phenomena.

CO4. Learning the various types of solutions, relations vapour pressure, temperature relations.

CO5. Learning and understanding the knowledge of emf measurements, types of electrodes, different types of cells, various applications of emf measurements.

PaperXII: DSE-E8: Analytical Chemistry

By the end of this Course students should be able to know about:

CO1. The students will able to understand techniques of gravimetric analysis.

CO2. The students will able to Study instrumental analysis of alkali and alkaline earth elements.

CO3. Students will understand basics of colorimetry and spectrophotometry.



CO4. The students will be able to understand the procedure of potentiometric titration and their application.

CO5. Understanding the basics of ion exchange and column adsorption chromatography, Quality control practices in analytical industries / laboratories.

PaperXIII: DSE-F5 : Inorganic Chemistry

By the end of this Course students should be able to know about:

CO1. Students will be able to understand inorganic reaction mechanism.

CO2. Students will be able to understand thermodynamic and chemical kinetic aspect of metal complexes.

CO3. Students will be able to understand iron and steel and their production technique.

CO4. Students will be able to understand the concept bioinorganic chemistry.

CO5. The generation of nuclear power with the help of nuclear reactions is highlighted.

PaperXIV: DSE-F6: Organic chemistry

By the end of this Course students should be able to know about:

CO1. Students will be able to understand of reagents used in organic transformations and various reactions used in organic synthesis.

CO2. Students will be able to understand Knowing basic terms used in retrosynthetic analysis, retrosynthesis of some organic compounds.

CO3. Students will know electrophilic addition reactions and their applicability in day to day life.

CO4. Students will be able to understand definition and scope Natural Products.

CO5. Students will be able to understand the Pharmaceutical products and their uses.



PaperXV: DSE-F7: Physical Chemistry

By the end of this Course students should be able to know about:

CO1. Students will be able to understand concepts and applications of phase rule.

CO2. Students will be able to understand Knowledge about Thermodynamics,

CO3. Students will be able to understand the term solid state chemistry, synthetic applications.

CO4. Students will know Learning of kinetics, Simultaneous reactions such as
i) opposing reaction ii) side reaction iii) consecutive reactions: iv) chain reaction
v) explosive reaction

CO5. Learning and understanding the knowledge of distribution law

PaperXVI: DSE-F8: Industrial Chemistry

By the end of this Course students should be able to know about:

CO1. The students will be able to discuss mechanism sugar industry.

CO2. The students will be able to understand the manufacturing of heavy chemical processes and their applications.

CO3. Students will understand and learn the classification, synthesis and applications of various polymers

CO4. Understanding the petroleum Industry, fuels and need of use of ecofriendly fuels.

CO5. The students will be able to discuss about nanotechnology including classification, optical properties, synthesis routes, characterization techniques and applications of nano-materials.

The Department of Chemistry
KRISHNA MAHAVIDYALAYA
CHIVNAGAR (RETHARE BK.)



PRINCIPAL
KRISHNA MAHAVIDYALAYA
RETHARE (BK.) TAL. KARAD



Shetkari Shikshan Prasarak Mandal's

KRISHNA MAHAVIDYALAYA, RETHARE BK

DEPARTMENT OF Chemistry

Chemistry OBE PROCESS

Academic Year 2021-2022

1. Course- Program outcome Matrix: The Program Outcomes are developed through the curriculum (curricular/co-curricular extra-curricular activities). The program outcomes are attained through course implementation. As an educator, one must know, **“to which POs his/her course in contributing?”**. So that one can design the learning experiences, select teaching methods and design the tool for assessment. Hence, establishing the Course-PO matrix is an essential step in the OBE. The course-program outcomes matrix indicates the correlation between the courses and program outcomes. The CO-PO matrix is the map of the list of **courses contributing to the development of respective Pos.**

The Template is provided in the table below

Sr. No	Course Title	PSO-A	PSO-B	PSO-C	PSO-D	PSO-E	PSO-F	PSO-G	PSO-H
1.	Paper IX:DSE-E5: Inorganic Chemistry	✓	✓		✓	✓	✓	✓	✓
2.	Paper X: DSE- E6 Organic Chemistry	✓	✓	✓	✓	✓	✓	✓	✓
3.	Paper No. XI: DSE-E7 Physical Chemistry	✓	✓	✓	✓	✓	✓	✓	✓
4.	Paper XII : DSE-E8 Analytical Chemistry	✓	✓	✓	✓	✓	✓	✓	✓
5.	Paper XIII: DSE-F5 Inorganic chemistry	✓	✓		✓	✓	✓	✓	✓
6.	Paper XIV: DSE-F6 Organic Chemistry	✓	✓	✓	✓	✓	✓	✓	✓
7.	Paper XV: DSE-F7 Physical	✓	✓	✓	✓	✓	✓	✓	✓



	Chemistry								
8.	Paper XIV: DSE-F8 Industrial Chemistry	✓	✓		✓	✓	✓	✓	✓
9.	Chemistry Practical	✓	✓	✓	✓	✓	✓	✓	✓

2. Course Outcomes (for all courses):

The course outcomes are the statement that describes the knowledge & abilities developed in the student by the end of course (subject) teaching. The focus is on development of abilities rather than mere content. There can be 5 to 7 course outcomes of any course. These are to be written in the specific terms and not in general. The list of Course Outcomes is the part of **Annexure-C** attached herewith.

3. Set Target levels for Attainment of Course Outcomes:

The course outcome attainment is assessed in order to track the graduates' performance w.r.t target level of performance. The CO-PO attainment is the tool used for continuous improvement in the graduates' abilities through appropriate learning & teaching strategies. In order to assess students' performance with respect to abilities (at the end of course teaching/by the end of program) the course outcome attainment are measured/calculated. In order to calculate the program outcome attainment, the course outcome attainment is calculated. Prior to that, the course-program outcome mapping is done.

4. Set Target level for Attainment of Program Outcomes:

The program outcome attainment is assessed in order to track the graduates' performance w.r.t target level of performance. The CO-PO attainment is the tool used for continuous improvement in the graduates' abilities through appropriate learning & teaching strategies. In order to assess student's performance with respect to abilities (at the end of course teaching/by the end of program) the course outcome attainment and program outcome attainment is measured/calculated. The program outcome attainment is governed by curricular, co-curricular and extra-curricular activities including the stakeholders' participation. The direct method and indirect method is adopted to calculate the PO attainment. **The direct method implies the attainment by course outcomes contributing to respective program outcomes. And indirect method is the satisfaction/feed-back survey of stakeholders.** In order to calculate the program outcome attainment, the course outcome attainment is calculated. Prior to that, the course-program outcome mapping is done. The set target level is the set



benchmark to ensure continuous improvements in the learners/ graduates' performance.

5. Course Attainment Levels:

- a) CO attainment is defined/set at three levels;
- b) The CO attainment is based on end term examination assessment and internal assessment;
- c) The Co attainment is defined at three levels in ascending order
 - i. e.g. For end term and internal examination;

Sr. No	Level	CO Attainments
1.	Level-1:	30% students scored more than class average
2.	Level-2:	40% students score more than class average
3.	Level-3	50% students score more than class average

. The target level is set (e.g. Level-2). It indicates that, **the current target is level-2; 40% of students score more than class average.** The CO attainment is measured and the results are obtained. Based on the results of attainment, the corrective measures/remedial action are taken.

e. CO Attainment= 80% (Attainment level in end term examination) + 20% (Attainment level in internal examination)

6. Program attainment Level:

- a. PO attainment is defined at five levels in ascending order;
- b. **The PO attainment is based on the average attainment level of corresponding courses (Direct Method) and feed-back survey (Indirect method);**
- c. The PO attainment levels are defined/set as stated below;

Sr. No	Level	PO Attainments
1.	Level-1:	Poor: Greater than 0.5 and less than 1.0 (0.5>1)
2.	Level-2:	Average: 1.0 to 1.5
3.	Level-3	Good: 3: 1.5 to 2.0
4.	Level-4	Very Good: 2.0 to 2.5



5.	Level-5	Excellent: 2.5 to 3.0
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d. The PO attainment target level is set/defined (say, Level-4). It implies that, the department is aiming at minimum level-4 (very good) in the performance of abilities by the graduates. Based upon the results of attainment, the remedial measures are taken;

e. PO Attainment= 80% (Average attainment level by direct method) + 20% (Average attainment level by indirect method).

7. The Results of CO Attainment: The Results of CO Attainment is provided in Annexure-B

FOR EXAMPLE COURSE CODE/TITLE: Paper IX: DSE- E5 Inorganic Chemistry

e.g. For end-term and internal examination;

- i. Level-1: 30% students scored more than class average
- ii. Level-2: 40% students score more than class average;
- iii. Level-3: 50% students score more than class average

Paper IX: DSE- E5 Inorganic Chemistry		
Average Marks in External examination:	24	
% Students score more than 24 is =29	55%	Level: 3
Average Marks in Internal examination	8	
% Students score more than 8 is =42	79%	Level: 3
A(CO) Paper IX: DSE-E5 Inorganic Chemistry		
=	80% (3) +20 %(3)	
=	2.4+0.6	
=	3	

Paper X: DSE- E6 Organic Chemistry		
Average Marks in External examination:	34	
% Students score more than 34 is = 43	81%	Level: 3
Average Marks in Internal examination	9	
% Students score more than 9 is = 39	74%	Level: 3
A(CO) DSE- E6 Organic Chemistry		
=	80% (3) +20% (3)	
=	2.4+0.6	
=	3	



Paper No. XI: DSE-E7 Physical Chemistry		
Average Marks in External examination:	26	
% Students score more than 26 is =33	62%	Level: 3
Average Marks in Internal examination	9	
% Students score more than 9 is =38	72%	Level: 3
A(CO) Paper No. XI: DSE-E7 Physical Chemistry		
	=	80% (3) +20% (3)
	=	2.4+0.6
	=	3

Paper XII : DSE-E8 Analytical Chemistry		
Average Marks in External examination:	28	
% Students score more than 28 is =30	57%	Level: 3
Average Marks in Internal examination	9	
% Students score more than 9 is = 38	72%	Level: 3
A(CO) DSE-E8 Analytical Chemistry		
	=	80% (3) +20% (3)
	=	2.4+0.6
	=	3

Paper XIII: DSE-F5 Inorganic chemistry		
Average Marks in External examination:	28	
% Students score more than 28 is =30	57%	Level: 3
Average Marks in Internal examination	9	
% Students score more than 9 is =32	60%	Level: 3
A(CO) Paper XIII: DSE-F5 Inorganic chemistry		
	=	80% (3) +20% (3)
	=	2.4+0.6
	=	3

Paper XIV: DSE-F6 Organic Chemistry		
Average Marks in External examination:	31	
% Students score more than 31 is = 30	57%	Level: 3
Average Marks in Internal examination	9	
% Students score more than 9 is = 32	60%	Level: 3
A(CO) Paper XIV: DSE-F6 Organic Chemistry		
	=	80% (3) +20% (3)
	=	2.4+0.6



= 3

Paper XV: DSE-F7 Physical Chemistry		
Average Marks in External examination:	33	
% Students score more than 33 is =25	47%	Level: 2
Average Marks in Internal examination	9	
% Students score more than 9 is =35	64%	Level: 3
A(CO) Paper XV: DSE-F7 Physical Chemistry		
	= 80% (2) +20% (3)	
	= 1.6+0.6	
	= 2.2	

Paper XVI : DSE-F8 Industrial Chemistry		
Average Marks in External examination:	35	
% Students score more than 35 is =32	60%	Level: 3
Average Marks in Internal examination	9	
% Students score more than 9 is = 35	66%	Level: 3
A(CO) Paper XIV: DSE-F8 Industrial Chemistry		
	= 80% (3) +20% (3)	
	= 2.4+0.6	
	= 3	

Chemistry Practical		
Average Marks in External examination:	166	
% Students score more than 166 is = 36	68%	Level: 3
A(CO) Paper : Chemistry Practical		
	= 100%(3)	
	= 3	
	= 3	

Hence, the attainment level is Level-3 and the set target level is Level-2 and therefore the CO is Fully attained.



Table No. 1.0: CO Attainment Level

Course Title	Target Attainment Level	Course Attainment Value	Fully Attained/ Not Attained	Remedial Measures
DSE- E5 Inorganic Chemistry	2	3	Fully Attained	
DSE- E6 Organic Chemistry	2	3	Fully Attained	
DSE-E7 Physical Chemistry	2	3	Fully Attained	
DSE-E8 Analytical Chemistry	2	3	Fully Attained	
DSE-F5 Inorganic chemistry	2	3	Fully Attained	
DSE-F6 Organic Chemistry	2	3	Fully Attained	
DSE-F7 Physical Chemistry	2	2.2	Fully Attained	
DSE-F8 Industrial Chemistry	2	3	Fully Attained	
Chemistry Practical	2	3	Fully Attained	

8. The Results of PO Attainment:

The Results of PO attainment are provided in Annexure-B

FOR EXAMPLE: PO NO.: a (Note: Refer to point No. 11 above which describes the attainment level and set target attainment level).

PO Attainment= 80% (Average attainment level by direct method) + 20% (Average attainment level by indirect method).

$$(PSO-A) = 80\% (3+3+3+3+3+3+2+3+3)/09 + 20\% (3+3+3+3+3+3+3+3)/8=80\% (2.89) + 20\% (3) =2.312 + 0.6 =2.912 \text{ i.e. Level-5. The Target Level is Level-3.}$$

Hence, PO is attained

$$(PSO-B) = 80\% (3+3+3+3+3+3+2+3+3)/09 + 20\% (3+3+3+3+3+3+3+3)/8=80\% (2.89) + 20\% (3) =2.312 + 0.6 =2.912 \text{ i.e. Level-5. The Target Level is Level-3.}$$

$$(PSO-C) = 80\% (3+3+3+3+2+3)/06 + 20\% (3+3+3+3+3+3)/6=80\% (2.83) + 20\% (3) = 2.264 + 0.6 = 2.864 \text{ i.e. Level-5. The Target Level is Level-3.}$$



(PSO-D) = 80% (3+3+3+3+3+3+2+3+3)/09 + 20% (3+3+3+3+3+3+3)/8=80% (2.89) + 20% (3) =2.312 + 0.6 =2.912 i.e. Level-5. The Target Level is Level-3.

(PSO-E) = 80% (3+3+3+3+3+3+2+3+3)/09 + 20% (3+3+3+3+3+3+3)/8=80% (2.89) + 20% (3) =2.312 + 0.6 =2.912 i.e. Level-5. The Target Level is Level-3.

(PSO-F) = 80% (3+3+3+3+3+3+2+3+3)/09 + 20% (3+3+3+3+3+3+3)/8=80% (2.89) + 20% (3) =2.312 + 0.6 =2.912 i.e. Level-5. The Target Level is Level-3.

(PSO-G) = 80% (3+3+3+3+3+3+2+3+3)/09 + 20% (3+3+3+3+3+3+3)/8=80% (2.89) + 20% (3) =2.312 + 0.6 =2.912 i.e. Level-5. The Target Level is Level-3.

(PSO-H) = 80% (3+3+3+3+3+3+2+3+3)/09 + 20% (3+3+3+3+3+3+3)/8=80% (2.89) + 20% (3) =2.312 + 0.6 =2.912 i.e. Level-5. The Target Level is Level-3.

Table No. 2.0 PO Attainment Level

PO/PSO Number	Target Attainment Level	PO/PSOs Attainment		Fully Attained/ Not Attained	Remedial Measures
		Level	Value		
PSO-A	3	5	2.912	Fully Attained	
PSO-B	3	5	2.912	Fully Attained	
PSO-C	3	5	2.864	Fully Attained	
PSO-D	3	5	2.912	Fully Attained	
PSO-E	3	5	2.912	Fully Attained	
PSO-F	3	5	2.912	Fully Attained	
PSO-G	3	5	2.912	Fully Attained	
PSO-H	3	5	2.912	Fully Attained	



9. Planned Actions for Course Attainment:

The courses for which the level attained is less than Level-2, the remedial measures will be taken in plan way that includes, tutorial, assignments, field work and remedial coaching.

10.Planned Actions for Program Outcome Attainment:

Not Applicable.

ANNEXURE-B RESULTS OF CO-PO ATTAINMENT

Sr. No	Course Title	PSO-A	PSO-B	PSO-C	PSO-D	PSO-E	PSO-F	PSO-G	PSO-H
1.	DSE- E5 Inorganic Chemistry	3	3		3	3	3	3	3
2.	DSE- E6 Organic Chemistry	3	3	3	3	3	3	3	3
3.	DSE-E7 Physical Chemistry	3	3	3	3	3	3	3	3
4.	DSE-E8 Analytical Chemistry	3	3	3	3	3	3	3	3
5.	DSE-F5 Inorganic chemistry	3	3		3	3	3	3	3
6.	DSE-F6 Organic Chemistry	3	3	3	3	3	3	3	3
7.	DSE-F7 Physical Chemistry	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
8.	DSE-F8 Industrial Chemistry	3	3		3	3	3	3	3
9.	Chemistry Practical	3	3	3	3	3	3	3	3
Average		2.91	2.91	2.86	2.91	2.91	2.91	2.91	2.91

HEAD
The Department of Chemistry
KRISHNA MAHAVIDYALAYA
MUVNAGAR (RETHARE BK)



PRINCIPAL
KRISHNA MAHAVIDYALAYA
RETHARE (BK), TAL. KARAD

॥ संहती कार्य साधिका, शिलंम परम भूषणंम ॥

**Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALYA RETHARE BK.**

Department of Physics
PROGRAM SPECIFIC OUTCOMES
AND
COURSE OUTCOMES
FOR OUTCOME-BASED EDUCATION
ACADEMIC YEAR
2021-2022

Shetkari Shikshan Prasarak Mandal's

KRISHNA MAHAVIDYALAYA, RETHARE BK

DEPARTMENT OF PHYSICS

PROGRAMME OUTCOMES

Academic Year 2021-2022

After completion of the B. Sc programme, the students will develop ability:

- A. The B.Sc Programme develops an insight into scientific inquisitiveness among students.
- B. It increases **scientific** temperament and attitude among science graduates.
- C. It creates a systematic method of study ie. Observation, Experiment, and Conclusion which is a basic principle of scientific research.
- D. The qualities of a science – observation, precision, analytical mind, logical thinking, clarity of thought and expression, systematic approach, and qualitative and quantitative decision making are enlarged.
- E. The program also empowers the graduates to appear for various competitive examinations or choose the postgraduate programme of their choice.
- F. It trains the learners to extract information, formulate a scientific method of study and solve problems in a systematic and logical manner
- G. This programme enables the learners to perform jobs in diverse fields such as agriculture, industries, engineering, survey, education, banking, development-planning, business, public service, self-business, etc., efficiently.
- H. The programme also helps the students to perform their carrier in the field of basic and applied research.
- I. Understood the basic concepts, fundamental principles, and scientific theories related to various scientific phenomena and their relevancies in today's life.

After completion of the programme, the students will develop ability:

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF PHYSICS

PROGRAMME SPECIFIC OUTCOMES

Academic Year 2021-2022

PSO-A: To understand the core knowledge of Physics and the basic concepts which help them in understanding physical phenomenon in nature.

PSO-B: It Identifies their area of interest and further specialization in the subject and develops skills and competencies to conduct scientific experiments related to Physics.

PSO-C: The study inculcates a rigorous understanding of the core theories & principles of physics, which includes mechanics, electromagnetism, thermodynamics, & quantum mechanics.

PSO-D: It helps to understand the set of physical laws, describing the motion of bodies, under the influence of the system of forces.

PSO-E: It provides knowledge about material properties and their application for developing technology to solve society's problems.

PSO-F: To learn the structure of solid materials & their different physical properties along with metallurgy, cryogenics, electronics & material science.

PSO-G: To understand the fundamental theory of nature & levels of atom & sub-atomic particles.

PSO-H: It provides advanced knowledge and skills for technical work in industries along with their knowledge and skills in carrying out independent work.

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF PHYSICS
PHYSICS COURSE OUTCOMES

Academic Year 2021-2022

B.Sc. (Physics)

Annexure-C

Course Outcomes: B.Sc. I Paper I: DSC- 1 A MECHANICS-I

By the end of this Course students should be able to know about:

- CO1. Different types of motions in nature.
- CO 2. Difference between translational motion and rotational motion.
- CO 3. Different laws of motion.
- CO 4. Differential equations and their applications.

B.Sc. I Paper II: DSC- 2 A MECHANICS-II

By the end of this Course students should be able to know about:

- CO 1. Oscillations and waves and their properties.
- CO 2. Use of waves in general life.
- CO 3. Various elastic constants and properties of elasticity.
- CO 4. Surface tension and their applications.
- CO 5. Applications of GPS and Satellite.

Paper III: DSC- B ELECTRICITY AND MAGNETISM-I

By the end of this Course students should be able to know about:

- CO 1. Scalar vectors and their mathematical Applications.
- CO 2. Dielectric phenomenon.
- CO 3. Difference between polar and non-polar molecules.
- CO 4. Various types of Condensers and calculation of capacity.

Paper IV: DSC- 2B ELECTRICITY AND MAGNETISM-II

By the end of this Course students should be able to know about:

- CO 1. What is the origin of the magnetic property of material?
- CO 2. Complex numbers and their application in solving problems in Ac circuits.
- CO 3. Boit savert's law and its applications.
- CO 4. Maxwell's equations and electromagnetic waves propagation in vacuumed and isotropic dielectric medium.

Paper V : DSC-C1 THERMAL PHYSICS AND STATISTICAL MECHANICS - I

By the end of this Course students should be able to know about:

- CO 1. General information on various types of gases and theories related to them.
- CO 2. Thermal properties of gases and various laws related to thermodynamics.
- CO 3. Transport phenomena in gases.
- CO 4. Concept of heat and temperature and different types of thermometers.

Paper VI: DSC-C2: WAVES AND OPTICS - I

By the end of this Course students should be able to know about:

- CO 1. Use of Cathode ray oscilloscope in oscillations.
- CO 2. Linearity and superposition principles
- CO 3. Coupled oscillatory system.
- CO 4. Oscillations and waves and their properties.
- CO 5. The viscosity of liquid and its mathematical theory related to it.

Paper VII: DSC-D1 THERMAL PHYSICS AND STATISTICAL MECHANICS - II

By the end of this Course students should be able to know about:

- CO 1. Study of thermodynamic and different thermodynamically relations
- CO 2. Study of the theory of radiations.
- CO 3. Study of classical and quantum statistics

CO 4. Thermodynamic probability and probability distribution.

CO 5. LASERS and applications in various fields.

Paper VIII: DSC- D2 - WAVES AND OPTICS-II

By the end of this Course students should be able to know about:

CO 1. Lenses and various cardinal points.

CO 2. Formation of Images by Newton's formula.

CO 3. Properties of light like interference, diffraction, and polarization with theory and experiments.

CO4. Resolving the power of different optical instruments

Paper IX: Mathematical Physics

By the end of this Course students should be able to know about:

CO 1. Study of different coordinate systems.

CO 2. Differential equations and their applications.

CO Experimental study of the Black body radiation spectrum.

CO 4. Basic concepts in statistical physics and MB, BE, and FD statistics.

Paper X: Quantum Mechanics

By the end of this Course students should be able to know about:

CO 1. Interpretation of wave function and Schrodinger's wave equation

CO 2. Quantum mechanical treatment of particles in a rigid box.

CO 3. Schrodinger's equation for the hydrogen atom

CO 4. Significance of quantum numbers.

CO 5. Various operators in quantum mechanics.

Paper XI: Classical Mechanics and classical electrodynamics

By the end of this Course students should be able to know about:

CO 1. Study of mechanics of particle and system of particle.

CO 2. Coriolis force and effect of Coriolis force in nature

CO 3. Applications of Long-range equations

CO 4. Study of techniques of calculus of variation

CO 5. The motion of a rigid body in space

Paper XII: Digital and Analog Circuits and Instrumentation

CO 1. Study of basic gates, flip-flops, half and full adders.

CO 2. Working principle of transistors and load line analysis

CO 3. Study of working principle of oscillators and various types of oscillators.

CO 4. Construction and working of CRO, Lissajous figures

CO 5. Study basics of the op-amp, applications of IC-555 as astable and monostable multivibrator

Paper XIII: Nuclear and Particle Physics

By the end of this Course students should be able to know about:

CO 1. Need of accelerators and principal, construction, and working conditions of accelerators.

CO 2. Study of principal, construction, and working conditions of the nuclear detector.

CO 3. Study of the nucleus and its properties.

CO 4. Origin of cosmic rays and their types.

Paper XIV: Solid-State Physics

By the end of this Course students should be able to know about:

CO 1. Study of crystalline and non-crystalline solids.

CO 2. Study of X-ray diffraction method.

CO 3. Elastic vibrations of the diatomic mono-atomic lattice

CO 4. Solid state devices and their applications.

CO 5. Study of metal semiconductors and insulators

Paper XV: Atomic and Molecular physics and Astrophysics

By the end of this Course students should be able to know about:

CO 1. Doublet fine structure and electron spin-orbit interaction

CO 2. Effect of magnetic field on atomic spectra

CO 3. Study the Raman effect and its classical theory.

CO 4. Study of the origin of the solar system.

CO 5. Evidence of geological activities.

Paper XVI: Energy Studies and Material Science

By the end of this Course students should be able to know about:

CO 1. Classification of energy resources and their alternatives.

CO 2. Solar energy from the satellite power station.

CO 3. Study of impurities in solids and defects in solids.

CO 4. Study of superconductivity.

CO 5. Introduction of nanoscience and nanotechnology

Salani

HEAD
DEPARTMENT OF PHYSICS
KRISHNA MAHAVIDYALAYA,
Rethare Bk; Shivnagar - 415108



Principal
Principal
Krishna Mahavidyalaya, Rethare Bk
Tal. Karad : 415 108 (M.S)

॥ संहती कार्य साधिका, शिलंम परम भूषणं ॥

**Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALYA RETHARE BK.**

Department of Zoology
PROGRAM SPECIFIC OUTCOMES
AND
COURSE OUTCOMES
FOR OUTCOME-BASED EDUCATION

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF ZOOLOGY

PROGRAMME OUTCOMES

Academic Year 2021-2022

After completion of the B. Sc programme, the students will develop ability:

- A. The B.Sc Programme develops an insight of scientific inquisitiveness among students.
- B. It increases **scientific** temperament and attitude among science graduates.
- C. It creates a systematic method of study ie. Observation, Experiment, and Conclusion which is a basic principle of scientific research.
- D. The qualities of a science – observation, precision, analytical mind, logical thinking, clarity of thought and expression, systematic approach, qualitative and quantitative decision making are enlarged.
- E. The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.
- F. It trains the learners to extract information, formulate a scientific method of study and solve problems in a systematic and logical manner
- G. This programme enables the learners to perform jobs in diverse fields such as agriculture, industries, engineering, survey, education, banking, development-planning, business, public service, self-business etc., efficiently.
- H. The programme also helps the students to perform their carrier in the field of basic and applied research.
- I. Understood the basic concepts, fundamental principles, and scientific theories related to various scientific phenomena and their relevancies in the to-day life.

After completion of the programme, the students will develop ability:

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF ZOOLOGY

PROGRAMME SPECIFIC OUTCOMES

Academic Year 2021-2022

After completion of the programme, the students will develop ability:

- A. To understand the core knowledge of Zoology and the basic concepts which help them in understanding the basics of Zoology.
- B. It identify their area of interest and further specialization in the subject and also develops skills and competence to conduct scientific study of Flora and Fauna.
- C. Students will demonstrate broad understanding of major current and past theories research findings and methodologies and techniques in their area of concentration both orally and writing.
- D. To understand the nature and basic Concepts of Cell Biology and the basic Concepts of Chordates and Non-Chordates along with the Concepts of Goaterly and Lac Culture.
- E. To understand the various Applications of Biotechnology, the Lamarkism, Neo-Lamarkism and Darwinism and the terms ELISA technique, DNA finger printing and the process of evolution.
- F. It helps to retrieve, evaluate, and interpret professional scientific literature and use this information to develop theoretical framework, testable hypothesis and prediction for their own research project.
- G. It provides advanced knowledge and skills for technical work in research and formulation of theories, concept, principals along with their knowledge and skills in carrying out independent work.

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF PHYSICS
ZOOLOGY COURSE OUTCOMES

Academic Year 2021-2022

B.Sc. (Zoology)

Annexure-C

B.Sc. I.

Paper I: Animal Diversity I

By the end of this Course students should be able to know about:

- CO1. Understanding the arrangement of organism or groups of organisms in distinct categories in accordance with particular & well-established plan.
- CO 2. Explanation of unity in diversity of organism.
- CO 3. Studying specific & scientific names to organism.
- CO4. Collecting information about useful and harmful animals, helps in understanding the nature of habitat.

Paper II: Animal Physiology

By the end of this Course students should be able to know about:

- CO 1. Understanding the structure and function of cell & cell organelles.
- CO2. To study animal tissue to improve knowledge about genetic information. it study how organism evolve from a single cell division, get knowledge about unicellular & multi-cellular organisms.
- CO 3. Understanding normal function of cell, organ or tissue.

Paper IV: Genetics

By the end of this Course students should be able to know about:

- CO 1. Study of structure function, molecular organization, growth, reproduction and genetics of cell.
- CO 2. Study of Mendelian and Post Mendelian genetics.

CO 3. Study of Linkage and Crossing Over.

CO 4. Study of Mutations.

CO 5. Understanding evolutionary history of certain animals, study their sericulture which is one of the longest agro industries & silk is used in the manufacture of woven materials.

B.Sc. II

Paper V: Animal Diversity II

By the end of this Course students should be able to know about:

CO 1. Understanding the arrangement of organism or groups of organism in distinct categories in accordance with particular & well established plan.

CO 2. Understanding General features and Classification up to orders; Venomous and non-venomous snakes, Biting mechanism in snakes.

CO 3. Study General features and Classification up to orders; Osmoregulation in Fishes.

Paper VI: Biological Chemistry

By the end of this Course students should be able to know about:

CO 1. Study of chemistry within living organisms.

CO 2. Perceiving the chemical components & chemical structure in organisms.

CO 3. Study how body functioning with the help of chemical molecules elements.

Paper VII: Reproductive Biology

By the end of this Course students should be able to know about:

CO 1. Study outline and histology of female and male reproductive system

CO 2. Functional anatomy of female and male reproduction.

CO 3. Understand infertility in male and female: causes, diagnosis and management; Assisted

CO 4. Reproductive Technology: sex selection, sperm banks, frozen embryos, in vitro fertilization, ET, EFT.

Paper VIII: APPLIED ZOOLOGY

By the end of this Course students should be able to know about:

CO 1. Improving proper knowledge about Transmission, Prevention and control of diseases Tuberculosis, typhoid..

CO 2. Understanding Insects of Economic Importance.

CO 3. Study the principles of poultry breeding, Management of breeding stock and broilers, Processing and preservation of eggs.

B.Sc. III

Zoology Paper- IX DSE-E29 (COMPARATIVE ANATOMY OF VERTEBRATES)

By the end of this Course students should be able to know about:

CO 1. Comparative study of Integumentary System, Skeletal System

CO 2. Comparative study of Digestive System, Respiratory system

CO 3. Comparative study of Circulatory system, Kidney

CO 4. Comparative study of Nervous system, Sense organs

Zoology Paper- X DSE-F29 (Molecular Cell Biology and Animal Biotechnology)

By the end of this Course students should be able to know about:

CO 1. Study of Molecular biology

CO 2. Study of Protein synthesis

CO 3. Study of Molecular techniques in gene manipulation

Zoology Paper- XI DSE-F30 (Biotechniques and Biostatistics)

By the end of this Course students should be able to know about:

CO 1. Study of Genetically Modified organisms

CO 2. Study of Culture techniques and applications

CO 3. Study of Biostatistics

Zoology Paper- XII DSE-F31 (AQUATIC BIOLOGY)

By the end of this Course students should be able to know about:

CO 1. Study of Aquatic Biomes

CO 2. Study of Freshwater Biology

CO 3. Study of Endocrinology

Zoology Paper- XIII DSE-E30 (DEVELOPMENTAL BIOLOGY OF VERTEBRATES)

By the end of this Course students should be able to know about:

CO 1. Study of Gametogenesis

CO 2. Study of Early Development of Frog

CO 3. Study of Chick Embryology

CO 4. Study of Late Embryonic Development

Zoology Paper- XIV DSE-E32 (IMMUNOLOGY)

By the end of this Course students should be able to know about:

CO 1. Study of Cells and Organs of the immune system

CO 2. Study of Antigens

CO 3. Study of Immunoglobulin / Antibodies

Zoology Paper- XV DSE-E31 (Applied Zoology - II)

By the end of this Course students should be able to know about:

CO 1. Study of Apiculture, Animal Husbandary

CO 2. Study of Pearl culture, Freshwater prawn culture

CO 3 Study of Fish Technology, Goat Farming-

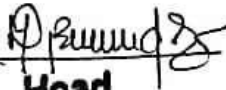
Zoology Paper- XVI DSE-F32 (Insect Vectors and Histology)

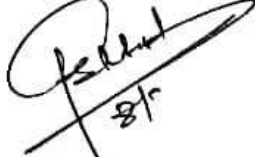
By the end of this Course students should be able to know about:

CO 1. Study of Dipteran as Disease Vectors

CO 2. Study of Siphonoptera as Disease Vectors

CO 3. Study of Histology of mammalian organs

For 
Head
Department of Zoology
K. M. Rethare (Bk.)


Principal
Krishna Mahavidyalaya, Rethare Bk,
Tal. Karad : 415 108 (M.S)



॥संहती कार्य साधिका, शिलंम परम भूषणंम॥

Shetkari Shikshan Prasarak Mandal's

KRISHNA MAHAVIDYALYA RETHARE BK.



Department of Mathematics
PROGRAM SPECIFIC OUTCOMES
AND
COURSE OUTCOMES
FOR OUTCOME-BASED EDUCATION



Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF MATHEMATICS
PROGRAMME OUTCOMES

Academic Year 2021-2022

After completion of the B. Sc. program, the students will develop ability:

- PO A. Recognize that Mathematics permeates the world around us.
- PO B. Appreciate the usefulness, power and beauty of Mathematics.
- PO C. Enjoy Mathematics and develop patience and persistence when solving the problem.
- PO D. Understand and be able to use the language symbols and notations of Mathematics.
- PO E. Develop Mathematical curiosity and use inductive as well as deductive reasoning when solving problems.
- PO F. Became confident in using Mathematics to analyze and solve problems both in college and real life situations.
- PO G. Develop knowledge, skills and attitudes necessary to pursue further studies in Mathematics.
- PO H. Develop abstract, logical and critical thinking and the ability to reflect critically upon their work and the work of others.
- PO I. Develop ability to critically assess numerical and graphical information and to prepare for future challenges.



Shetkari Shikshan Prasarak Mandal's

KRISHNA MAHAVIDYALAYA, RETHARE BK

DEPARTMENT OF MATHEMATICS

PROGRAMME SPECIFIC OUTCOMES

Academic Year 2021-2022

PSO A. Though knowledge and understanding students develop mathematical reasoning to make deductions and solve problems.

PSO B. Mathematical inquiry encourages students to become risk takers, inquires and critical thinkers.

PSO C. At the end of the course students should be able to communicate mathematical ideas, reasoning and findings.

PSO D. Students are encouraged to share their thinking with teachers and peers and to examine different problem solving strategies.

PSO E. Students will develop the knowledge, skills and attitudes necessary to pursue further studies in Mathematics.

PSO F. Students will enjoy Mathematics and develop patience and persistence when solving the problem.

PSO G. Students will develop abstract, logical and critical thinking and the ability to reflect critically upon their work and the work of others.

PSO H. Students will understand and be able to use the language symbols and notations of Mathematics.



Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF Mathematics
MATHEMATICS COURSE OUTCOMES

Academic Year 2021-2022

B.Sc. (Mathematics)

Annexure-C

Course Outcomes: B.Sc. I Paper I: DSC-5A Differential Calculus

By the end of this Course students should be able to know about:

- CO 1. Understand De-Moivre's theorem, examples and applications.
- CO 2. Understand Hyperbolic functions and its properties.
- CO 3. Representation of the curves in parametric and polar co-ordinates.
- CO 4. Apply Leibnitz's theorem to obtain higher derivatives of product of two differentiable functions.
- CO 5. Understand Euler's theorem on homogenous functions and solve examples on it.
- CO 6. Understand Maxima and Minima for functions of two variables and Lagrange's method of undetermined multipliers.

B.Sc. I Paper II : DSC-6A Calculus

By the end of this Course students should be able to know about:

- CO 1. Understand Mean value Theorems, Rolle's mean Theorem, Lagrange's mean value theorem, Cauchy's mean value theorem and examples.
- CO 2. Understand Taylor's and Maclaurin's theorem.
- CO 3. Understand different indeterminate forms Solve indeterminate forms.
- CO 4. Evaluate the limit and examine the continuity of a function at a point.
- CO 5. Understand the consequences of mean value theorems for differentiable functions.

Paper III: DSC-5B Differential Equations

By the end of this Course students should be able to know about:

- CO 1. Understand types of differential equations.
- CO 2. Solve different types of ordinary differential equations.



CO 3. Understand applications of differential equations.

Paper IV: DSC-6B Higher Order Ordinary Differential Equations and Partial Order Differential Equations:

By the end of this Course students should be able to know about:

CO 1. Understand second order Differential equations.

CO 2. Understand complete solution of different methods and examples.

CO 3. Understand ordinary simultaneous and total differential equations and examples.

CO 4. Understand Partial differential equations, order and degree, linear and non-linear partial differential equations and examples.

CO 5. Understand Lagrange's equations and Charpits method and solve examples on that.

Paper V: DSC-5C Real Analysis -I

By the end of this Course students should be able to know about:

CO 1. Understand types of functions and how to identify them.

CO 2. Use mathematical induction to prove various properties.

CO 3. Understand the basic ideas of Real Analysis

CO 4. Prove order properties of real numbers, completeness property and the Archimedean properties.

Paper VI : DSC-6C Algebra -I

By the end of this Course students should be able to know about:

CO 1. Understand properties of matrices.

CO 2. Solve system of linear homogenous equations and linear non-homogenous equations.

CO 3. Find Eigen values and Eigen vectors.

CO 4. Construct permutation group and relate it to the other groups

CO 5. Classify the various types of the groups and subgroups

Paper VII: DSC-5CD Real Analysis -II

By the end of this Course students should be able to know about:

CO 1. Understand sequence and subsequence

CO 2. Prove the Bolzano-Weirestrass theorem

CO 3. Derive Cauchy Convergence criterion

CO 4. Find convergence of series.



CO 5. Apply Leibnitz test.

Paper VIII: DSC-6D Algebra -II

By the end of this Course students should be able to know about:

CO 1. Prove Lagrange's theorem

CO 2. Derive Fermat's theorem.

CO 3. Understand properties of normal subgroups, factor group.

CO 4. Define homomorphism and isomorphism in group and rings.

CO 5. Derive basic properties of ring and subrings.

Paper IX: DSE-E9 Mathematical Analysis

By the end of this Course students should be able to know about:

CO 1. The integrations of bounded function on a closed and bounded interval.

CO 2. Some of the families and properties of Riemann integrable functions.

CO 3. The applications of the fundamental theorems of integrations.

CO 4. Extension of Riemann integral to the improper integrals when either the interval of integration is infinite or the integrand has infinite limits at a finite number of points on the interval of integration.

CO 5. The expansion of functions in Fourier series and half range Fourier series

Paper X: DSE-E10 Abstract Algebra

By the end of this Course students should be able to know about:

CO 1. Basic concepts of group and rings with examples.

CO 2. Identify whether the given set with the compositions form Ring, Integral domain or field.

CO 3. Understand the difference between the concepts Group and Ring

CO 4. Apply fundamental theorem, isomorphism theorems of groups to prove this theorems for rings.

CO 5. Understand the concepts of polynomial rings , unique factorization domain .

Paper XI: DSE-E11 Optimization Techniques

By the end of this Course students should be able to know about:

CO 1. Provide student basic knowledge of a range of operation research models and techniques, which can be applied to variety of industrial and real life applications.

CO 2. Formulate and apply suitable methods to solve problems.



CO 3. Identify and select procedures for various sequencing assignment transportation problems.

CO 4. Identify and select suitable methods for various games.

CO 5. To apply linear programming and find algebraic solution to games.

Paper XII: DSE-E12 Integral Transform

By the end of this Course students should be able to know about:

CO 1. Understand concept of Laplace transform.

CO 2. Apply properties of Laplace transform to solve differential equations.

CO 3. Understand the relation between Laplace and Fourier transform.

CO 4. Understand infinite Fourier transform.

CO 5. Apply Fourier transform to solve real life problem.

Paper XIII: DSE-F9 Metric space

By the end of this Course students should be able to know about:

CO 1. Acquire the knowledge of notion of metric space, open set and closed set.

CO 2. Demonstrate the properties of continuous functions on metric space.

CO 3. Apply the notion of metric space to continuous function on metric space.

CO 4. Understand the basic concept of connectedness, completeness and compactness of metric spaces.

CO 5. Appreciate process of abstraction of limits and continuity to metric space.

Paper XIV: DSE-F10 Linear Algebra

By the end of this Course students should be able to know about:

CO 1. Understand notion of vector space basis. .

CO 2. Understand concept of linear transformation and its application to real life situation.

CO 3. work out algebra of linear transformation.

CO 4. Appreciate connection between linear transformation and matrices.

CO 5. Work out Eigenvalues, Eigen vectors and its connection with real life situation.

Paper XV: DSE-F11 Complex Analysis

By the end of this Course students should be able to know about:

CO 1. Learn basic concepts of function of complex variables.

CO 2. Be introduced to concept of analytic functions.

CO 3. Learn concept of complex integration and basic results thereof.

CO 4. Be introduced to concept of sequence and series of complex variables.

CO 5. Learn to apply concept of residues to evaluate certain real integrals.

Paper XVI: DSE-F12 Discrete Mathematics

By the end of this Course students should be able to know about:


CO 1. Use classical notations of logic: implications, equivalence, negation, proof by contradiction, proof by induction, and quantifiers.

CO 2. Apply notions in logic in other branches of mathematics.

CO 3. Know elementary algorithms: Searching algorithms, sorting, greedy algorithms, and their complexity.

CO 4. Apply concept of graph and trees to tackle real situations.

CO 5. Appreciate applications of shortest path algorithms in computer science


Head of Dept. of Mathematics
Krishna Mahavidyalaya Rethare BK.




PRINCIPAL
KRISHNA MAHAVIDYALAYA
RETHARE (BK.), TAL. KARAD

॥ संहती कार्य साधिका, शिलम परम भूषणम ॥

Shetkari Shikshan Prasarak Mandal's

KRISHNA MAHAVIDYALYA RETHARE BK.

Department of Marathi

PROGRAM SPECIFIC

OUTCOMES

AND

COURSE OUTCOMES

FOR OUTCOME-BASED EDUCATION

2021-22

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF MARATHI
Academic Year 2021-2022

PROGRAMME OUTCOMES

Bachelor of Arts (B.A.)

After completion of the B.A. programme, the students will develop ability:

- To become a good citizen of India.
- To understand every field of Knowledge.
- To understand Moral ethics in humanities.
- To become socially conscious.
- The students acquire knowledge in the field of social sciences, literature and humanities which make them sensitive and sensible enough.
- The B.A. graduates will be acquainted with the social, economic, historical, geographical, political, ideological and philosophical tradition and thinking.
- To understand fundamental values of Indian Constitution.
- To get employment opportunities.
- To use communication skills.
- To make all round personality development of the learners.
- To become good human being.
- The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.

PROGRAMME SPECIFIC OUTCOMES**B.A - Marathi**

After completion of the programme, the students will develop ability:

PSO. A. To understand the creative process and appreciate Marathi literature.

PSO.B. Students will understand the social customs, codes and get interest in reading Marathi literature.

PSO.C. Students will be aware of impact of various factors on Marathi literature and use of formal and informal Marathi in communication.

PSO.D. Students will develop their critical and creative skills and use of language in day-to-day life Students can understand that moral values reflected in Marathi literature.

PSO.E. Students can go for higher studies and post graduate courses in Marathi language

PSO.F. Students can understand that moral values reflected in Marathi literature.

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF PHYSICS
MARATHI COURSE OUTCOMES
Academic Year 2021-2022

B.A. Part I – Discipline Specific Core (DSC-): Marathi (Paper – A1 and A13)
(June 2018 onwards) अक्षरबंध

After studying the course, the students:

- CO 1. Develop the knowledge of Marathi Language and Literature.
- CO 2. Improve Conversation skills and essential skills in Marathi.
- CO 3. Criticize appreciation of film.
- CO 4. Know the knowledge of how to write for print media.

B.A. Part II – Semester No. III Paper No. III (DSC-C1) साहित्यकृती : काय डेंजर वारा
सुटलाय (नाटक) आणि मराठी भाषिक कौशल्ये

After studying the course, the students:

- CO 1. Develop the knowledge of Marathi Language and Literature.
- CO 2. Improve the knowledge of Marathi Literature especially a Play.
- CO 3. Understand different types of Drama
- CO 4. Know the knowledge of how to write dialogues for drama.

B. A. Part II – Semester No. III Paper No. IV (DSC-C2) काव्यगंध आणि मराठी भाषिक
कौशल्ये

After studying the course, the students:

- CO 1. Become curious readers of poetry.
- CO 2. Improve the knowledge of Marathi Literature especially Poetry.
- CO 3. Understand different types of Poetry.
- CO 4. Receive the knowledge of various cultures and traditions reflected in poetry.

B. A. Part II - Semester No. IV Paper No. V (DSC-C25) माती, पंख आणि आकाश
(आत्मचरित्र) आणि मराठी भाषिक कौशल्ये

After studying the course, the students:

- CO 1. Develop the knowledge of Marathi Language and Literature.
- CO 2. Improve the knowledge of Marathi Literature especially Autobiography.
- CO 3. Understand characteristics of Autobiography.
- CO 4. Understand the knowledge about Mr. Mule and his literary journey.

B. A. Part II - Semester No. IV Paper No. VI (DSC-C26) जुगाड (कांदबरी) आणि मराठी भाषिक कौशल्ये

After studying the course, the students:

- CO 1. Develop the knowledge of Marathi Language and Literature.
- CO 2. Improve the knowledge of Marathi Literature especially a novel.
- CO 3. Understand the A novel as a form of literature.
- CO 4. Identify major trends and elements of novel and types of novel.
- CO5. Receive the knowledge of various cultures and traditions reflected in novel.

B. A. Part III – Semester No. V & VI Paper No. VII& XII काव्यशास्त्र

After studying the course, the students:

- CO 1. Develop the knowledge of Kavyashastra.
- CO 2. Study Western Poetic tradition and its importance.
- CO 3. Understand the salient features & characteristics of Poetry.
- CO 4. Know the structure of poetry and process of Poetic creation.
- CO 5. Know the major critical concepts, literary movements.
- CO 6. Attempt appreciating poetry in a critical way
- CO 7. Explain the importance of Literary Writing.

B. A. Part III – Semester No. V&VI Paper No. VII & XII भाषाविज्ञान आणि मराठी भाषा

After studying the course, the students:

- CO 1. Develop the knowledge of Bhashavidnyan.
- CO 2. Study the correlation between Bhashavidnyan and Marathi language.
- CO 3. Understand the salient features & characteristics of Bhashavidnyan.
- CO 4. Know the rise, development and evolution of Marathi language.
- CO 5. Know the importance of alphabets.

B. A. Part III - Semester No. V&VI Paper No. IX & XIV मराठी वाङ्मयाचा इतिहास

After studying the course, the students:

CO 1. Develop the knowledge of Marathi Language and History of Medieval Marathi Literature.

CO 2. Identify structure & characteristics of Medieval Marathi Literature.

CO 3. Study the background of Medieval Marathi Literature.

CO 4. Understand the genre and importance of Medieval Marathi Literature.

B. A. Part III – Semester No. V&VI Paper No. X & XV मराठी भाषा उपयोजन आणि सर्जन

After studying the course, the students:

CO 1. Develop the knowledge of Marathi Language

CO 2. Study the correlation between formal & informal Marathi language.

CO 3. Study the Marathi language and linguistic skills.

CO 4. Understand the use of reading, writing, and speech in different situations.

CO 5. Write creative and Critical writing through Marathi language.

B. A. Part III Semester No. V&VI Paper No. XI& XVI

वाङ्मयप्रवाहाचे अध्ययन (ग्रामीण साहित्य आणि दलित साहित्य)

After studying the course, the students:

CO 1. Develop the knowledge of Marathi Language and Literature.

CO 2. Study the structure and characteristics of Gamin Sahitya.

CO 3. Read different types of masterpieces critically and creatively.

CO 4. Explain literary values and human values.

CO 4. Understand the structure and characteristics of Dalit Sahitya.



Principal
Principal
Krishna Mahavidyalaya, Rethare Bk,
Tal. Karad : 415 108 (M.S)

Dr. M. V. Kamble
Dr. M. V. Kamble
M. A., Ph.D. SET
Head- Department of Marathi
Krishna Mahavidyalaya,
Rethare BK, Tal-Karad 415108

॥संहतीकार्यसाधिका, शिल्मं परमभूषणं॥

Shetkari Shikshan Prasarak Mandal's

KRISHNA MAHAVIDYALYA

RETHARE BK.

Department of Geography

PROGRAM SPECIFIC OUTCOMES

AND

COURSE OUTCOMES

FOR OUTCOME-BASED EDUCATION

ACADEMIC YEAR

2021-2022

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF Geography

PROGRAMME OUTCOMES

Academic Year 2021-2022

Bachelor of Arts (B.A.)

After completion of the B.A. programme, the students will develop ability:

- A. To become a good citizen of India.
- B. To understand every field of Knowledge.
- C. To understand Moral ethics in humanities.
- D. To become socially conscious
- E. The students acquire knowledge in the field of social sciences, literature, and humanities which makes them sensitive and sensible enough.
- F. The B.A. graduates will be acquainted with the social, economic, historical, geographical, political, ideological, and philosophical traditions and thinking.
- G. To understand the fundamental values of Indian Constitution.
- H. To get employment opportunities.
- I. To use communication skills.
- J. To make all-round personality development of the learners.
- K. To become a good human being.
- L. The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF GEOGRAPHY

PROGRAMME SPECIFIC OUTCOMES

Academic Year 2021-2022

After completion of the programme, the students will develop ability:

- A. The program shall be helpful to gather information and Knowledge of basics in geography.
- B. The program gives minute knowledge of whole Earth ie. Lithosphere, Hydrosphere, Atmosphere and Biosphere.
- C. It will be helpful to understand the physical setup of the world and especially of India and Maharashtra.
- D. The program will be helpful to study the forms and processes of various landforms.
- E. To get acquainted with the relationship between human activities and physical Environment.
- F. To relate Global and Local situations.
- G. The study will be helpful to the planning and management of Natural and Human Recourses.
- H. It gives knowledge of Natural and Manmade Hazards and disasters and the management.
- I. To acquire knowledge of different traditional And Modern study techniques like cartography, GIS, GPS and Remote Sensing.

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF GEOGRAPHY
GEOGRAPHY COURSE OUTCOMES

Academic Year 2021-2022

B.A (Geography)

Annexure-C

B.A.-I: DSC – I (Paper I) Physical Geography

After studying this course, students:

CO1. Understand the functioning of Earth & analyze natural and anthropogenic

operating factors affects the development of landforms.

CO2. Distinguish between the mechanisms that control these processes.

CO3. Assess the roles of structure, stage and time in shaping the landforms, interpret geomorphologic maps and apply the knowledge in geographical research.

CO4. Explain exposure of climatology.

CO5. Study knowledge of upper atmospheric conditions and cyclonic features.

CO 6. Understand the characteristics of climatic regions.

B.A.-I: DSC – II (Paper II) Human Geography

After studying this course, students:

CO1. Exposure of contemporary relevance of cultural landscape

CO2. Study spatial concepts, geographic vocabulary and landscape interpretation

to a variety of locations and situations around the globe & in local areas.

CO3. Understand knowledge of space and society of cultural regions

CO4. Understand the settlement pattern and population resource relationship

B.A.II: DSC - III (Paper 3) Soil Geography

After studying this course, students:

CO1. Understand soil is key resource for the development of any country.

CO2. Understand the process of soil formation and development as well as soil properties.

CO3. Know classification, characteristics and distribution of soils

CO4. Understand the concepts related to soil degradation and erosion, causes and controlling factors of soil erosion, conservation of soils

B.A.II: DSC - IV (Paper 4) Resource Geography

After studying this course, students:

CO1. Study the role of Resource Geography in the present scenario.

CO2. Understand the concept and classification of Resources.

CO3. Understand knowledge of the major resources (water, forest, energy and human) with their distribution, utilization and problems

CO4. Explain the sustainable resource development.

B.A.II: DSC - V (Paper No. 5) Oceanography

After studying this course, students:

CO1. Describe the major surface and deep currents in the oceans and explain their causes.

CO2. Analyze the movement of tectonic plates, MOR and seduction zone.

CO3. Relate scales and rates of ocean and ocean processes.

CO4. Explain physical and chemical factors affecting the climate in the past, present and future.

B.A.II: DSC - VI (Paper 6) Agricultural Geography

After studying this course, students:

CO1. Understand the concept and development of Agriculture

CO2. Explain the agriculture and its determinants

CO3. Study Indian and World agriculture regions and systems

CO 4. Understand sound knowledge of agriculture revolutions

Course Outcome (COs)

B. A. Part - III Geography Paper VII-DSE- E 106 Evolution of Geographical Thought

CO 1. Student should be able to understand in-depth about the Evolution of Geographical Thought.

CO.2. Students should be able to analyse the recent trends in geography

CO.3. Student should be able to make use of various models of paradigms and debates in the geographical studies. Understanding of recent trends in geography.

B. A. Part - III Geography Paper No. VIII DSE E107 - GEOGRAPHY OF INDIA

CO.1 In depth understanding the dimensions and physiography of India

CO.2. The students are fully aware about the climatic seasons in India.

CO.3. Detailed knowledge about soils, vegetation, drainage systems in India.

CO.4. Understanding an importance of agriculture and industry in Indian economy.

CO.5. Detailed knowledge about the economic setup of the India.

B.A. Part- III Geography DSE E 230 Paper No. IX- POPULATION GEOGRAPHY

CO.1. This paper would bring an understanding of population geography along with relevance of demographic data.

CO.2. The students would get an understanding of distribution and trends of population growth in the developed and less developed countries, along with population concepts.

CO.3. The students would get an understanding of the dynamics of population

CO.4. An understanding of the implications of population composition in different regions of the world.

CO.5. An appreciation of the contemporary issues in the field of population studies

B. A. Part – III Geography PAPER X-DSE- E 231 Economic Geography

CO.1. In depth understands about the economic geography.

CO.2. Detailed knowledge about locational factors of economic activities with special reference to agriculture and industry.

CO.3. Detailed understanding of the basic concepts related to manufacturing and major manufacturing industries (selected countries) of the world. Understanding of the transport and trade.

B. A. Part – III Geography DSE-E232 or XI- Urban Geography

CO.1. The students were known the importance of Urban Geography.

CO.2. The students understood the concepts of Urbanization.

CO.3. The students were familiar with indicators of measurement of development.

CO.4. Detailed understanding of Urban Scenario.

CO.5. The students are developing skills for demarcation of Urban Boundaries and Urban Regions.

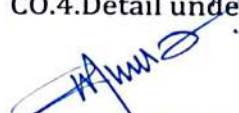
B.A. Part– III Geography DSE-E233 Paper No. XII –Political Geography

CO.1. Understand various geographical perspectives related to Political Geography.

CO.2. Create awareness of Political Issues.

CO.3. The students are familiar with geographical background of States and Boundaries regional pattern.

CO.4. Detail understanding of pressure of Political issues.


Dr. Pravinchandra Bhakare
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Principal
Krishna Mahavidyalaya, Retihare Bk.,
Tal. Karad : 415 108 (M.S)

॥संहतीकार्यसाधिका, शिलंम परमभूषणं॥

**Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALYA RETHARE BK.**

Department of Commerce
PROGRAM SPECIFIC OUTCOMES
AND
COURSE OUTCOMES
FOR OUTCOME-BASED EDUCATION

Shetkari Shikshan Prasarak Mandal's

KRISHNA MAHAVIDYALAYA, RETHARE BK

PROGRAMME OUTCOMES

DEPARTMENT OF COMMERCE

Academic Year 2021-2022

After completion of the B. Com. programme, the students will develop ability:

POs –A To understand the principle and areas of Commerce and management.

POs –B To understand the basic knowledge of accounting

POs –C To face the modern-day challenges in commerce and business in relation to globalization.

POs –D The course offers a number of value based and job-oriented knowledge which progress to the valuing and organization levels.

POs –E The Course develops basic knowledge of statistical techniques applicable to business along with the concepts in Insurance, Banking, Marketing and e-commerce.

POs –F The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.

POs –G
The students become capable of doing a business of their choice or choosing a profession or can become employees having basic knowledge and skill required for such activities.

After completion of the programme, the students will develop ability:

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF COMMERCE
COMMERCE COURSE OUTCOMES

Academic Year 2021-2022

B.Com. (Commerce)

Annexure-C

Course Outcomes:

B.Com. I: Management Principles and Applications

By the end of this Course students should be able to know about:

- CO1. Understand the management and administrations in the business
- CO2. Acquire theories of management by experts to develop managerial role.
- CO3. Implement of the functions of management viz. planning, organizing, decision making controlling etc. in the business to achieve the goals of business.
- CO4. Learn motivational aspects and the promotional keys by motivation in the business.
- CO5. Enhance leadership and the ways of business communication.

B.Com. I : Financial Accounting

By the end of this Course students should be able to know about:

- CO1. Understand the financial accounting process in the business.
- CO2. Acquire the knowledge of financial accounting.
- CO3. Prepare the financial statements practically with accounting principles, conventions and standards.
- CO4. Study the role of Chartered Accountants, Company Secretaries, Cost Accountants, Tax consultants' accountant, auditor, tax consultants.
- CO5. Participate in different commercial and economic activities

CO6. Enhance qualities through practical accounting system with tally with GST

B.Com. I : Principles of Marketing

By the end of this Course students should be able to know about:

CO1. Understand the concept of marketing management to develop marketing skills

CO2. Learn consumer behavior in the business environment through marketing management.

CO3. Gain the implementation of 4Ps in the marketing mix.

CO4. Enhance research qualities, marketing segment, target marketing, positioning in the business after learning marketing aspects.

CO5. Understand service marketing, as expected in the marketing environment.

B. Com. Part I- Micro Economics

By the end of this Course students should be able to know about:

CO1. Know the decision making of consumers

CO2. Identify the nature of revenue and cost of production.

CO3. Comprehend the demand function and production function.

CO4. Realize various production theories.

CO5. Clarify the meaning of marginal, average, total revenue marginal, average and total cost and its implication

CO6. Understand pricing in different markets & judge the factors responsible for pricing

B. Com. Part I: Insurance

By the end of this Course students should be able to know about:

CO1. Enable to understand meaning, scope, need and characteristics of insurance

CO2. Get information about various procedures of taking life insurance policy.

CO3. Know about the structure, setup and function of life insurance business.

CO4. Know about the various type of insurance.

B. Com. Part II: Fundamentals of Entrepreneurship

By the end of this Course students should be able to know about:

CO1. Understand the concept of entrepreneurship and qualities, functions and role of entrepreneurship in changing environment.

CO2. Understand the obstacles in entrepreneurship in business career.

CO3. Know the entrepreneurship development concept and different institutions for its development.

CO4. Understand the concepts of MSMEs, its importance and MSME policies.

CO5. Understand women entrepreneurship, their problems and remedies to solve the problems as well as getting knowledge of rural entrepreneurship.

CO6. Understand about project report of small scale units to prepare the project report in his business career and also getting insights of stories of successful entrepreneurs such as Tata, Dhirubai Ambani 'Vargis Kurian, Vitthal Kamat and getting motivated to start the career in business.

B. Com. Part II Corporate Accounting

By the end of this Course students should be able to know about:

CO1. Understand the issues of shares and debenture with different aspects of market and get the knowledge of how to make an investment in financial securities in the stock market

CO2. Get the knowledge of how to establish a company and to determine the profitability before and after incorporation of the company.

CO3. Receive the knowledge of Tally software for computerized accounting, enabling them to get a job opportunity as an accountant.

CO4. Understand the role of accounting standard in respect of companies and learn the practical issues related.

CO6. Develop ability to understand computer application through Tally and become employable in firms, companies.

CO7. Get ability to demonstrate accounting for issue of debentures and redemption of debentures.

CO9. Simulate practice of preparing financial statements as per the provisions of Indian Companies Act 2013.

B. Com. Part II: Macro Economics

By the end of this Course students should be able to know about:

CO1. Identify the basic concept and theories of Macro Economics

CO2. Get awareness about changing Macro Economics Policies and Theories

CO3. Understand various concepts such as GDP, GNP, NNP, Per Capital, Disposable income, Per capita income and national income.

CO4. Identify the factors determining gross domestic product, employment, the general level of prices and interest rate.

CO5. Realize the law of markets, consumption function and investment function.

CO6. Judge the role of fiscal policy, monetary policy in developing economy.

CO7. Know features, phases and theories of trade cycle.

B. Com. Part II: Money and Financial System

By the end of this Course students should be able to know about:

CO1. Understand the nature, functions and issues related to money, banking and non banking financial intermediaries and financial system.

CO2. Know about changing role of banking and financial intermediaries in the process of growth & development.

CO3. Realize the term structure, role and functions of RBI, NBFIs, Development Banks, Commercial Banks, Money Market, Capital Market and Forex .

CO4. Get knowledge of the changing paradigms in Indian Banking.

B. Com. Part II: Business Statistics

By the end of this Course students should be able to know about:

CO1. Make familiar with statistical tools which are relatively used in business.

CO2. Impart the ability to collect present, analyze and interpret data

CO3. Predict trend values by using list square methods in regression

CO4. Understand how to collect, present, analyze and interpret the data.

B.COM. III: Business Environment

By the end of this Course students should be able to know about:

CO1. Understand characteristic features of structural changes in Indian Economy.

CO2. Comprehend the nature and impact of new economic reforms on the Indian Economy.

CO3. Know the problem of unemployment, poverty, rising economic and social inequality and problems of regional imbalances in India

CO4. Evaluate the changing role of agricultural, industrial and service sector and foreign sector in Indian Economy

CO5. Measure the problems and prospects of cottage and small scale industries, and industrial sicknesses

B.COM. III: Business Regulatory Framework

By the end of this Course students should be able to know about:

CO1. Get provided with fundamental information about the Indian Legal System related to the business.

CO2. Get knowledge the laws, functions of the court.

CO3. Understand the basic principles of law that apply to business organizations

CO4. Study business law in the global context.

CO5. Gain knowledge of legal environment in which a consumer and business operations

B.COM. III: Modern Management Practices

By the end of this Course students should be able to know about:

CO1. Understand the modern concepts of management practices about the growing size and complexity of business.

CO2. Understand the concept of strategic management. Getting known with the corporate governance and social responsibility from different areas of social responsibilities.

CO3. Understand the new concepts in management.

CO4. Get known with modern management and understanding MBO.

B.COM. III: Co -Operative Development

By the end of this Course students should be able to know about:

CO1. Understand the Principles of Co-Operation and Co-Operative Movement in India.

CO2. Know the Structure, types, functions, problems and remedies agricultural and Non – agricultural Credit Co – operative institution.

CO3. Evaluate the impact of Globalization on co – operative Movement.

CO4. Get basic knowledge of cooperative society and its administration.

CO5. Understand New Economic policy since 1991 and co – operative Movement.

B.COM. III: Advanced Accountancy (Paper I, II, III & IV)

By the end of this Course students should be able to know about:

CO1. Understand the utility of advanced accountancy, auditing, taxation in practices with accounting software.


CO2. Visit banks, insurance companies etc for better understanding of working and functioning

CO3. Develop their potential and skill for employment opportunities as accountant, auditor and tax consultant in various firms.

CO4. Pursue the master degrees for advanced and professional knowledge.


Principal
Krishna Mahavidyalaya, Rethare Bk.
Tal. Karad. 415 108 (M.S.)




(Patil V.S.)
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॥ संहती कार्य साधिका, शलंम परम भूषणं ॥

**Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALYA RETHARE BK.**

Department of History

**PROGRAM SPECIFIC OUTCOMES
AND
COURSE OUTCOMES
FOR OUTCOME-BASED EDUCATION
ACADEMIC YEAR
2021-2022**

Shetkari Shikshan Prasarak Mandal's
KRISHNA MAHAVIDYALAYA, RETHARE BK
DEPARTMENT OF HISTORY

PROGRAMME OUTCOMES

Bachelor of Arts (B.A.)

After completion of the B.A. programme, the students will develop ability:

- To become a good citizen of India.
- To understand every field of Knowledge.
- To understand Moral ethics in humanities.
- To become socially conscious.
- The students acquire knowledge in the field of social sciences, literature, and humanities which makes them sensitive and sensible enough.
- The B.A. graduates will be acquainted with the social, economic, historical, geographical, political, ideological, and philosophical traditions and thinking.
- To understand the fundamental values of Indian Constitution.
- To get employment opportunities.
- To use communication skills.
- To make all-round personality development of the learners.
- To become a good human being.
- The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.

Shetkari Shikshan Prasarak Mandal's

KRISHNA MAHAVIDYALAYA, RETHARE BK

DEPARTMENT OF HISTORY

PROGRAMME SPECIFIC OUTCOMES

Academic Year 2021-2022

After completion of the programme, the students will develop ability:

PSO-A: Understand the basic themes concept, Chronology and the scope of Indian history.

PSO-B: To study the history of various countries in the world.

PSO-C: To study and interpret history objectively.

PSO-D: Prepare of various type of the competitive examination.

PSO-E: To understand the change and impact of the revolutionary events.

PSO-F: Critically recognize Social, Political. Economic and cultural aspects of history.

Shetkari Shikshan Prasarak Mandal's

KRISHNA MAHAVIDYALAYA, RETHARE BK

DEPARTMENT OF HISTORY

HISTORY COURSE OUTCOMES

Academic Year (2021-2022)

B. A. (HISTORY)

Annexure-C

**B.A.I - Paper No. I/II Rise of the Maratha Power (1600-1707) & polity,
Society and Economy under the Maratha (1600-1707)**

After studying this course, students:

CO1. Understand of importance of the Maratha History in the 17th Century.

CO2. Study the circumstance at the time of rise of the Maratha took place.

CO3. Understand the political scenario of the Maratha in the 17th Century.

CO4. Understand the policies of Chhatrapati Shivaji Maharaj.

**B.A. II - Paper No. III/V History of Modern Maharashtra (1900-1960)
and History of Modern Maharashtra (1960- 2000)**

After studying this course, students:

CO1. Study the background of History of Modern Maharashtra.

CO 2. Understand of importance of the Maratha in Modern Maharashtra.

CO 3. Know the first 60 years span of 20th century (a period of great upheaval in Maharashtra).

CO 4. Study the event and changes that look place a lasting impact on the polity, society and economy of the Modern Maharashtra.

**B.A. II - Paper No. IV/VI History of Indian (1757-1857) and History of
freedom struggle (1858-1947) Part I&II**

After studying this course, students:

CO1. Study the background of History of Indian Freedom Struggle.

CO 2. Understand the history of Indian freedom struggle as a glorious epic of Indian history.

CO 3. Study the characteristics and importance of Indian freedom struggle.

CO4. Understand the great sacrifices of freedom fighters in Indian freedom struggle.

B.A. I and II (IDS) History of Social Reform in India and History of Social Reform in Maharashtra.

After studying this course, students:

CO1. Study the background of Social Reforms in Maharashtra & India.

CO 2. Understand the importance of movements of social reformers in Maharashtra & India.

CO3. Understand the time span of reform movements in the traditional Maharashtra & India.

CO 4. Develop the values of social justice and equality.

B.A. III Paper No. VII/XII- Paper VII: Early India (from beginning to 4th c. BC) History of And Paper XII : Ancient India (From 4th c BC to 7th c. AD)

After studying this course, students:

CO 1. Perceive various sources of Ancient India.

CO 2. Know the development and achievements of man in the Stone Age.

CO 3. Understand the glory of Indian history in the age of Harppan civilization.

CO 4. Comprehend the history of Vedic period.

CO 5. Understand the philosophy of Jainism and Buddhism.

B.A. III Paper No. VIII/XIII- Paper VIII: DSE-E- 62 History of Medieval and India (1206-1526 AD) and Paper XIII: History of Medieval India (1526-1707 AD)

After studying this course, students:

CO 1. Understand early difficulties of Medieval India.

CO 2. Know the system of trade and commerce during the period of Medieval India.

CO 3. Understand the nature of village community and the relationship between the different classes of society.

CO 4. Study the Socio-culture system of the Mughal Raj.

CO5. Understand the Political system of the Mughal Raj.

B.A. III – Paper No. IX/XIV- Paper IX: Age of Revolution and Paper XIV: DSE- E- 188 Making of the Modern World (16 to 19 Century)

After studying this course, students:

CO 1. Introduce important events in the World History.

CO 2. Study the important events before Independence period.

CO 3. Create awareness about Indian freedom struggle and contribution of the freedom fighters.

CO 4. Know the contribution of the social reform movements.

B.A. III Paper No. X/XV- Paper X: Political History of the Marathas and Paper No. Paper XV: DSE-E-189 Polity, Economy and Society under the Marathas

After studying this course, students:

CO1. Understand the beginning and growth of nationalist consciousness in Maharashtra.

CO 2. Explain the contribution of Maharashtra to the national movement.

CO 3. Give an account of various movements of the peasants, workers, woman and backward classes.

CO 4. Know the background and events which led to the formation of separate state of Maharashtra.

B.A. III Paper No. XI/XVI-Paper No. Paper XI: DSE-E- 65 History: Its Theory and Paper XVI: Methods and Applications of History


After studying this course, students:

CO1. Study the key concepts in historiography.

CO2. Understand the importance of historiography in present era.

CO 3. Develop application of History in today's scenario.

CO 4. Study various fort visits, theories and projects related to historiography.


(Dr. Nikam R. D.)
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PRINCIPAL
KRISHNA MAHAVIDYALAYA
RETHARE (BK.) TAL. KARAD