



Rayat Shikshan Sanstha's
Annasaheb Awate Arts, Commerce & Hutatma Babu
Genu Science College, Manchar.

“ Criterion 1- Curricular Aspects”

AQAR 2022-23

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.

Rayat Shikshan Sanstha's

Annasaheb Awate Arts, Commerce and Hutatma Babu Genu Science College,
Manchar, Tal. Ambegaon, Dist. Pune 410503

Department of Electronic Science

CROSS-CUTTING COURSES IN THE CURRICULUM

A.Y 2022-23

Programme	Title of the Course	Description
TYBSc Electronic Science	Internet of Things & Applications	Create awareness on IoT, which is any network of devices connected to the internet for the purpose of exchanging information with one another, collecting data or controlling processes

Bkhillari
Ms. J B Khilari

Course Co-ordinator



Ms. A M Dange

Ms. A M Dange

Head of the Department
Dept. of Electronic Science
A. A. College, Manchar

Rayat Shikshan Sanstha's
**Annasaheb Awate Arts, Commerce &
Hutatma Babu Genu Science College,**

Manchar, Tal- Ambegaon, Dist-Pune

Department Of Biotechnology

Name of The teacher- Prof. Maskare S. R

Subject- Biotechnology

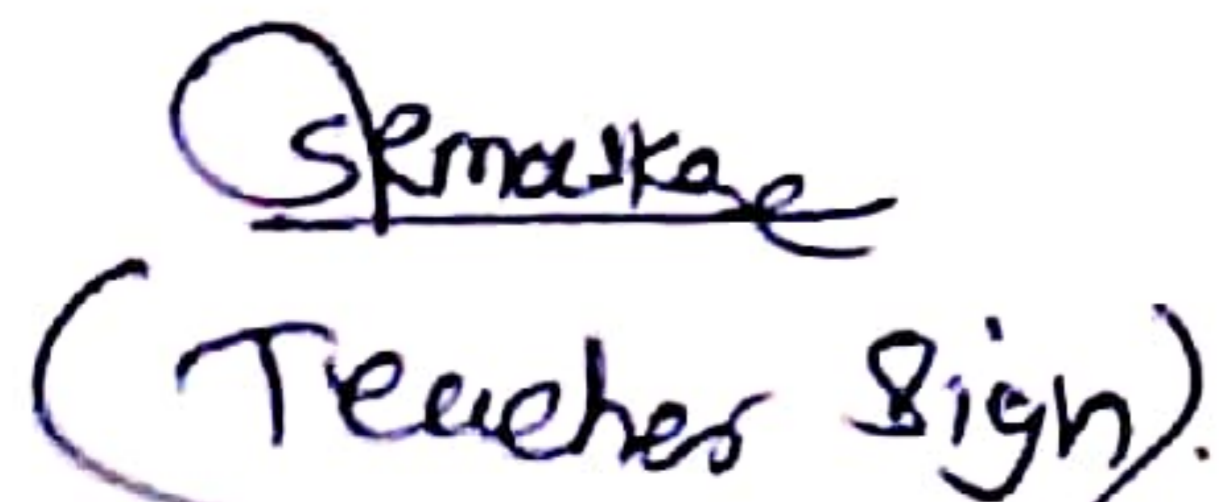
Course /paper- Recombinant DNA technology, Molecular Biology,
Genetics, Environmental biotechnology.

Sr. No.	Course syllabus	Relevant cross cutting issues
1.	Accessing biotechnology: intellectual property rights, Bio safety and bioethics: capacity for risk assessment, Gene therapy, Genetically modified food and human health, Genetically modified crops and food security, The human genome project.	Professional ethics
2.	Gene variants and transgender identity, Sex determination	Gender
3.	Genetically Modified organisms, Biodiversity, Air quality and climate change, Efficient use of resources, Sustainable consumption patterns	Environment and sustainability


HOD

Department of Biotech.s.o.
Annasaheb Awate College, Man.




(Teacher Sign)

Rayat Shikshan Sanstha's
**Annasaheb Awate Arts, Commerce &
Hutatma Babu Genu Science College,**
Manchar, Tal- Ambegaon, Dist-Pune


Department Of Biotechnology

Name of The teacher- Prof. Ingole D.D

Subject- Biotechnology

Course /paper- Industrial Microbiology, Food Microbiology, Genetics,
Metabolism, Environmental Biotechnology, Applied biotechnology

Sr. No.	Course syllabus	Relevant cross cutting issues
1.	Microorganism isolation and identification, Fermentation technology, food and pharmacology, Genetically Modified organisms, Industrial application of microorganisms	Inclusion of Professional ethics in the curriculum . Inclusion of Right to health in the curriculum .
2.	Human rights, Gene variants and transgender identity, Sex determination, Genetically Modified organisms,	Inclusion of Human value in the curriculum . Inclusion of gender in the curriculum ,
3.	Pollution, Inviornment, Biodiversity, Air quality and climate change, Efficient use of resources, Sustainable consumption patterns, Pollution control	Inclusion of Environment and sustainability in the curriculum . Inclusion of Human value in the curriculum .


HOD
Department of Biotechnology
Annasaheb Awate College, Manchar



1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum
2022-23

Sr. No.	Subject	crosscutting issues (1. Professional Ethics, 2. Gender, 3. Human Values, 4. Environment and Sustainability)	Sub Point
1	T.Y. PV Solar System (Sem-IV)	Professional Ethics	-
			-
		Environment and Sustainability	Basics types of PV Systems On grid and off grid, DC to AC Conversion, Building-integrated Photovoltaic's, Engineering and Architecture, Balancing of PV system. System Components, Batteries, Charge Controllers, Inverters, Hybrid Systems, System Sizing, Applications of off grid PV System
2	M. Sc-II Energy Studies	Professional Ethics	
		Human Values	
		Environment and Sustainability	Types of energy storage systems: sensible and latent heat storage systems, Electric energy storage systems, Chemical energy storage



			systems, Heat exchanges, Hydrostorage, solar pond as a energy storage, Green house
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1.3.2 Number of courses that include experiential learning through project work/field work/internship during the year 2022-23

Program name	Program code	Name of the student studied course on experiential learning through project work/field work/internship
T.Y.B.Sc	PH359	Students Name
		Dolas Dipak Tukaram
		Gawade Vijay Kisan
		Lambhate Kedarnath Shivaji
		Mourya Rohit Chandrabhan
		Adhari Nilesh Dipak
		Chaskar Vrushali Ramesh
		Vani Aditya Dattatray
M.Sc. II	PHCT-245	Students Name
		Chaskar Sankalp. B.
		Deshmukh Omkar. D.
		Khokarale Pranali. J.
		Matade Vishal. D.
		Neharkar Abhishek. C.
		Padekar Amol. P.
		Padwal Gauri. K.



Name of Teacher :- Dr. Gardi B.P.

Subject :- Marathi (2021-22)

Course/ Paper name :- व्यावहारिक व उपयोजित मराठी G1 (v)


Sr.No.	Course Syllabus	Relevant Cross cutting issues
1	व्यावहारिक व उपयोजित मराठी : संवाद लेखन भाषिक कौशल्य लेखन कौशल्य भाषांतर	Personality Development Language Skill Professional Ethics Skill Enrichment

Course/ Paper name :- व्यावहारिक व उपयोजित मराठी G2 (v)

Sr.No.	Course Syllabus	Relevant Cross cutting issues
1	व्यावहारिक मराठी : भाषांतर सारांश प्रसार माध्यमासाठी लेखन कौशल्य	Personality Development Language Skill Professional Ethics Skill Enrichment
2	व्यावहारिक व उपयोजित मराठी : पत्र लेखन टिप्पणी लेखन अर्ज लेखन जनसंपर्क मुलाखत इतिवृत्त लेखन	Personality Development Language Skill Professional Ethics Skill Enrichment

Course/ Paper name :- नेमलेल्या साहित्य कृतींचा अभ्यास - साहित्यप्रकार

Sr.No.	Course Syllabus	Relevant Cross cutting issues
1	साहित्य प्रकार - स्त्री पुरुष तुलना माझा अमेरिका प्रवास दिवे गेलेले दिवस	Human Values


मराठी विभाग प्रमुख
अण्णासाहेब आवटे महाविद्यालय,
मंचर, पुणे.



Name Of The Teacher : **Muthe R.P.**

Subject : **Marathi (2021-22)**

Course/Paper Name : **मराठी साहित्य कथा आणि भाषिक कौशल्य विकास**

Sr.No.	Course/Syllabus	Relevant Cross Cutting Issues
1.	भाषिक कौशल्य : मराठी साहित्य प्रकार : कथा कथा साहित्य : संकल्पना, स्वरूप व वाटचाल कथेचे विशेष, कथेचे घटक कथा संग्रह : समकालीन मराठी कथा	Personality Development Language Skill Professional Ethics Skill Enrichment

Course/Paper Name : **उपयोजित मराठी (G3)**


Sr.No.	Course/Syllabus	Relevant Cross Cutting Issues
1.	मराठी भाषेचे समाजातील उपयोजन : भाषा आणि जीवन व्यवहार अर्ज लेखन नभोवाणी वृत्तपत्रे facebook, twiter	Personality Development Language Skill Professional Ethics Skill Enrichment

Course/Paper Name : **मध्ययुगीन मराठी वाङ्मयाचा स्थूल इतिहास (S2)**

Sr.No.	Course/Syllabus	Relevant Cross Cutting Issues
1.	वाङ्मयाचा इतिहास : यादवकाल व बहामनकाळ व साहित्य निर्मिती सर्व संप्रदाय व त्यांचे वाङ्मयीन कार्य	Personality Development Language Skill Professional Ethics Skill Enrichment

Course/Paper Name : **ग्रामीण साहित्य (M.A.)**

Sr.No.	Course/Syllabus	Relevant Cross Cutting Issues
1.	मराठीतील साहित्याची संकल्पनाव स्वरूप : ग्रामीण साहित्य : स्वरूप ग्रामीण साहित्यातील लेखक व त्यांचे साहित्य ग्रामीण साहित्याचे विशेष ग्रामीण वेगळेपण	Personality Development Language Skill Professional Ethics Skill Enrichment


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मंचर, पुणे.



Name Of The Teacher : **Mundhe G.D.**

Subject : **Marathi (2021-22)**

Course/Paper Name : **मराठी भाषिक संज्ञापन कौशल्य (MIL)**


Sr.No.	Course/Syllabus	Relevant Cross Cutting Issues
1.	भाषा आणि व्यक्तिमत्त्व विकास : लोकशाहीतील जीवन व्यवहार प्रसार माध्यमे मुद्रित शोधन संहितालेखन का व कसे करावे नभोवाणीसाठी संहितालेखन	Personality Development Language Skill Professional Ethics Skill Enrichment

Course/Paper Name : **भाषिक कौशल्याविकास आणि आधुनिक मराठी साहित्य प्रकार (G3)**

Sr.No.	Course/Syllabus	Relevant Cross Cutting Issues
1.	मराठी साहित्य प्रकार : कथा, कादंबरी, कविता, निबंध, प्रवासवर्णन प्रवासवर्णन : स्वरूप व विशेष तीन मुलांचे चार दिवस कविता : स्वरूप व विशेष रूप कवितेचे : मुल्यमापन व अस्वाद	Personality Development Language Skill Professional Ethics Skill Enrichment

Course/Paper Name : **प्रसार माध्यमांसाठी लेखन कौशल्य (M.A.)**

Sr.No.	Course/Syllabus	Relevant Cross Cutting Issues
1.	मुद्रित माध्यमांसाठी लेखन : प्रसार माध्यमे आणि भाषा व्यवहार नभोवाणी माध्यमासाठी लेखन दूरचित्रवाणी माध्यमांसाठी लेखन मुद्रित माध्यमांसाठी लेखन : महत्त्व व गरज	Personality Development Language Skill Professional Ethics Skill Enrichment


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अण्णासाहेब आवटे महाविद्यालय,
मंचर, पुणे.



Name Of The Teacher : Dr. Rupnar S.S.

Subject : Marathi (2021-22)

Course/Paper Name : भाषिक कौशल्याविकास आणि आधुनिक मराठी साहित्य प्रकार (G2)

Sr.No.	Course/Syllabus	Relevant Cross Cutting Issues
1.	मराठी साहित्य प्रकार : ललित गद्य ललित गद्य : संकल्पना, स्वरूप व वाटचाल ललित गद्य : लेखन कौशल्य साहित्यरंग : आकलन व मुल्यमापन साहित्यरंग : लेखांचे वाङ्मयीन विशेष	Personality Development Language Skill Professional Ethics Skill Enrichment

Course/Paper Name : व्यावहारिक व उपयोजित मराठी (G3)

Sr.No.	Course/Syllabus	Relevant Cross Cutting Issues
1.	मराठीचा व्यवहारातील उपयोग : सदरलेखन अग्रलेखन परिसंवाद चर्चासत्र गटचर्चा मराठीविषयक कार्य करणाऱ्या शासकीय संस्था परिचय	Personality Development Language Skill Professional Ethics Skill Enrichment

Course/Paper Name : लोकसाहित्याची मूलतत्वे आणि मराठी लोकसाहित्य (M.A.)

Sr.No.	Course/Syllabus	Relevant Cross Cutting Issues
1.	समाजातील लोकसाहित्य : लोकसाहित्य : संकल्पना, स्वरूप व व्याप्ती लोकसाहित्याचा अभ्यास लोकसाहित्याचे प्रकार लोकसाहित्य व लोकजीवन लोकसाहित्याची परंपरा लोककला व लोकसाहित्य यांचा सहसंबंध : पोतराज, वासुदेव, गोंधळी, वाघ्या मुरळी इत्यादी	Personality Development Language Skill Professional Ethics Skill Enrichment

मराठी विभाग प्रमुख
अण्णासाहेब आवटे महाविद्यालय,
मंचर, पुणे.



Rayat Shikshan Sanstha's
Annasaheb Awate College, Manchar

Cross Cutting Issues

The course Bachelor of Arts (English) incorporates issues related to human ethics, business ethics, issues related with gender sensitization, environmental awareness etc. It also deals with basic competency in communications among the people involved in the communication processes at various levels. It appeals to various spheres of life in order to sustain a healthy interaction among them which ultimately leads towards a healthy and interdependent relationship among the learners and the society as a whole.

Sr. No	Class	Subject	Chapters	Cross Cutting Issues
1.	F.Y.B.Com.	Compulsory English	Group Discussion, Interview Techniques Dialogue Writing, Presentation Skills, Types of Communication, mails	Development of initiative qualities, Leadership qualities, Abilities to work in group, depth of knowledge, Use of effective linguistic expressions, Development of the polite conversational skills in written format,
2	F.Y.B.Com.	Additional English	The World is Too Much With Us, Where The Mind is Without Fear...	Creating awareness of the importance of nature in human life, Patriotic and Nationalistic attitude towards the nation



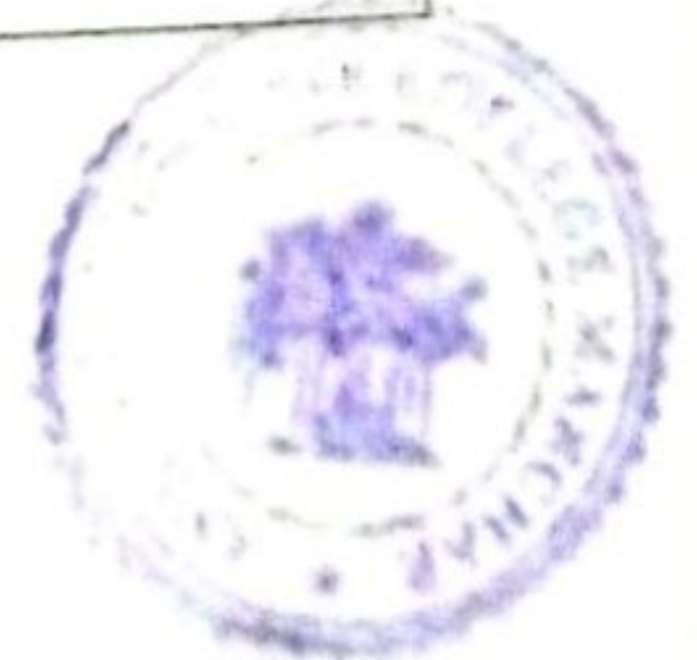
3	F.Y.B.A.	Comp.English	Grammar and Communication Skills	Linguistic competence, Use of grammar in day to day communication in real life situations Ability to analyse and interpret the things from different perspectives
4	F.Y.B.A.	Optional.English G-1	Grammar and Communication Skills	Linguistic competence, Use of grammar in day to day communication in real life situations Ability to analyse and interpret the things from different perspectives
5	F.Y.B.A.	Functional English -I	Remedial Grammar, Linguistic Levels of analysis	Linguistic competence, Linguistic performance, Enrichment of language skills
6	F.Y.B.A.	Functional English -II	Oral Communication, Story telling Personality Development	Linguistic competence, Linguistic performance, Enrichment of Spoken skills, Personality Development
7	S.Y.B.A.	Comp.English	Grammar and Vocabulary and Soft Skills	Use of grammar in day to day communication in real life situations Enrichment of Vocabulary for fluency in English language for basic communication purposes
8	S.Y.B.A.	Optional English G 2- Advanced Study of English Language	Phonology, Morphology, Syntax, Semantics, Pragmatics	Familiarization of students to the various components of language, Development of overall linguistic competence Enhancement of communicative skills through the advanced areas of language study
9	S.Y.B.A.	English S1-	Theory of Drama,	Enhancement of awareness in the aesthetics



		Appreciating Drama	Types of Drama, Elements of Drama,	of drama, Empowerment of students to evaluate drama independently, Interpretation and analysis of human ethics and values reflected in the prescribed texts and its implementation in the real life scenario
10	S.Y.B.A.	English S2- Appreciating Poetry	Theory of Poetry, Types of Poetry, Elements of Poetry, Selected Poetic Devices	Awareness in the aesthetics of poetry and empowerment of students to get aesthetic sense from the poems Inculcation of the abilities to appreciate and critically evaluate poetry independently
11	S.Y.B.A.	Functional English Paper III- Paper III: Advanced Writing Skills and Introduction to Electronic Media	Vocabulary, Basic sentence Structure, Introduction to creative writing, Letter Writing	Enhancement of students' ability to communicate in written mode, Awareness of change in language use as per the nature of Media, Empowerment of students to think and write creatively on their own
12	S.Y.B.A.	Functional English Paper IV Oral Communication in English: Intermediate & Key Competency Modules (Practical Paper)	Non-verbal communication, Formal and Informal situations, Reading Skills Anchoring the programme, Role playing, Debating	Building confidence for effective communication, Enhancement of learning through activities, Enrichment of overall communication abilities, Awareness of language etiquettes and manners



13	T.Y.B.A.	Comp. English	Prose and Poetry, Grammar, Writing Skills, Soft Skills and Employability Skills	Literary abilities to study excellent pieces of prose and poetry in English, Realization of the beauty and communicative power of English, Overall personality development, Installment of Humanitarian values and sympathetic attitude in students
14	T.Y.B.A.	Optional English G 3- Enhancing Employability Skills	Creative writing, Translation, Mass Communication and Journalism Academia and Other Careers English for Sales Services, English for Presentation Skills, Writing a Project, Report	Finding good career opportunities with career etiquettes, Enrichment of language skills for making livelihood along with the sense of humanistic and moral values Enhancement of skills required for placement
15	T.Y.B.A.	English S 3- Appreciating Novel	Theory of Novel, Types of Novel, Elements of Novel, Selected masterpieces of novel	Development of literary sensibility Sensitization of cultural diversity reflected in the study material, Inculcation of Socio- economic and political virtues in the real life situations as represented in the novels
16	T.Y.B.A.	English S 4- Introduction to Literary Criticism	Literary Criticism, Types of Criticism, Feminism, Qualities of a	Inculcation of interpretative, analytical and evaluative abilities Recognition of the significance of various critical approaches and terms Sensitization of gender issues and its critical appreciation in the texts from feministic



			good critic, Critical terms and Practical criticism	point of view Abilities to interpret and judge the texts within the context and its relevance outside the text in real life situations
17	T.Y.B.A.	Functional English Paper V- Introduction to Print Media and Writing for Mass Media & Key Competency Modules	Writing News, Letter Writing, Making of an Advertisement Book and Film Review Basic of Translation	Enhancement of Communicative abilities in written mode, Negotiations in both personal as well as professional situations of sale, lease, service delivery, and other legal contracts Encouragement of analytical abilities to observe language activities used in media
18	T.Y.B.A.	Functional English Paper VI- Entrepreneurship development, Project Report & Oral Communication in English: Advanced Practical Paper	Entrepreneurship development, SME and Start- Ups, Service Industry, Laws and Regulation, Voice Culture and Voice Modulation	Encouraging students for the financial development through self-employment, Promoting ethical and professional values among the stakeholders, Encouragement for the eco-friendly and need based researches among the learners



Rayat Shikshan Sanstha's
Annasaheb Awate College, Manchar,
Department of History (2021-22)

Cross Cutting Issues In Curriculum of History (BA)

Sr. No.	Class	Paper Name	Chapter No	Cross-Cutting Issues
1	FYBA	Sem-I Early India: From Prehistory to the Age of the Mauryas	Early India: Sources and Prehistory	Human value
		Sem II Early India: Post Mauryan Age to the Rashtrakutas	The Central Asian Contacts and Age of the Shung-Satvahanas	Human value
2	SYBA	Sem.III History of the Marathas(1630-1707)	Sources and Rise of the Maratha Power	Human Rights
		Sem. IV History of the Marathas(1707-1818)	Consolidation and Expansion of the Maratha Power	National Integration
3	TYBA	HISTORY OF THE WORLD IN 20TH CENTURY (1914-1992)	RISE OF DICTATORSHIP	Human Rights

[Signature]
 Head,
 Department of History
 Annasaheb Awate College, Manchar (Pune)



Rayat Shikshan Sanstha's
Annasaheb Awate College, Manchar,
Department of Economics (2021-22)

Cross Cutting Issues In Curriculum of Economics (BA & MA)

Sr. No.	Class	Paper Name	Chapter No	Sub-Point	Cross-Cutting Issues
1	FYBA	Indian Economic Environment	Sem. I Ch-02 Agricultural Environment Ch-03 Industrial Environment Sem. II Ch-03 Overview of Indian economy	1) Natural Resources, Energy Resources, Education, Health, Environment 2) Natural Resources, Energy Resources, Education, Health, Environment Challenges to Indian Agriculture 3) Water Management 1) Poverty, Employment, Inequality, Informal Sector	2) Social Human Value 3) Environment Sustainability and Awareness 1) Inequality
2	SYBA	Financial System	Sem. III Ch-01 Indian Financial System Ch-02 Banking in India 3) Ch-06 New Technology in Banking Sem. IV Cha. 1 Reserve Bank of India Cha. 2 Financial Regulators in India	1) Commercial Banks (Public Sector Banks, Private Sector Banks, Foreign Banks): Management, Organization and Functions. 2) Monetary Policy: Tools and their Limitations. 3) SEBI, IRDA: Role and Functions.	1) Professional Ethics-Bank 2) Financial Inclusion 3) Professional Ethics & Financial Inclusion Financial Regulators
		Micro Economics	Sem. III Ch-03 Theory of Demand Ch-04 Supply and Production Analysis	1) Utility, Demand, & Elasticity 2) Monopoly, Oligopoly 3) Social Welfare Function	1) Human Behavior 2) Professional Ethics 3) Human



			Sem. IV Ch-02 Market Structure Ch-4 Welfare Economics		Value (Socio- Economic Development)
3	TYBA	Public Finance	Sem. III Ch-02,03 & 04 Public Expenditure, Revenue & Debt Sem. IV Ch-02 Budget	1) Social Expenditure, Taxation & Deftness 2) Gender Budget	1) Governmental Social Ethics 2) Gender Empowerment
		International Economics	Sem. III Ch-02 Theories of International Trade Sem. IV Ch-04 Regional and International Co- operation	1) Smith, Ricardo, Heackscher-Ohlin Theory 2) World Bank, WTO, European Union Etc.	1) International Trade Ethics 2) Economic Integration & Social Value
4	MA I	Labour Econmics	Ch-02 Wage Determination Ch-04 Industrial Relations	1) Organized- Unorganized Sector 2) Social Security Measures	1) Organizational Skills 2) Gender Empowerment
5	MA II	Demography	Ch-03 Population structure and characteristics	1) Mortality 2) Fertility 3) Pattern of Age and Sex Structure	1) Human Social Value 2) Gender Empowerment
		Economics of Environment	Ch-01 Introduction Ch-02 Environmental Challenges	1) Economic Development and Environment 2) Environment and Agricultural Development 3) Global Environmental Issues	4) Sustainable Development 5) Environmental Ethics


Head,

Department of Economics




Principal

Amasaheb Awate Art's Commerce, &
Hutatma Babu Genu Science College,
Waranheri, Tal. Ambegaon, Dist. Pune

Rayat Shikshan Sanstha's
Annasaheb Awate College, Manchar, Pune
Department of B.Voc
Food Processing and Quality Management
Year 2021-22

Name of the Teacher: Prof. Suse S. N.

Subject: Human Nutrition

Course/paper: FG-13

Sr.No.	Name of topic	Course Syllabus	Relevant Cross Cutting Issues
1.	Topic 1: Nutrition agencies	Nutrition of community; Nutritional policies and their implementation; Metabolic function of nutrients	Professional ethics
3.	Topic 2: Nutrients	Sources, functions, digestion, absorption, assimilation and transport of carbohydrates, proteins and fats in human beings;	Professional ethics

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Department of B.Voc
Food Processing and Quality Management
Year 2021-22

Name of the Teacher: Prof. Veer S. J.

Subject: Snack Food Processing

Course/paper: FG-33

Sr.No.	Name of topic	Course Syllabus	Relevant Cross Cutting Issues
1.	Topic 1: Various types of snack food Technology for grain-based snacks	:whole grains – roasted, toasted, puffed, popped and flakes, coated grains-salted, spiced and sweetened	Skill enrichment ethics



2.	Topic 2: Technology for fruit and vegetable based snacks	Technology for fruit and vegetable based snacks Chips, wafers. Technology for coated nuts – salted, spiced and sweetened; chikkis.	Skill enrichment ethics
3.	Topic 3: Equipments	Equipments for frying, Baking and drying, toasting, roasting and flaking, popping, blending, Coating and chipping.	Skill enrichment ethics

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Department of B.Voc
Food Processing and Quality Management
Year 2021-22

Name of the Teacher: Prof. Veer S. J.

Subject: Snack Food Technology

Course/paper: FG-53

Sr.No.	Name of topic	Course Syllabus	Relevant Cross Cutting Issues
1.	Topic 1: Various types of snack food Technology for grain-based snacks	:whole grains – roasted, toasted, puffed, popped and flakes, coated grains-salted, spiced and sweetened	Skill enrichment ethics
2.	Topic 2: Technology for fruit and vegetable based snacks Technology for fruit and	Chips, wafers. Technology for coated nuts – salted, spiced and sweetened; chikkis.	Skill enrichment ethics



	vegetable based snacks		
3.	Topic 3: Equipments	Equipments for frying, Baking and drying, toasting, roasting and flaking, popping, blending, Coating and chipping.	Skill enrichment ethics

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Annasaheb Awate College, Manchar, Pune
Department of B.Voc
Food Processing and Quality Management
Year 2021-22

Name of the Teacher: Prof. Patil Karuna Wasudeo

Subject: Bakery and Confectionery

Course/paper: FSC - 32

Sr .N o.	Name of Topic	Course Syllabus	Relevant Cross Cutting Issues
1.	Topic 1: Types of confectionery	Classification of confectionery product. Types of flour, Ingredients used in bakery and confectionary products and its role.	Skill enrichment ethics
2.	Topic 2: Technology for the manufacture of bakery products	Detailed description of unit operations for the manufacturing of bread, biscuits, cakes and the effect of variations in formulation.	Skill enrichment ethics



3.	Topic 3: Equipment used in bakery and confectionary industry	Construction and working of various equipment's like Mixers, proofing chambers, dough dividers, molder and sheeter, baking ovens, cooling chamber, sealing .	Skill enrichment ethics
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Rayat Shikshan Sanstha's
Annasaheb Awate College, Manchar, Pune
Department of B.Voc
Food Processing and Quality Management
Year 2021-22

Name of the Teacher: Prof. Patil Karuna Wasudeo

Subject: Fundamentals of food science

Course/paper: FG-12

Sr.No.	Name of Topic	Course Syllabus	Relevant Cross Cutting Issues
1.	Topic 1: Introduction of food science	Definition and concepts of food science Objectives of food science Introduction of laboratory rules and equipment's	Professional ethics
2.	Topic 2: Food preservation	Introduction, definition, principles of food preservation	Professional ethics



3.	Topic 3: Effect of processing on nutritional value of food	Changes during processing; Methods for nutrient preservation	Professional ethics
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Annasaheb Awate College, Manchar, Pune
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Food Processing and Quality Management
Year 2021-22

Name of the Teacher: Prof. Patil Karuna Wasudeo

Subject: Beverages Technology

Course/paper: FSC-52

Sr.No.	Name of Topic	Course Syllabus	Relevant Cross Cutting Issues
1.	Topic 1: History, importance of beverages	status of beverage industry in India Types of beverages Manufacturing technology for juice-based beverages;	Skill enrichment ethics
3.	Topic 2: Alcoholic beverages, Technology of brewing	- types, manufacture and quality evaluation; the role of yeast in beer and other alcoholic beverages, ale type beer, lager type beer, process, wine and related beverages, distilled spirits.	Skill enrichment ethics



Rayat Shikshan Sanstha's
Annasaheb Awate College, Manchar, Pune
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Food Processing and Quality Management
Year 2021-22

Name of the Teacher: Prof. Ingole D. D.

Subject: Food Microbiology

Course/paper: FSC-12

Sr.No.	Name of Topic	Course Syllabus	Relevant Cross Cutting Issues
1.	Topic 1: Introduction of microbiology	History and significance of food microbiology. • Metabolism of microbes. • Sources of microorganisms.;	Professional ethics
3.	Topic 2: Contamination, Spoilage and Prevention	Cereal and cereal products • Sugar and sugar products • Canned food Contamination, spoilage and prevention of meat, fish and poultry products, fruits and vegetables, milk and milk products.	Professional ethics
3.	Topic 3: Food poisoning	Food contamination and public health • Food poisoning and food borne diseases.	Professional ethics
4.	Topic 4: Inactivation of microorganisms	Thermal inactivation of microbes: pasteurization, sterilization etc. • Concept of TDT, F, Z and D values. Factors affecting heat resistance. • Antimicrobial agents: mechanism and action	



Rayat Shikshan Sanstha's
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Food Processing and Quality Management
Year 2021-22

Name of the Teacher: Prof. Ingole D. D.

Subject: Food Microbiology

Course/paper: FSC-12

Sr.No.	Name of Topic	Course Syllabus	Relevant Cross Cutting Issues
1.	Topic 1: Introduction	History of industrial microbiology, Primary and secondary metabolites produced by the microorganisms, Screening of microorganisms •Preservation of microorganisms; Organizations involved in microbiological work	Professional ethics
3.	Topic 2: Fermentation Process	Fermentation media, Industrial sterilization; Fermentor: Components of a fermentor, parts of fermentors, Types of fermentor	Professional ethics
3.	Topic 3: Beverages	Alcoholic beverages: types, production and quality; Types of fermentations processes	Professional ethics
4.	Topic 4: Microbial By-products	Microbial cell products i.e. Mushroom, SCP, Baker's yeast, blue green algae and sprulina Oriental and traditional fermented foods; Measures to improve yield of fermented products•	Professional ethics


Head

Dept. of B. Voc
(Food Processing & Quality Management)
Annasaheb Awate College, Manchar





Principal


Annasaheb Awate College,
Manchar, Dist.Pune

Rayat Shikshan Sanstha's
Annasaheb Awate College ,Manchar
Department of Physical Education & Sports
2021-2022
Cross Cutting Issues

Sr .No	Class & Subject	Cross Cutting Issues
1	All Branches F.Y Students G-1- Physical Education	Development of motor abilities like strength, speed, endurance, coordination, flexibility, agility and balance as they are important aspects for good performance in different games and sports.
		Development of the techniques and tactics involved in organised physical activities, games and sports.
		development of leadership and followership qualities and team spirit through participation in games and sports.
		Development of the positive health related fitness habits which can be practised lifelong so as to prevent degenerative diseases.
		Develop/Increase knowledge about various Sports/Games
		Personality Development


शारिरीक शिक्षण संचालक
अण्णासाहेब आवटे कॉलेज, मंवर




Principal
Annasaheb Awate Art's Commerce, &
Hutatma Babu Genu Science College,
Manchar, Tal. Ambegaon, Dist. Pune

Rayat Shikshan Sanstha's
Annasaheb Awate Arts, Commerce & Hutatma Babu Genu Science College,
Manchar, Tal-Ambegaon, Dist.-Pune

Department of Chemistry
List of Cross Cutting Issues (2021-22)

Sr. No.	Course Syllabus	Relevant Cross Cutting Issues
1	Cyber Security Module 1: Pre-requisites in Information and Network Security Module 2: Security Management Module 3: Information and Network Security Module 4: System and Application Security	Professional Ethics
2	Introduction to Human Rights and Duties Module 1: Basic Concept Module 2: Perspectives of Rights and Duties Module 3: Introduction to Terminology of Various Legal Instruments Module 4: United Nations & Human Rights	Human Rights


Head

Department of Chemistry
A A College, Manchar,
Tal. Ambegaon Dist Pune



Rayat Shikshan Sanstha's
Annasaheb Awate College, Manchar
Department of Botany
Cross Cutting issue of Syllabus Academic Year 2021-22

Human Values
Environmental Sustainability Curriculum.

1. Prof. Dr. Bolbhat. S . N. – F.Y.B. Sc. and S.Y.B. Sc.
2. Prof. Kumawat . V . S . – T.Y.B. Sc.
3. Dr. Admuthe. N , B . – M. Sc. I and M. Sc. II

Sr. No.	Course	Syllabus
1	F. Y. B.Sc. and S.Y.B. Sc.	Plant and food supply for human
2	T. Y. B. Sc. and M.Sc.	Biodiversity Conservation Medicinal botany and Human health Plant Breeding and Seed Technology



Admuthe
15/11/2021
for Head
Dept. of Botany
A. A. College, Manchar

Received
[Signature]
15/11/2021