T. Y. B. A. Generic Elective Humanities

1. Digital Literacy

1.1 What is Digital Literacy?

1.2 What is role of Digital literacy in professional life?

1.3 Trends and opportunities in using digital technology in workplace

2. Social Innovation

2.1 What is Social Innovation?

2.2 How to identify social problem?

2.3 Civic Action and Innovation

3. Social (Graduate)Entrepreneurship and Start Up

3.1 What is Social Entrepreneurship: Concept and Functions

3.2 What is impact of policies and programmes pertaining to enterprising activities?

3.3 What is Start Up?

3.4 How to conduct field survey for understanding society/ market?

3.5 How to prepare business plan and raising funding for project?

4. Civic Education

4.1 What are Fundamental Rights and Duties of Indian Citizens?

4.2 What is Social Justice?

4.3 What are the marginal sections within the Indian Society?

4.4 Role of Panchayat System

5. Digital Literacy:

5.1 Internet Basics and Introduction to MS Office tools:

i. Paint

ii. Office

iii. Excel

iv. PowerPoint

6. Understanding the marginal sections within the society: (<u>Any 2 out of 3</u>)

6.1. Visiting Slum Area around your locality.

6.2. Write a field work report narrating the problems faced by the people living in the locality.

6.3. Identify the specific government department concerning with the any specific problem e.g., Sanitation, Electricity, Public Food Distribution and visit the government authority to convey the problems.

7. Graduate Entrepreneurship and Start Up:

7.1. Visit the Centre for Innovation, Incubation and Linkage center in Savitribai Phule Pune University.

7.2. Write a detailed report explaining the innovation activities suitable for your residential area or any specific social problem in consultation of course teacher.

8. Your Responsibilities and Rights

A. Understanding Law Enforcement Agencies:

1. Identify the law enforcing authorities you came across in your everyday life.
2. Describe how these authorities work to implement the laws.
3. What are the responsibilities of individual citizens towards government authorities to cooperate with these agencies?
4. What are citizen's rights protected by the constitution of India?

OR

B. Understanding Social Inclusion and Discrimination:

1. What are the Public and Private spaces in your residential locality?
2. Are these places accessible to all individuals without discrimination?
3. Note down your observation and discuss in the class.

OR

C. Understanding Social Occupation:

1. Conduct a survey of your locality to understand the social occupation of the residents.
2. Interview any particular individual or group of individual to understand nature of their work.
3. Observe what are the factors affecting the occupation of people and opportunities available to them.
4. Discuss your observation in the class under the guidance of teacher.

सावित्रीबाई फुले पुणे विद्यापीठ, पुणे

मराठी विषयाचा पुनर्रचित अभ्यासक्रम - जून २०२१ पासून

तृतीय वर्ष कला (T.Y.B.A.) मराठी

निवड आधारित श्रेयांक पद्धत

Choice Based Credit System [CBCS]

सत्र	विषयाचे नाव	संकेतांक	पूर्वीचे नाव
पहिले	भाषिक कौशल्यविकास आणि आधुनिक मराठी साहित्यप्रकार : प्रवासवर्णन	[CC – 1 E (3)]	नियमित अभ्यासक्रम G3
दुसरे	भाषिक कौशल्यविकास आणि आधुनिक मराठी साहित्यप्रकार : कविता	[CC – 1 F (3)]	
पहिले	व्यावहारिक व उपयोजित मराठी : भाग ५	[CC – 1 E (3)]	पर्यायी अभ्यासक्रम G3
दुसरे	व्यावहारिक व उपयोजित मराठी : भाग ६	[CC – 1 F (3)]	
पहिले	मध्ययुगीन मराठी वाङ्मयाचा स्थूल इतिहास : प्रारंभ ते इ.स. १६००	[DSE 1 C (3+1)]	S3
दुसरे	मध्ययुगीन मराठी वाङ्मयाचा स्थूल इतिहास : इ.स. १६०१ ते इ.स. १८१७	[DSE 1 D (3+1)]	
पहिले	वर्णनात्मक भाषाविज्ञान : भाग १	[DSE 2 C (3)+1]	S4
दुसरे	वर्णनात्मक भाषाविज्ञान : भाग २	[DSE 2 D (3)+1]	
पहिले	कार्यक्रम संयोजनातील भाषिक कौशल्ये : भाग १	[SEC 2 C (2)]	DSE विषयांशी निगडीत अनिवार्य
दुसरे	कार्यक्रम संयोजनातील भाषिक कौशल्ये : भाग २	[SEC 2 D (2)]	

तृतीय वर्ष कला (T. Y. B. A.)

नियमित अभ्यासक्रम

पहिले सत्र

विषयाचे नाव

वर्णनात्मक भाषाविज्ञान : भाग १ [DSE 2 C (3)+1]

अभ्यासक्रमाची उद्दिष्टे :

१ भाषा स्वरूप, वैशिष्ट्ये व कार्ये समजावून घेणे.
२ भाषा अभ्यासाची आवश्यकता स्पष्ट करणे.
३ भाषा अभ्यासाच्या शाखा आणि विविध पद्धतींचा थोडक्यात परिचय करून घेणे.
४ वागिन्द्रियाची रचना, कार्य आणि स्वननिर्मितीची प्रक्रिया समजावून घेणे.
५ स्वनविज्ञान, स्वनिमविचार आणि मराठीची स्वनिमव्यवस्था समजावून घेणे.

घटक	तपशील	श्रेयांक	तासिका
१	**भाषा : स्वरूप व संकल्पना** १ भाषा : स्वरूप, वैशिष्ट्ये व कार्ये २ संदेशन : मानव व मानवेतर संदेशन ३ भाषाभ्यासाच्या शाखा (ध्वनिविचार – व्याकरणविचार – अर्थविचार – शब्दसंग्रह - स्थूल परिचय) ४ भाषेच्या अभ्यासाचे महत्त्व व भाषाभ्यासाच्या पद्धती (ऐतिहासिक,वर्णनात्मक, सामाजिक, तुलनात्मक – स्थूल परिचय)	१	१५
२	**स्वनविचार** १ स्वनविज्ञान : स्वरूप व संकल्पना (उच्चारणकेंद्री - संचारणकेंद्री – श्रवणकेंद्री) २ वागिन्द्रीय : रचना व कार्य स्वनांची निर्मितिप्रक्रिया ३ स्वनांचे वर्गीकरण व वर्गीकरणाची तत्त्वे (उच्चारण स्थान, उच्चारण अवयव, प्रयत्न)	१	१५
३	**स्वनिमविचार** १ स्वन -स्वनिम-स्वनांतर (परस्पर संबंध व प्रकार) २ स्वनिमनिश्चितीची तत्त्वे ३ विनियोग संकल्पना (व्यवच्छेदक विनियोग- पूरक विनियोग - मुक्त परिवर्तन) मराठीची स्वनिमव्यवस्था (स्वरस्वनिम - अर्धस्वरस्वनिम - व्यंजन स्वनिम – खंडित व खंडाधिष्ठीत स्वनिम -बलाघात, सुरावली – नासिक्यरंजन - सीमासंधी)	१	१५
४	संशोधनपर प्रकल्प / क्षेत्रकार्य (घटक १, २ आणि ३)	१	१५

दुसरे सत्र

विषयाचे नाव

वर्णनात्मक भाषाविज्ञान : भाग २ - ४ [DSE 2 D (3)+1]

अभ्यासक्रमाची उद्दिष्टे :

१. रूपविन्यास आणि मराठीची रूपव्यवस्था समजावून घेणे
२. वाक्यविन्यास आणि वाक्यव्यवस्थेचा मराठी भाषेच्यासंदर्भात परिचय करून देणे
३. अर्थविन्यास या संकल्पनेचा भाषावैज्ञानिक अंगाने परिचय करून देणे

घटक	तपशील	श्रेयांक	तासिका
१	**रुपिमविचार** १ रूपविन्यास (संकल्पना) २ रूपिका - रुपिम – रुपिकांतर : स्वरूप व प्रकार ३ रूपिम निश्चितीची तत्त्वे ४ विनियोग संकल्पना ५ प्रकृती आणि प्रत्यय यांचे वर्गीकरण	१	१५
२	**वाक्यविचार** १ वाक्यविन्यास (संकल्पना परिचय) २ घटक आणि रचना : परस्पर संबंध ३ वाक्याचे घटक (उद्देश्य, विधेय) ४ प्रथमोपस्थित संघटक संकल्पना व वाक्यविश्लेषण (शब्द – शब्दबंध – उपवाक्य – वाक्य) ५ वाक्यांचे प्रकार	१	१५
३	**अर्थविचार** १ अर्थ : स्वरूप व संकल्पना २ अर्थविन्यास (संकल्पना परिचय) ३ अर्थाचे वर्गीकरण (प्रकार: सांकल्पनिक अर्थ - साहचर्यपर अर्थ- शैलीगत अर्थ- भावपर अर्थ- परावर्तीत अर्थ - विषय अर्थ) ४ अर्थविन्यासाची व्यापकता (समानार्थी शब्द, अनेकार्थी शब्द – सरूपता – अर्थसमावेश – अर्थविरोध)	१	१५
४	संशोधनपर प्रकल्प / क्षेत्रकार्य (घटक १, २ आणि ३)	१	१५

SAVITRIBAI PHULE PUNE UNIVERSITY

(Formerly University of Pune)

T.Y.B.A. Economics Syllabus

(Choice Based Credit System and Semester System)

Revised Syllabus will be implemented with effect from the academic year 2021-2022

T.Y.B.A. Economics

(Sem V & VI)

Semester	Paper Name	Subject Code	Title of the Paper
V	Economics General - III		Indian Economic Development- I
	Economics Special - III		International Economics-I
	Economics Special - IV		Public Finance- I
	Skill Enhancement Course (SEC-3A)		Business Management- I
VI	Economics General - III		Indian Economic Development- II
	Economics Special - III		International Economics- II
	Economics Special - IV		Public Finance- II
	Skill Enhancement Course (SEC-3A)		Business Management- II (Project Report)

T.Y.B.A. Economics
Skill Enhancement Course
SEC-3A: Business Management-II (Project Report)
(Course Code:)
Semester – VI

Course Learning Outcomes:
At the end of the Course, the Learner will have the following skills:

- Analytical Skills – Ability to analyze data collected and interpret in the most logical manner
- Project Report Writing Skills- Ability to comprehend and illustrate/demonstrate findings
- Presentation Skills – PPT/Poster- Ability to illustrate findings in the most appealing manner
- Leadership Skills: Ability to show leadership skills with business ideas or work on business ventures as a practical example

Unit No.	Name and Sub Titles of the Topic	No. of Lectures	Skill Enhancement Exercises
1	**Case Study** Guest Lecture – Local Entrepreneur – Success Stories / Struggles/ Historical Reviews/ Start-ups, etc	2	Preview to Students for Project Report
2	**Project Interim Presentation** Detailed Study of ANY Business Enterprise under the Guidance of Subject Teacher OR Presentation of a Business Idea	14	Initial Mid Semester Presentation (15 marks)
3	**Project Final Presentation** Presentation with PPT or Poster or Exhibition of Business Ideas/ Reports	14	Final Presentation Viva (35 Marks) Int. Examiner - 10 Ext. Examiner - 10 Report- 15

Recommended Books

1. Stephen R. Covey, The 7 Habits of Highly effective People (1989), Guerilla Marketing.
2. Harvard Business Review, Management Tips, hbr.org/books.
3. Pandey, I.M. Financial Management, Persons 12th Edn.
4. Saksena, S.C., Principles of Business Management (2019), Sahitya Bhawan Publi.Agra.
5. Kalkar Parag and Ajinath Doke, Vyavsay Vyavsthapan, Nirali Prakashan, Pune.
6. Vasistha, Neeru, Principles of Management, Taxmann.
7. Hannagan, Tim. Management Concepts and Practices, Macmillan India Ltd.
8. Government of India, Official Websites.

Savitribai Phule Pune University, Pune

Faculty of Humanities

T.Y.B.A. in History

Choice Based Credit System Syllabus

To be implemented from the Academic Year 2021-2022

Savitribai Phule Pune University, Pune.

Faculty of Humanities

Structure of Choice Based Credit System for Undergraduate Program to be Implemented from Academic Year 2021-2022

Subject: - T.Y.B.A. History Structure Academic Year 2021-2022

Semester	Core Courses (CC)	Skill Enhancement Course (SEC)	Discipline Specific Elective Courses (DSE)
V	**CC- 3(3)** Indian National Movement (1885-1947) History of Civilization – World Civilization Part I	**SEC 2 C (2)** 9.South Indian Art and Architecture 10.Research Paper Writing 11.Museology	**DSE-3 C** (3) +1 7.Introduction to Historiography **DSE-4 D** (3)+1 8.Maharashtra in the 19th Century **OR** 9.Constitutional Developments in India 1773 to 1853
VI	**CC- 4(3)** India After Independence- (1947-1991) History of Civilization –World Civilization Part II	**SEC 2 D (2)** 12. Heritage management 13.Archaeology 14.Numismatics	**DSE-3 C (3)+1** 10 Applied History **DSE-4 D (3)+1** 11 Maharashtra in the 20th Century OR Constitutional Developments in India1858 to 1950

Savitribai Phule Pune University, Pune
Proposed Syllabus in History for TYBA (Credit system)
From the Academic Year 2021-22
Under the Faculty of Humanities
Discipline Specific Elective Courses (DSE-3C) -(3 + 1 Credit)

Semester –VI, Course Title: Applied History

Course objectives:

1) To Introduce students to information and importance of Applied History.

2) To help students understand the usefulness of history in the 21st century, its changing perspectives, the new ideas that have been invented, and the importance of History in a Competitive World.

3) To inform the students about the historical significance of Archaeology and Archives and the opportunities in the field of Archaeology and Archives through this course.

4) To inform the students about the opportunities in the field of Media, Museums through this Course.

Course Outcomes:

1. Students will be introduced to the information and importance of applied history.
2. Student will learn about the Historical significance of Archaeology and Archives and opportunities in the field of Archaeology and Archives.
3. Through this course, students will be informed about the opportunities in the field of Media, Museums.
4. Students will learn about the usefulness of history in the 21st Century, its changing Perspectives, the new ideas that have been invented, and the importance of History in a Competitive World.

Pedagogy: Lectures / Visual Presentation / Critical Analysis / Assignments / Test/ e-learning

Course Content

Unit-I. Applied History 14

a. Applied History: Concept and Application
b. Application of History in Various Subjects
c. Co-relationship between Past and Present
d. Contemporary History: Meaning and Nature

Unit-II. Archaeology and Archives 15

a) Archaeology and Archives: Definition and Development in India

b) Archival Sources: Ancient, Medieval and Modern- A brief survey

c) Heritage Sites: Types, Preservation and Conservation

d) Historical Importance of Heritage Sites and Museums

Unit-III. Mass Media and Applied History 16

a) Mass Media: Meaning and Types

b) Print media:

i). Establishment and growth of printing press in India

ii). Newspaper: Definition, Rise, Newspaper in India - A brief survey

c) Electronic media: Radio, Television, E-media.

Unit-IV: Project Work /Study Tour Report/Historical Places Visit Rreport

Project work and Evaluation scheme

1. Candidate shall submit Project report of minimum 2000 words i.e.10 to12 pages (Should be DTP) to the department by end of the Semester.
2. A viva-voce should be conducted before theory examination and the results should be sent to the University as immediately
3. The Distribution of Marks – For Report Writing 20 Marks and for Vice-Voce 10 Marks

Reference Books

English

1) Bajaj Satish K, Research Methodology in History, Amol Pub Pvt.Ltd, New Delhi.

2) Bobade Bhajang R., Manuscriptology from Indian Sources, Pacific Publication, Delhi.

3) Carr E.H., What is History, Penguin Books, Harmondsworth, 1971.

4) Chitnis K.N., Research Methodology in History, Navi Path, Pune1979.

5) Collingwood R.G., The Idea of History, Oxford university,1961.

6) Datta.K.B., Mass Media in India, Akansha Publishing House, New Delhi,2005.

7) Director General, Archaeological Remains, Monuments and Museums Part1&2, Archaeological Survey of India, New Delhi, 1964.

8) Gaur.M. M., Electronic Media, Omega Publication, Delhi, 2006.

Syllabus for

Ability Enhancement Compulsory Course (AECC – Environment Studies)(2 credit) for under graduate

(For All Faculties - Second Year - Semester III)

It is as per UGC guidelines and framing -

Unit 1 : Introduction to environmental studies

- Multidisciplinary nature of environmental studies;
- Scope and importance; Concept of sustainability and sustainable development.

(2 lectures)

Unit 2 : Ecosystems

- What is an ecosystem? Structure and function of ecosystem ; Energy flow in an ecosystem : food chains, food webs and ecological succession. Case studies of the following ecosystems :

a) Forest ecosystem
b) Grassland ecosystem
c) Desert ecosystem
d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

(8 lectures)

Unit 3 : Natural Resources : Renewable and Non-renewable Resources

- Land resources and landuse change; Land degradation, soil erosion and desertification.
- Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.
- Water : Use and over-exploitation of surface and ground water, floods, droughts conflicts over water (international & inter-state).
- Energy resources : Renewable and non renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

(10 lectures)

Unit 4 : Biodiversity and Conservation

- Levels of biological diversity : genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots
- India as a mega-biodiversity nation; Endangered and endemic species of India
- Threats to biodiversity : Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity : In-situ and Ex-situ conservation of biodiversity.
- Ecosystem and biodiversity services : Ecological, economic, social, ethical, aesthetic and Informational value.

(10 lectures)

References :

1. Carson, R. 2002. Silent Spring. Houghton Mifflin Harcourt.
2. Gadgil, M., & Guha, R. 1993. This Fissured Land: An Ecological History of India. Univ. of California Press.

3. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.

4. Gleick, P. H. 1993. Water in Crisis. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press.

5. Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. Principles of Conservation Biology. Sunderland: Sinauer Associates, 2006.

6. Grumbine, R. Edward, and Pandit, M.K. 2013. Threats from India's Himalaya dams. Science, 339 : 36-37.

7. McCully, P. 1996. Rivers no more: the environmental effects of dams (pp. 29-64). Zed Books.

8. McNeill, John R. 2000. Something New Under the Sun: An Environmental History of the Twentieth Century.

9. Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia: Saunders.

10. Pepper, I.L., Gerba, C.P. & Brusseau, M.L. 2011. Environmental and Pollution Science. Academic Press.

11. Rao, M.N. & Datta, A.K. 1987. Waste Water Treatment. Oxford and IBH Publishing Co. Pvt. Ltd.

12. Raven, P.H., Hassenzahl, D.M. & Berg, L.R. 2012. Environment. 8th edition. John Wiley & Sons.

13. Rosencranz, A., Divan, S., & Noble, M.L. 2001. Environmental law and policy in India. Tripathi 1992.

14. Sengupta, R. 2003. Ecology and economics : An approach to sustainable development. OUP.

15. Singh, J.S., Singh, S.P. and Gupta, S.R. 2014. Ecology, Environmental Science and Conservation. S. Chand Publishing, New Delhi.

16. Sodhi, N.S., Gibson, L. & Raven, P.H. (eds). 2013. Conservation Biology : Voices from the Tropics. John Wiley & Sons.

17. Thapar, V. 1998. Land of the Tiger: A Natural History of the Indian Subcontinent.

18. Warren, C. E. 1971. Biology and Water Pollution Control. WB Saunders.

19. Wilson, E. O. 2006. The Creation: An appeal to save life on earth. New York : Norton.

20. World Commission on Environment and Development. 1987. Our Common Future. Oxford University Press.

Syllabus for

Ability Enhancement Compulsory Course (AECC – Environment Studies)(2 credit) for under graduate

(For All Faculties - Second Year - Semester IV)

It is as per UGC guidelines and framing -

Unit 5 : Environmental Pollution

- Environmental pollution : types, causes, effects and controls; Air, water, soil and noise pollution
- Nuclear hazards and human health risks
- Solid waste management : Control measures of urban and industrial waste.
- Pollution case studies.

(10 lectures)

Unit 6 : Environmental Policies & Practices

- Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture
- Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act;

  Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).
- Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

(9 lectures)

Unit 7 : Human Communities and the Environment

- Human population growth: Impacts on environment, human health and welfare.
- Resettlement and rehabilitation of project affected persons; case studies.
- Disaster management : floods, earthquake, cyclones and landslides.
- Environmental movements : Chipko, Silent valley, Bishnois of Rajasthan.
- Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.
- Environmental communication and public awareness, case studies (e.g. CNG vehicles in Delhi).

(6 lectures)

Unit 8 : Field work

- Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc.

- Visit to a local polluted site-Urban/Rural/Industrial/Agricultural.
- Study of common plants, insects, birds and basic principles of identification.
- Study of simple ecosystems-pond, river, Delhi Ridge, etc.

(Equal to 5 lectures)

References :

1. Carson, R. 2002. Silent Spring. Houghton Mifflin Harcourt.

2. Gadgil, M., & Guha, R. 1993. This Fissured Land: An Ecological History of India. Univ. of California Press.

3. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.

4. Gleick, P. H. 1993. Water in Crisis. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press.

5. Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. Principles of Conservation Biology. Sunderland: Sinauer Associates, 2006.

6. Grumbine, R. Edward, and Pandit, M.K. 2013. Threats from India's Himalaya dams. Science, 339 : 36-37.

7. McCully, P. 1996. Rivers no more: the environmental effects of dams (pp. 29-64). Zed Books.

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सावित्रीबाई फुले पुणे विद्यापीठ, पुणे

प्रथम वर्ष वाणिज्य (मराठी)

F. Y. B. Com. (मराठी)

मराठी विषयाचा पुनर्रचित अभ्यासक्रम- जून २०१९ पासून

निवड आधारित श्रेयांक पद्धत

Choice Based Credit System [CBCS]

सत्र	विषयाचे नाव
पहिले	भाषा, साहित्य आणि कौशल्यविकास [११७] (Ability Enhancement Course)
दुसरे	भाषा आणि कौशल्यविकास [११७] (Ability Enhancement Course)

पहिले सत्र

विषयाचे नाव – भाषा, साहित्य आणि कौशल्यविकास [११७]

(Ability Enhancement Course)

अभ्यासक्रमाची उद्दिष्टे -

१. विविध क्षेत्रातील भाषा व्यवहाराचे स्वरूप व गरज समजावून देणे.

२. या व्यवहार क्षेत्रातील मराठी भाषेचे स्थान स्पष्ट करणे व त्यातील मराठीच्या प्रत्यक्ष वापराचा अभ्यास करणे.

३. विविध क्षेत्रीय मराठी भाषेच्या वापराची कौशल्ये विकसित करणे.

४. विविध लेखनप्रकारांचा अभ्यास व प्रत्यक्ष लेखनाची कौशल्ये वापरण्यास सक्षम करणे.

५. विविध क्षेत्रातील कर्तृत्ववान व्यक्तींच्या कार्याची व विचारांची ओळख करून देणे.

६. विद्यार्थ्यांमध्ये नैतिक, व्यावसायिक व वैचारिक मूल्यांची जोपासना करणे.

घटक	तपशील	श्रेयांक	तासिका
१	निबंध लेखन- वैचारिक, ललित आणि वाणिज्य विषयक	१	१५
२	अभ्यासपुस्तक : **उत्कर्षवाटा** शब्दालय प्रकाशन, श्रीरामपूर संपादक : प्रा. डॉ. शिरीष लांडगे, प्रा. डॉ. तुकाराम रोंगटे, प्रा. डॉ. राजेंद्र सांगळे	२	३०

दुसरे सत्र

विषयाचे नाव – भाषा आणि कौशल्यविकास [११७]

(Ability Enhancement Course)

घटक	तपशील	श्रेयांक	तासिका
१	**अर्जलेखन व पत्रलेखन :** १. अर्जलेखन : अर्जांचे विविध नमुने - विनंती अर्ज, नोकरीसाठी अर्ज, माहितीच्या अधिकारातील अर्ज, संगणकीय अर्जलेखन– युनिकोडमधून मायक्रोसॉफ्ट वर्डमध्ये अर्ज. २. पत्रलेखन : खासगी पत्रव्यवहार, प्रशासनिक पत्रव्यवहार, व्यावसायिक पत्रव्यवहार, इ-मेल.	१	१५
२	**प्रशासनिक मराठी** : १. इतिवृत्त लेखन २. माहितीपत्रक ३. जाहीर निवेदन ४. वाणिज्य व माहिती तंत्रज्ञानविषयक पारिभाषिक संज्ञा	१	१५
३	**प्रगत भाषिक कौशल्ये** : १. सारांशलेखन २. भाषांतर- (इंग्लिश - मराठी) **जाहिरातलेखन** : १. आकाशवाणी २. वृत्तपत्र ३. दूरचित्रवाणी	१	१५

संदर्भ ग्रंथ -

१. व्यावहारिक मराठी - पुणे विद्यापीठ प्रकाशन.

२. व्यावहारिक मराठी - डॉ. कल्याण काळे, डॉ. दत्तात्रय पुंडे, निराली प्रकाशन, पुणे.

३. व्यावहारिक मराठी - संपा. डॉ. स्नेहल तावरे, स्नेहवर्धन प्रकाशन, पुणे.

४. व्यावहारिक मराठी - डॉ. लीला गोविलकर, डॉ. जयश्री पाटणकर, स्नेहवर्धन प्रकाशन

५. व्यावहारिक मराठी - डॉ. सयाजीराजे मोकाशी, प्रा. रंजना नेमाडे

६. व्यावहारिक मराठी -डॉ. ल. रा. नसिराबादकर, फडके प्रकाशन, कोल्हापूर

७. प्रसारमाध्यमांसाठी लेखन कौशल्ये - य.च.म.मुक्त विद्यापीठ, नाशिक.

८. कहाणी वर्तमानपत्राची-चंचल सरकार, अनुवाद - दिनकर गांगल, नॅशनल बुक ट्रस्ट.

९. द्विभाषी व्यावहारिक शब्दकोश (इंग्लिश - मराठी) - गणेश ओतुरकर

१०. प्रसारमाध्यमे आणि मराठी भाषा - संपादक डॉ. भास्कर शेळके.

११. व्यावहारिक मराठी भाषा - शरदिनी मोहिते

१२. भाषांतर मीमांसा -डॉ. कल्याण काळे

१३. भाषांतर चिकित्सा - डॉ. मधुकर मोकाशी

१४. व्यावहारिक , उपयोजित मराठी आणि प्रसारमाध्यमे - संपा. डॉ. संदीप सांगळे

१५. व्यावहारिक आणि उपयोजित मराठी - डॉ. मनोहर रोकडे

१६. मराठी भाषा उपयोजन आणि सर्जन - प्रा. सुहासकुमार बोबडे

१७. पारिभाषिक संज्ञा कोश (इंग्लिश -मराठी)- डॉ. स्नेहल तावरे.

१८. उपयोजित मराठी- डॉ. केतकी मोडक, प्रा. सुजाता शेणई ,संतोष शेणई

१९. व्यावहारिक मराठी - प्रकाश परब

२०. जाहिरातशास्त्र - डॉ. वंदना खेडीकर

२१. निबंध : शास्त्र व कला - डॉ. प्र. न. जोशी

२२. निबंध व लेखन - निर्मला किराणे.

प्रश्नपत्रिकेचे स्वरूप : पहिले आणि दुसरे सत्र

पहिले सत्र		
विद्यापीठ सत्र परीक्षा		
वेळ : ३ तास		**गुण : ७०**
प्रश्न क्रमांक	घटकनिहाय प्रश्न तपशील	गुण
प्रश्न १ ला	निबंध लेखन- वैचारिक, ललित आणि वाणिज्य विषयक (३०० शब्दांपर्यंत) (घटक १)	१५
प्रश्न २ रा	४ पैकी २ प्रश्नांची उत्तरे प्रत्येकी ५० शब्दांपर्यंत (घटक २)	१५
प्रश्न ३ रा	४ पैकी २ प्रश्नांची उत्तरे प्रत्येकी १५० शब्दांपर्यंत (घटक २)	२०
प्रश्न ४ था	२ पैकी १ प्रश्नाचे उत्तर प्रत्येकी ३०० शब्दांपर्यंत (घटक २)	२०
	सत्र परीक्षा एकूण गुण	**७०**
अंतर्गत मूल्यमापन		
	लेखी परीक्षा (घटक २)	१५
	प्रश्नमंजुषा / सादरीकरण / प्रकल्प / गृहपाठ (घटक २)	१५
	सत्र परीक्षा आणि अंतर्गत मूल्यमापन एकूण गुण	**१००**
दुसरे सत्र		
विद्यापीठ सत्र परीक्षा		
वेळ : ३ तास		**गुण : ७०**
प्रश्न क्रमांक	घटकनिहाय प्रश्न तपशील	गुण
प्रश्न १ ला	अ. २ पैकी १ प्रश्नाचे उत्तर लिहिणे. (घटक १)	२०
	ब. २ पैकी १ प्रश्नाचे उत्तर लिहिणे. (घटक १)	
प्रश्न २ रा	अ. २ पैकी १ प्रश्नाचे उत्तर लिहिणे. (घटक २)	२०
	ब. २ पैकी १ प्रश्नाचे उत्तर लिहिणे. (घटक २)	
प्रश्न ३ रा	अ. २ पैकी १ प्रश्नाचे उत्तर लिहिणे. (घटक ३)	३०
	ब. २ पैकी १ प्रश्नाचे उत्तर लिहिणे. (घटक ३)	
	सत्र परीक्षा एकूण गुण	**७०**
	अंतर्गत मूल्यमापन	
	प्रश्नमंजुषा / सादरीकरण / प्रकल्प / गृहपाठ (घटक १)	१५
	लेखी परीक्षा (घटक २ आणि ३)	१५
	सत्र परीक्षा आणि अंतर्गत मूल्यमापन एकूण गुण	**१००**

Savitribai Phule Pune University

(Formerly University of Pune)

Three Year B.Sc. Degree Program in Physics

(Faculty of Science & Technology)

T.Y.B.Sc. (Physics)

Choice Based Credit System

To be implemented from Academic Year 2021-2022

Savitribai Phule Pune University, Pune

Revised syllabus for T.Y.B.Sc. (Physics) (CBCS Pattern-2021-22)

To be implemented from Academic Year 2021-22

Salient Features of Revised Syllabi in Physics

As far as possible to promote:

1) Physics Education through Master Texts:
It helps in understanding the theoretical and mathematical development of the subject and to create interest in the subject.

2) Physics Education through Experimentation:
It helps in general to improve scientific attitude. So emphasis is given on the development of experimental skills, data analysis, calculations, and also on the limitations of the experimental method and data and, results obtained.

3) Physics Education through Problem Solving: It helps in understanding the concepts of physics. It underline the strength of equations, formulae, graphs, mathematical tools to tackle the problems. So accordingly, we have introduced compulsory problem part in the question paper.

4) Physics Education through History and Philosophy:
It helps in understanding the conceptual development of the subject and thereby increase the interest in the subject. A topic on this is introduced in the Physics Course.

5) Physics Education through Awareness of Misconceptions:
It improves the scientific awareness among the students. A discussion on different subjects are encouraged.

6) Physics Education through Proto-research:
It creates interest in the subject and improves technological aspect. Accordingly, mini projects, hands-on activities, projects, models and demonstrations etc. is included in the syllabi.

7) Physics Education through Qualitative Overview:
It creates interest in the subject to continue to work in the field of science in general and physics in particular. Accordingly future directions and frontiers of the subject are included in the syllabi.

8) **Structure of Question paper:**
Existing structure shall continue.

9) **ATKT Rules:**
Existing rules shall apply.

10) **Structure of the Course:**

Semester	Course Type	Course Code	Course Name	Credit
V	Discipline Specific Elective Course	PHY-351	Mathematical Methods in Physics-II	2
		PHY-352	Electrodynamics	2
		PHY-353	Classical Mechanics	2
		PHY-354	Atomic and Molecular Physics	2
		PHY-355	Computational Physics	2
		PHY-356: Elective-I (Select any One)		2
		PHY-356(**A**)	Astronomy and Astrophysics-I	
		PHY-356(**B**)	Elements of Materials Science	
		PHY-356(**C**)	Biophysics	
		PHY-356(**D**)	Renewable Energy Sources-I	
		PHY-356(**E**)	Applied Optics	
		PHY-356(**F**)	C# programming	
		PHY-356(**G**)	Acoustics-I	
		PHY-357	Physics Laboratory-3A	2
		PHY-358	Physics Laboratory-3B	2
		PHY-359	Project-I	2
	Skill Enhancement Course	**PHY-3510: Skill Enhancement Course-I (Select any One)**		2
		PHY-3510(**H**)	Python Programming	
		PHY-3510(**I**)	Energy studies	
		PHY-3510(**J**)	Introduction to Arduino	
		PHY-3510(**K**)	Sensors and Transducer	
		PHY- 3511: Skill Enhancement Course-II (Select any One)		2
		PHY-3511(**L**)	Physics Workshop Skill	
		PHY-3511(**M**)	Biomedical Instrumentation	
		PHY-3511(**N**)	Non-destructive Testing Techniques	
		PHY- 3511(**O**)	Acoustics Applications	
VI	Discipline Specific Elective Course	PHY-361	Solid State Physics	2
		PHY-362	Quantum Mechanics	2
		PHY-363	Thermodynamics and Statistical Physics	2
		PHY-364	Nuclear Physics	2
		PHY-365	**(A)** Electronics-II **OR**	2

T.Y.B.Sc. (Physics) (Sem-V)
PHY-359: Physics Project-I

Lectures: 36 **(Credits-02)**

Guidelines:

It is expected that,

1. The student does work equivalent to about ten (10) laboratory experiments throughout the semester in the third year.
2. One bears in mind that the project work is a practical course and it is intended to develop a set of skills pertaining to the laboratory work apart from the cognition of students. Therefore, the guides should not permit projects that involve no contribution on part of student.
3. The project must have a clear and strong link with the principles of basic physics and/or their applications.
4. The theme chosen should be such that it promotes better understanding of physics concepts and brings out the creativity in the students.
5. The evaluation of the project work must give due credit to the amount of the project work actually done by a student, skills shown by the student, understanding of the physics concepts involved and the final presentation at the time of viva voce.
6. It is also recommended that a teacher will look after Four (4) projects at one time.
7. Practical examination will be conducted semester wise.
8. The student can perform an Experimental/Theoretical/Computational Project in Physics or interdisciplinary areas under the supervision of one or more guides.
9. The student can learn the basics of the topic chosen for project, to learn how to do literature survey and set up the basic experimental/theoretical and computational techniques needed for the project.
10. The department encourage to students for projects both in experimental and theoretical areas of Physics in collaboration with other institutes and industry.

The Project work shall consist of the following Criterions.

1. Project work is mandatory for all the T. Y .B. Sc. students.
2. All the T. Y. B. Sc. students will be have to complete the Project work prescribed by the Board of Studies in Physics of Savitribai Phule Pune University during the Vth Semester.
3. The Project work shall consist of the following Criterions.
    - It is expected that students must finalize the Title of Project, Aim and objective, Significance, Literature survey, Materials required, Method and Application etc.
    - Introduction to foundations of Project Work.
    - Introduction of Project Research Methodology.
    - Study of Data Collection Methods.
    - Project Problem Writing and Presentation Skills.

Evaluation weightage:

- Project-I: Semester End University Examination : 35 Marks
- Internal Examination: 15 Marks

Faculty of Science and Technology

M. Sc. (Physics)

Choice Based Credit System (CBCS)

To be implemented from Academic Year 2020-2021

Structure and Syllabus

SAVITRIBAI PHULE PUNE UNIVERSITY

GANESHKHIND, PUNE-411007

Proposed Structure of M. Sc. (Physics) Syllabus (C. B. C. S.)

1. Title of the Course: M. Sc. Physics

2. Preamble:

The curriculum for the M. Sc. (Physics) programme is designed to cater to the requirement of Choice Based Credit System following the University Grants Commission (UGC) guidelines. In the proposed structure, due consideration is given to Core and Elective Courses (Discipline specific - Physics), along with Ability Enhancement (Compulsory and Skill based) Courses. Furthermore, continuous assessment is an integral part of the CBCS, which will facilitate systematic and thorough learning towards better understanding of the subject. The systematic and planned curricula divided into two years (comprised of four semesters) shall motivate the student for pursuing higher studies in Physics and inculcate enough skills for becoming an entrepreneur.

Objectives:

- To foster scientific attitude, provide in-depth knowledge of scientific and technological concepts of Physics.
- To enrich knowledge through problem solving, minor/major projects, seminars, tutorials, review of research articles/papers, participation in scientific events, study visits, etc.
- To familiarize with recent scientific and technological developments.
- To create foundation for research and development in Physics.
- To help students to learn various experimental and computational tools thereby developing analytical abilities to address real world problems.
- To train students in skills related to research, education, industry and market.
- To help students to build-up a progressive and successful career in Physics.

3. Introduction: Semester Credit System

4. Eligibility: As per the rules and regulations published by SPPU, Pune.

5. Examination: As per the BOOKLET prepared by SPPU, Pune

A. Pattern of Examination

B. Standard of Passing

C. ATKT Rules

D. Award of Class

E. External Students

F. Setting of Question paper / Pattern of Question paper

G. Verification / Revaluation

INDEX

Structure of M. Sc. Physics (Choice Based Credit System)

To be implemented from the Academic Year 2020-21

Subject Name	Year	Semester	Course Type	Course Code	Course Name		Credit
Physics	1	I	Core Compulsory Theory Paper **(CCTP)**	PHCT-111	Mathematical Methods in Physics		**4**
				PHCT-112	Classical Mechanics		**4**
				PHCT-113	Electronics		**4**
			Choice Based Optional Paper (**CBOP-I**)	PHOT-114	Choose any one from **Group I**	Theory	**4**
				PHOP-114		Practical	**0**
			OR				
			CBOP-I	PHOT-114	Choose any one from **Group I**	Theory	**2**
				PHOP-114		Practical	**2**
			Core Compulsory Practical Paper **(CCPP)**	PHCP-115	Physics Lab-I		**4**
		II	**CCTP**	PHCT-121	Electrodynamics		**4**
				PHCT-122	Atoms and Molecules		**4**
				PHCT-123	Quantum Mechanics		**4**
			CBOP-II	PHOT-124	Choose any one from **Group I**	Theory	**4**
				PHOP-124		Practical	**0**
			OR				
			CBOP-II	PHOT-124	Choose any one from **Group I**	Theory	**2**
				PHOP-124		Practical	**2**
			CCPP	PHCP-125	Physics Lab-II		**4**

	Year	Semester	Course Type	Course Code	Course Name		Credit
	2	III	CCTP	PHCT-231	Statistical Mechanics		4
				PHCT-232	Solid State Physics		4
				PHCT-233	Experimental Techniques in Physics - I		4
			CBOP-III	PHOT-234	Special–I from **Group II**	Theory	4
				PHOP-234		Practical	0
			OR				
			CBOP-III	PHOT-234	Special–I from **Group II**	Theory	2
				PHOP-234		Practical	2
			CCPP	PHCP-235	Physics Laboratory - III		4
		IV	CCTP	PHCT-241	Nuclear Physics		4
				PHCT-242	Experimental Techniques in Physics-II		4
			CBOP-IV	PHOT-243	Choose any one from **Group I**	Theory	4
				PHOP-243		Practical	0
			OR				
			CBOP-IV	PHOT-243	Choose any one from **Group I**	Theory	2
				PHOP-243		Practical	2
			CBOP-V	PHOT-244	Special–II from **Group II**	Theory	4
				PHOP-244		Practical	0
			OR				
			CBOP-V	PHOT-244	Special–II from **Group II**	Theory	2
				PHOP-244		Practical	2
			CCPC	PHCP-245	Project		4
Total credits of M. Sc. Physics course							**80**

Advanced Diploma in Electrical Technology

Second Year: Semester –II

Paper Code: BVET40 Title: Environment Awareness

Credits: 4

Units	Name of Unit	Content
I	Multidisciplinary nature of environmental studies	Definition, scope and importance
II	Natural Resources	Renewable and non-renewable resources: Natural resources and associated problems. a) Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forest and tribal people. b) Water resources c) Energy resources
III	Ecosystems	Concept of an ecosystem, Structure and function of an ecosystem, Producers, consumers and decomposers, Energy flow in the ecosystem, Ecological succession, Food chains, food webs and ecological pyramids, Introduction, types, characteristic features, structure and function of the Following ecosystem: - a. Forest ecosystem b. Grassland ecosystem c.Desert ecosystem d. Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)
IV	Biodiversity and its conservation	Introduction – Definition: genetic, species and ecosystem diversity, Biogeographical classification of India, Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values.
V	Environmental Pollution	Definition, Cause, effects and control measures of:-a. Air pollution b. Water pollution c. Soil pollution d. Marine pollution e. Noise pollution f. Thermal pollution g. Nuclear hazards.
VI	Environment Protection Act.	Air (Prevention and Control of Pollution) Act, Water (Prevention and control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act.

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

Syllabus

For

B.Voc. (Electrical)
[Third Year]

Electrical Technology

BACHELOR OF VOCATION (B.Voc.)

Syllabus: B.Voc. : Electrical Technology

COURSE STRUCTURE

First Year (Diploma in Electrical Technology)						
Semester	**Paper Code**	**Title of the Paper**	**Credits**			**Marks**
			Total	**Theory**	**Practical**	
I	BVET11	Communication Skill	4	4	-	100
	BVET12	Basic Electrical Engg-I	4	4	-	100
	BVET13	Basic Electrical Engg-II	4	4	-	100
	BVET14	Lab Practical-1 (Based on BVET12)	6	-	6	150
	BVET15	Lab Practical-2 (Based on BVET13)	6	-	6	150
	BVET16	Lab Practical-3 (Based on Electrical Wiring)	6	-	6	150
		Total Credits	**30**	**12**	**18**	**750**
Semester	**Paper Code**	**Title**	**Credits**			**Marks**
			Total	**Theory**	**Practical**	
II	BVET21	Applied Mathematics	4	4	-	100
	BVET22	Electrical Appliances-I	4	4	-	100
	BVET23	Electrical Machines-I	4	4	-	100
	BVET24	Lab Practical-1 (Based on BVET22)	6	-	6	150
	BVET25	Lab Practical-2 (Based on BVET23)	6	-	6	150
	BVET26	Lab Practical-(Based on Rewinding Motors)	6	-	6	150
		Total Credits	**30**	**12**	**18**	**750**

Second Year (Advanced Diploma in Electrical Technology)						
Semester	**Paper Code**	**Title of the Paper**	**Credits**			**Marks**
			Total	**Theory**	**Practical**	
III	BVET31	Computer Technology	4	4	-	100
	BVET32	Electrical Appliances-II	4	4	-	100
	BVET33	Electrical Machines-II	4	4	-	100
	BVET34	Lab Practical-1 (Based on BVET31)	6	-	6	150
	BVET35	Lab Practical-2 (Based on BVET32)	6	-	6	150
	BVET36	Lab Practical-3 (Based on BVET33)	6	-	6	150
		Total Credits	**30**	**12**	**18**	**750**
Semester	**Paper Code**	**Title**	**Credits**			**Marks**
			Total	**Theory**	**Practical**	
IV	BVET40	Environment Awareness	Grade			
	BVET41	Entrepreneurship and Employable Skill	4	4	-	100
	BVET42	Basic Electronics	4	4	-	100
	BVET43	Electrical Measurement & Instrumentation	4	4	-	100
	BVET44	Lab Practical-1 (Based on BVET42)	6	-	6	150
	BVET45	Lab Practical-2 (Based on BVET43)	6	-	6	150
	BVET46	Lab Practical-3 (Based on Motor Pump and starters)	6	-	6	150
		Total Credits	**30**	**12**	**18**	**750**

Third Year (Degree in Electrical Technology)						
Semester	**Paper Code**	**Title of the Paper**	**Credits**			**Marks**
			Total	**Theory**	**Practical**	
V	BVET51	Testing and maintenance of Electrical Equipment	4	4	-	100
	BVET52	Power System & Switchgear Protection	4	4	-	100
	BVET53	Power Electronics Drives	4	4	-	100
	BVET54	Lab Practical-1 (Based on BVET51)	6	-	6	150
	BVET55	Lab Practical-2 (Based on BVET52)	6	-	6	150
	BVET56	Lab Practical-3 (Based on BVET53)	6	-	6	150
		Total Credits	**30**	**12**	**18**	**750**
Semester	**Paper Code**	**Title**	**Credits**			**Marks**
			Total	**Theory**	**Practical**	
VI	BVET61	Illumination Engineering	4	4	-	100
	BVET62	Electric & Hybrid Vehicle	4	4	-	100
	BVET63	Special Purpose Machine	4	4	-	100
	BVET64	Project	10	--	10	250
	BVET65	Industrial Internship	8	--	8	200
		Total Credits	**30**	Project	**18**	**750**

B. Voc. in Electrical Technology

Third Year: Semester –II

Paper Code: BVET64 Title: Project

Credits: 10

The student shall take up a project in the field closely related to Electrical Engineering. Preferably, group of 3/4 students should be formed for project work.

The project work should be based on the knowledge acquired by the student during the graduation and preferably it should meet and contribute towards the needs of the society. The project aims to provide an opportunity of designing and building complete system or subsystems based on area where the student likes to acquire specialized skills.

GUIDELINES:

1. To identify the problems in industry and society.
2. Perform Literature survey on the specific chosen topic through research papers, Journals, books etc. and market survey if required.
3. To narrow down the area taking into consideration his/her strength and interest. The nature of project can be analytical, experimentation, design and validation.
4. Define problem, objectives, scope and its outcomes.
5. Design scheme of implementation of project.
6. Data collection, simulation, design, hardware if any, needs to be completed.
7. Presentation based on completed work.
8. Submission of report based on the work carried out.
9. Student should maintain Project Work Book.
10. The student shall prepare duly certified final report of the project work in the standard format in MS Word