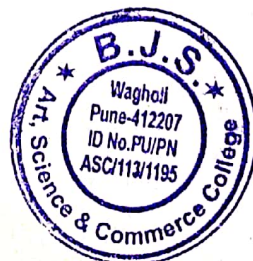


Ref.No.: BJSC :

Date :

List of Content in Syllabus

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7	S.Y.B.A(G2)	Made In India	Women Development	Value Added
8	S.Y.B.A (S2)	History of Modern Maharashtra	Mahatma Phule And Female Development	Value Added
9	S.Y.B.A(G2)	Geography of Disaster Management	Acid Rain , Ozone Depletion	Environment

**PRINCIPAL**Bharatiya Jain Sanghatana's
Art, Science & Commerce College
Wagholl, Pune - 412207



**भारतीय जैन संघटनेचे
कला, विज्ञान व वाणिज्य महाविद्यालय
वाघोली, पुणे
निसर्ग मंडळ**

आयोजित

ओझोन दिन : पर्यावरण वाचवा संदेश

प्रति,

मा. प्राचार्य,

रायसोनी कला, विज्ञान व वाणिज्य महाविद्यालय,

वाघोली, पुणे.

पृथ्वीवरील सजीवांना जीवन जगण्यासाठी स्वच्छ पाणी, हवा, अन्न व विचार किती महत्त्वाचे आहेत हे सर्वांना माहिती असून ही सध्या जगात बॉम्बस्फोट, अणु चाचण्या, अतिरेकी कारवाया, हल्ले, प्रदूषण, अपघात, किटकनाशकांचा अतिरेकी वापर, अति औद्योगिकीकरण, विषारी वायुंची गळती, अतिरिक्त वाहनांची संख्या व युद्ध अशा अनेक मानवनिर्मित घटना घडत असून त्यामुळे अनेक प्राण्यांच्या व वनस्पतींच्या समूळ जाती नष्ट होत आहेत. एकंदरीत पृथ्वीचा विनाश म्हणजेच आपला विनाश जवळ येत आहे. यास सर्वस्वी आपण म्हणजे मानव जबाबदार असून अशा समस्यांची तिव्रता कमी करण्याची क्षमता सध्या फक्त मानवातच आहे. आपण मानवी जीवन समृद्ध करण्याचा प्रयत्न करू या. आपण सर्वांनी मिळून ही चळवळ पुढे घेऊन जाऊ. त्यासाठी आम्ही हा संदेश आपणास देत आहोत व यासाठी आम्ही सायकल रॅलीद्वारे पर्यावरण वाचवा असा संदेश चळवळ उभारण्याचा प्रयत्न आज आंतरराष्ट्रीय ओझोन दिनाचे औचित्य साधून करत आहोत. आपण हा संदेश पुढे देऊन चळवळ यशस्वी करू या.

आपले नम्र

डॉ. ज्योतिराम मोरे
प्रमुख, भूगोल विभाग
बीजेएस कॉलेज, वाघोली, पुणे

डॉ. देविदास पाटील
प्रमुख, निसर्ग मंडळ
बीजेएस कॉलेज, वाघोली, पुणे

डॉ. बाबासाहेब सांगळे
प्राचार्य
बीजेएस कॉलेज, वाघोली, पुणे

BJS
Bharatiya Jain Sanghatana

संस्थापक अध्यक्ष
शांतिलाल मुध्या

Principal
Major Dr. Ashok V. Giri
M.Com., B.Ed., M.Phil (Com), GDC & A, Ph.D.
Cell: 9822296596

प्राचार्य
मेजर डॉ. अशोक व्ही. गिरी
M.Com., B.Ed., M.Phil (Com), GDC & A, Ph.D.
भ्रमणध्वनी : ९८२२२९६५९६

BHARATIYA JAIN SANGHATANA'S
Arts, Science & Commerce College

भारतीय जैन संघटनेचे
कला, विज्ञान व वाणिज्य महाविद्यालय

NAAC Re-Accredited 'B' Grade

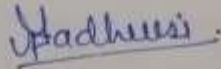
● Run by Jain Minority Institute ● Affiliated to SPPU, Pune ● ID No. PU/PN/ASC/113/1995 ● A.I.S.H.E. Ref. No.: C-41341

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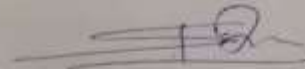
Bharatiya Jain Sanghatana's
Arts, Science and Commerce College, Wagholi, Pune
Report of Anti-superstition Committee

2015-16

- One Day Workshop on Anti-superstition Moment: Anti superstition committee organized a one day workshop on 11th July 2015. Mr. Milind Deshmukh delivered a lecture on "Science behind Miracle" at inaugural function of the workshop. He also gave a demo of various experiments and scientific explanation on black magic issues. Around 90 students participated in the workshop.
- To give tribute to Dr. Narendra Dabholkar (Founder of *Maharashtra Andhshardha Nirmulan Samittee*) for his extensive work in the field of anti-superstition, our management organized a Crackers free Diwali Celebration Program for our school and college students. Total 230 college students participated in this program and they took oath for crackers free Diwali and saved 5 Lakhs Ninety Thousand rupees in Diwali as they did not buy crackers for Diwali.



Prof. Madhuri Deshmukh



Dr. Babasaheb Sangale

PRINCIPAL

Bharatiya Jain Sanghatana's
Art, Science & Commerce College
Wagholi, Pune-412207

Bharatiya Jain Sanghatana's
Arts, Science and Commerce College, Wagholi, Pune

Report of Anti-superstition Committee

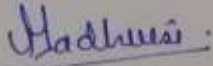
2014-15

During the academic year 2014-15 following activities were conducted:

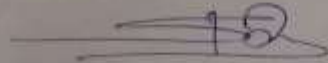
- Inaugural Function: Anti superstition committee organized an inaugural function on 1st August 2014. Mr. Gangadhar Khedkar delivered a lecture on "Snakes and Superstitions" and also gave a demo on poisonous and nonpoisonous snakes. Around 115 students participated in the program.
- Under Environment Safety Activity, Rotary Club, Pune, and Anti-superstition committee and Nature's club jointly organized a program of "Ganapati Nirmalya collection" on 4th September and 8th September 2014, at Mulla mutha River bank, Pune.

30 students actively participated in this program. Rotary club Pune, appreciated active contribution of our students and felicitated them with certificates.

- To give tribute to Dr. Narendra Dabholkar (Founder of *Maharashtra Andhshardha Nirmulan Samittee*) for his extensive work in the field of anti-superstition, our management organized a Crackers free Diwali Celebration Program for our school and college students. Total 210 college students participated in this program and they took oath for crackers free Diwali and saved 5 Lakhs Ninety Thousand rupees in Diwali as they did not buy crackers for Diwali.



Prof. Madhuri Deshmukh



Dr. Babasaheb Sangale

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भारतीय जैन संघटनेचे
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Bakori Phata, Pune - Nagar Highway, Wagholl, Pune 412 207. M.: 9325005837 | बकरी फाटा, पुणे - नगर महामार्ग, वाघोली, पुणे - ४१२ २०७. मो.: ९३२५००५८३७

● admin@bjs.edu.in ● principal@bjs.edu.in ● www.bjs.edu.in

Our Vision : Exploring Youth Capabilities For Social Service

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S.Y.B.A Gg-210 Geography of Disaster Management (G2)

Objectives:-

- 1) To introduce students the concept of disaster & its relation with Geography.
- 2) To acquaint the students with the utility & application of hazards in different areas & its management.

SECTION – II

Sr.

No.

Topic Sub Topic Learning Points Periods

- 7) Global issues and movements Causes, effects and measures to conservation.
- a) Global warming
 - b) Ozone depletion
 - c) Acid rain

Bharatiya Jain Sanghatana's
Arts, Science And Commerce College,
Wagholi, Pune-412207
Dept. of History

History subject Syllabus:

Class	Name of Course	Contents	Value added
S.Y.B.A. G2	Modern India	Female Development	Value added
S.Y.B.A. S2	History of Modern Maharashtra	Mahatma Phule & Female Development	Value added

UNIVERSITY OF PUNE
(Revised Syllabus From 2014-15)

Modern- India (1857-1950)

S.Y.B.A. (History)

General Paper 2

Objectives:-

The course is designed to help the student to know- History of freedom movement of India, aims, objectives problems and progress of Independent India. It aims at enabling the student to understand the processes of rise of modern India. The Course attempts to acquaint student with fundamental aspects of Modern Indian History. To explain the basic concepts/ concerns/ frame work of Indian History.

First- Term

Unit I - Conceptual Study

8

1. Modernity
2. Rule of Law
3. Drain of wealth
4. Nationalism
5. Home- Rule
6. Satyagraha
7. Communalism
8. Dyarchy

Unit II - Uprising of 1857

10

1. Causes, course and effects
2. Various Views
3. Causes of failure

Unit III - Social and Religious Movement (Special reference to institutional work)

10

1. Brahmo Samaj
2. Arya Samaj
3. Prarthna Samaj

4. Theosophical Society	
5. Satyashodhak Samaj	
Unit IV - Indian Nationalism	10
1. Rise and Growth	
2. Foundation of Indian National Congress.	
3. The Moderates and Extremists.	
4. Revolutionary Nationalism	
Spl. Ref. (Abhinav Bharat, Gadar, Anushilan Samitee, Yugantar, Hindustan Socialist Republican Army)	
Unit V - Administrative Policy of the British	10
1. Education	
2. Press	
3. Famine	
4. Local self government	
5. Land Revenue systems	

Second Term

Chapter VI - Mahatma Gandhi and Indian National movement	10
1. Philosophy	
2. Non - Co operation	
3. Civil Disobedience	
4. Quit India	
Chapter VII - Rise and Growth of communalism	10
1. Muslim League	
2. Khilafat movement	
3. Two Nation Theory	
4. Partition	
Chapter VIII - Constitutional Development	10

1. Morley Minto Act - 1909
2. Montague - Chelmsford Act - 1919
3. Provincial Autonomy - 1935
4. Various Constitutional Plans 1942 to 1946 (Crips mission, Wavell plan, Cabinet mission)
5. The last phase - Transfer of power (Mountbatten plan and India's Independence Act - 1947)

10

Chapter IX - Subaltern Movement

1. Dalit Movement
2. Women's Movement
3. Peasant Movement
4. Tribal Movement
5. Workers Movement

8

Chapter X - India after Independence

1. Consequences of partition
2. Integration of princely state: Hyderabad, Junagad & Kashmir.

96

Books for Study: English

1. Bipinchanda - India's struggle for freedom
2. Bearce, George D - British attitude towards India
3. Bipinchanda - The Rise and Growth of Economic Nationalism
4. Desai A.R. - Social background of India Nationalism
5. Dodwell H.H. - Cambridge History of India Vol V,VI
6. Dutt R.C. - Economic History of India Vol 1,2
7. Gopal S. - British policy in India 1858-1905
8. Majumdar R.C. - British paramountcy and Indian Renaissance Vol IX
9. Menon V.P. - The transfer of power in India
10. Natrajan S. - A century of social Reform In India
11. Overstreet G.D. & Windmiller M. - Communism In India

University of Pune

Revised Syllabus S.Y.B.A. (History, special Paper -II)

From 2014-2015

History of Modern Maharashtra (1818 to 1960)

First Term

Objectives:

The purpose of the course is to enable the students to study the history of modern Maharashtra .To highlight the ideas, institutions, forces and movements that contributes to the modern Maharashtra. To acquaint the students with various interpretative perspectives. To introduce the student to the regional history within a broad national framework.

Unit - 1) Conceptual Study of Modern Maharashtra 15

1) Modernity 2) Renaissance 3) Nationalism 4) Drain of wealth 5) Moderates
6) Extremist 7) Revolutionary 8) Four Points programme of Lokmanya Tilak
9) Satyagraha 10) Democracy 11) Capitalism 12) Industrialization 13)
Urbanization 14) Utilitarianism.

Unit - 2) Maharashtra in Early 19th Century 9

- a) Socio- Political & Economic background.(transition period)
- b) British Administration & its Impacts.

Unit -3) Socio-Economic & Religious Reformism 12

- a) Balshastree Jambhekar
- b) Jagannath Shankarsheth
- c) Bhau Daji Lad
- d) Gopal Hari Deshmukh (Lokhiwadi)
- e) Mahatma Phule

Unit - 4) Institutional Experiments in Socio- Religious Reformism 12

- a) Paramahansa Mandai
- b) Prarthana Samaj
- c) Satyashodhak Samaj
- d) Arya Samaj
- e) Depressed Classes Mission

Second Term

Unit - 5) Thoughts and work of Intellectuals 16

- a) Mahadev Govind Ranade
- b) Gopal Ganesh Agarkar
- c) Gopal Krishna Gokhale
- d) Rajarshri Chatrapati Shahu Maharaj
- e) Maharshi Dhondo Keshav Karve
- f) Karmaveer Bhaurao Patil
- g) Dr. Babasaheb Ambedkar
- h) Maharshi Vitthal Ramji Shinde

Unit - 6) Contribution of Maharashtra in Indian Freedom Movement 12

- a) 1818 to 1885 (Uprising of Ramoshi, Bhills, Koli, & Deccan Riots (1875) (b) Revolt of 1857, Moderates, Extremists & Revolutionaries.
- b) Non- Cooperation, Civil Disobedence & Quit India Movement

Unit - 7) Popular Movements in Maharashtra 10

- a) Non-Brahmin Movement
- b) Dalit
- c) Peasants
- d) Workers
- e) Tribals

Unit - 8) Maharashtra after independence 10

- a) Marathwada Muktisangram
- b) Samyukta Maharashtra Movement

MODERN MAHARASHTRA

Book For Study : English :

1. Ballhatchet Kenneth, Social Policy and Social Change in Western India. 1817-1830, OUP, 1961.

Semester-III

Course: Environmental and Green Chemistry (CH-336D)

Name of the Topic Number of lectures

1. Concepts and scope of Environmental Chemistry 02
2. Atmosphere and Air Pollution 14
3. Hydrosphere and water pollution 08
4. Introduction to Green Chemistry 10
5. Green Chemistry and Technology for sustainable development 10
6. Green Chemistry and Hazardous Organic Solvents 04

Total lectures 48

Chapter 1: Concepts and scope of Environmental Chemistry (02)

- 1.1 Introduction
- 1.2 Terminologies
- 1.3 Units of concentration
- 1.4 Segments of Environment

Ref. 1, Ref. 3

Aims and Objectives-

Students should knowi.

Importance and conservation of environment.

Chapter 2: Atmosphere and Air Pollution (14)

- 2.1 Composition and structure of atmosphere
- 2.2 Chemical and photochemical reactions in atmosphere
- 2.3 Chemistry of O₃, SO_x, NO_x and chlorides in atmosphere
- 2.4 Primary air pollutants
- 2.5 Sampling of air
- 2.6 Particulate matter: inorganic and organic
- 2.7 Smog: reducing and photochemical
- 2.8 Mechanism of ozone depletion
- 2.9 Stability and reactions of CFCs
- 2.10 Harmful effects of CFCs
- 2.11 CFCs substitutes
- 2.12 Bhopal gas tragedy

Ref. 1, Ref. 3, Ref. 5

Aims and Objectives-

Students should knowi.

Segments of atmosphere

65

- ii. Hazards of flue gases
- iii. Ozone depletion
- iv. Ecological changes due to hazardous gases
- v. Understand the social issues

Chapter 3: Hydrosphere and water pollution (08)

3.1 Water resources

3.2 Physical chemistry of sea water: composition, equilibria, pH, pE

3.3 Microbially mediated aquatic reactions, nitrogen cycle, iron and manganese bacteria

3.4 Classification of water pollutants

3.5 Organic and Inorganic pollutants: Pesticides, Detergents, Eutrophication, Marine, Oil, Acid mine drainage, remedial measures and sediments

3.6 Thermal pollution

3.7 Sampling and monitoring water quality parameters: pH, D.O. (Winkler Method), COD, TOC, Total hardness, free chlorine.

Ref. 1, 2, 3, and 5

Aims and Objectives-

Students should know:

Water resources

ii. Quality of potable water

iii. WHO limits for toxic materials in water stream

iv. Quality measures

Chapter 4. Introduction to Green Chemistry [10]

4.1 Chemistry is good

4.2 The environment and the five environmental spheres

4.3 What is environmental Chemistry?

4.4 Environmental Pollution

4.5 What is green Chemistry?

4.6 Green Chemistry and synthetic chemistry

4.7 Reduction of risk: Hazard and exposure

4.8 The risk and no risks

4.9 Waste prevention

4.10 Basic principles of green chemistry

4.11 Examples based on green technology

[Ref: Green Chemistry By Stanley E Manahan, Chemchar Research Inc. (2006) - 2ndEdn. chapter

1, P1-17 and Ref.6 Relevant pages.]

Chapter 5. Green Chemistry and Technology for sustainable development [10]

5.1 Green Chemistry from theory to practice

5.2 The twelve principles of green chemistry

5.3 Green Chemistry and sustainable Development

5.4 Designing Products under the holistic approach “ Cradle-to Cradle”

5.5 Scientific areas for practical applications of green chemistry

5.6 Use of alternative basic chemicals as feedstocks in chemical industry and research

66

5.7 Green Chemistry and Reduction of solvent Toxicity (Alternative Solvents or replacement)

5.8 Applications of New Methodologies in the synthesis of chemical compounds- catalysis and green chemistry.

[Ref : Green Chemistry–Green engineering by AthanasiosValavanidis and ThomaisVlachogianni (

March 2012) ; Chapter 2 p17-37 and Ref.6 Relevant pages]

Chapter 6. Green Chemistry and Hazardous Organic Solvents (Green solvents, replacement and Alternative techniques) [04]

6.1 Introduction to Green Chemistry and Toxic organic solvents

6.2 Green solvents and Alternative methods

6.3 Green Chemistry, Green solvents – Alternative techniques in organic synthesis

[Ref : Green Chemistry –Green engineering , Chapter 5, p81-91, Ref.6 Relevant pages]

Aims and Objectives-(for Chapters 4, 5 and 6)

Students should knowi.

Need of green chemistry technology

ii. Principles of green chemistry

iii. Advantages of green chemistry

iv. Simple examples to clarify the principles

v. Catalytic routes for sustainable developments

Reference Books:

1: Environmental Chemistry – A. K. De, 5th Edition (New age international publishers)

2: Environmental Chemistry – J. W. Moore and E. A. Moore (Academic Press, New York)

3: Environmental Chemistry – A. K. Bhagi and C. R. Chatwal (Himalaya Publishing House)

4: Analytical Chemistry – G. D. Christian 4th Edition (John Wiley and Sons)

5: Environmental Chemistry – H. Kaur 2nd Edition 2007, PragatiPrakashan, Meerut, India

6. Environmental Chemistry with Green Chemistry A. K Das , Books and Allied (P) Ltd, and 67

Semester-III

Course: Environmental and Green Chemistry (CH-346D)

Name of the Topic Number of lectures

1. Water treatment and effluent management 08

2. Soil and solid waste management 04

3. Instrumental methods in environmental analysis 08

4. Green House Effect and Global Warming 04

5. Water the ultimate Green solvent 12

6. Energy Relations 12

Total lectures 48

Chapter 1: Water treatment and effluent management [08]

1.1 Domestic sewage, waste water treatment: primary, secondary and tertiary treatments, aerobic, anaerobic and upflow anaerobic sludge bed treatment processes

1.2 Industrial waste water treatment i) filtration method ii) ion-exchange method iii) membrane techniques: ultrafiltration, reverse osmosis and electrodialysis

1.3 Treatment of drinking water

Aims and Objectives-

Students should knowi.

Methods of water purification

ii. Waste water treatment process

iii. Waste water treatment plants

Chapter 2: Soil and solid waste management [04]

- 2.1 Composition of soil and types of soil.
- 2.2 Organic and inorganic components of soil
- 2.3 Acid base and ion exchange reactions in soil and pH of soil
- 2.4 Chemistry of disposal of solid waste i) sanitary landfills ii) incinerators iii) pyrolysis

Ref.1, Ref. 2, Ref. 3

Aims and Objectives-

Students should knowi.

Types of soil

ii. Components of soil

iii. Types of solid waste and their disposal

Chapter 3: Instrumental methods in environmental analysis [08]

3.1 Atomic absorption spectroscopy: determination of Hg, As, Zn, Ag, Pb, Mn, Fe, Cu, Cr, Cd

3.2 Gas chromatography: detection and determination of CO, HC and pesticides

3.3 HPLC: determination of pesticides, PAH as metabolites

3.4 Spectrophotometry: determination of NO_x, SO₂, NH₃, CN, PO₄, Cd, Pb, Hg

3.5 Chemiluminescence: determination of NO_x and O₃.

68

3.6 Non Dispersive IR spectrometry of determination of CO

3.7 Ion selective electrodes: determination of NO₃ and dissolved oxygen (D. O.)

[Ref. 1, Ref. 2]

Aims and Objectives-

Students should knowi.

Techniques used to monitor hazardous materials present in environment

Chapter 4: Green House Effect and Global Warming [04]

4.1 Introduction

4.2 Greenhouse gases

4.3 Radiative forcing

4.4 Sources and sinks of CO₂

4.5 Causes of fluctuations in global temperature

4.6 Global warming and climate changes

4.7 Implications of climate changes

[Ref. 5]

Aims and Objectives-

Students should knowi.

Green house gases and their effects

ii. Global warming

iii. Climate change

Chapter 5. Water the ultimate Green solvent [12]

5.1 H₂O : Simple formula and complex molecule

5.2 Important properties of water

5.3 The hydrologic cycle

5.4 Bodies of water and life in water

5.5 Chemical process in water

5.6 Fizzy water from underground

5.7 Oxygen in water

5.8 Weak acid from sky

5.9 Why natural water contains alkalinity and calcium

5.10 Metals in water

5.11 Water interactions with other phases

[Ref: Green Chemistry By Stanley E Manahan, Chemchar Research Inc. (2006)-

2ndEdn Chapter 7 :

P 161-173]

Aims and Objectives-

Students should knowi.

What do you mean by green solvent

ii. Resources of of green solvents like alcohol and water

iii. Importance of water as a green solvent

Chapter6 .Energy Relations : [12]

6.1 Energy

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6.2 Radiant Energy from the sun

6.3 Storage and release of energy by chemicals

6.4 Energy sources

6.5 Conversions between forms of energy

6.6 Green engineering and energy conversion efficiency

6.7 Conversion of chemical energy

6.8 Renewable energy sources

[Ref: Green Chemistry By Stanley E Manahan, Chemchar Research Inc. (2006) -

2ndEdn Chapter 6 :

P 135-157]

Aims and Objectives-

Students should knowi.

Natural resources of energy

ii. Conventional and nonconventional energy resources

iii. Conservation of energy

iv. Utilization of solar and wind energies.

Reference Books:

1: Environmental Chemistry – A. K. De, 5th Edition (New age international publishers)

2: Environmental Chemistry – J. W. Moore and E. A. Moore (Academic Press, New York)

3: Environmental Chemistry – A. K. Bhagi and C. R. Chatwal (Himalaya Publishing House)

4: Analytical Chemisry – G. D. Christian 4th Edition (John Wiley and Sons)

5: Environmental Chemistry – H. Kaur 2nd Edition 2007, PragatiPrakashan, Meerut, India

6. Environmental Chemistry with Green Chemistry A. K Das , Books and Allied (P) Ltd.