<u>1.3.1</u>

Gender Issues:

Class	Subject	Topic
D 1	Zoology	Paper-V: Human Genetics, Sex
B sc -l		Determination, Blood Group.
B.AI	History	Paper-I: Role of Rajmata Jijabai in Rise of Maratha Power. Paper-II: 1. Participation of Annie Bezent in homrule movement. 2. Participation of women in Indian freedom movement. 3. Status of women in 19 th Century. 4. Work of mahatma Phule for empowerment of women. 5. Work of maharshidhondo Keshav karve.
B.AI	Economics	Paper-II: 1. Women empowerment, sex ratio. 2. Human Resource Development.
B.AI	Marathi	SL: Comparison of Man And Women-Tarabai Shinde. Paper II: Mulagi Zali Ho – Jyoti Mhapsekar
B.AI	Hindi	पेपर १.:स्त्री और पुरुष, हार की जीत,अमिता- स्त्रीवाद पर भाष्य.
		पेपर २.:गोदान- स्त्री पुरुष समानता, वर्ग व वर्णभेद प्रतिनिधि महिला एकांकी,
B.C.S.	Computer Science	Introduction to networking, network topology, LAN, WAN, MAN, Introduction to Internet, Requirement for Internet.
B SC II	Zoology	Paper- XI: 1. Human Genetic chromosomal Disorders. 2. Reproductive, Sex Harmons, Menstrual cycles, Harmonal Control of pregnancy.
-p-411	Marathi(SL)	अरुंद दारात्न बाहेर पडताना.
BAII		Paner-Xi:
B.AIII	History	 Women: Status, Property Rights, Reforms, Legislation and Political Participation. Women in Indian History. Women and Social History of India. Reform movement: Emanicipation women.
-	Botany	Paper- XXI: Sex Determination.
B SC III		

Human Values

Class	Subject	Total
BAI	Hindi	Topic पेपर १.:
		अ. आपका बंटी
		आ. काग भगोडा
		पेपर २.:गोदान- देहाती जीवन, शोषण,समानता, असमानता.
ВАІ	Political science	Liberty, equality, justice, democracy, social reform and in the second
	History	reform and justice.
BAI	, matory	Paper I and II:
		 Role of Shahaji, Jijabai and early activities of Shivaji.
		2. Work of brahmosamaj, Arya Samaj.
		3. Work of Sattyashodhaksamaj, gandhiyan
		principles.
	Marratt	4. Thoughts of mahatma phule and social reforms.
BAI	Marathi	पेपर १ (द्वितीय भाषा).: अ. ससिक रक्षण
		आ. राजाची कर्तव्ये
		इ. तुम्ही सदाचाराने वागा.
		ई. भासा वाचोनीमराठीया
		उ. धुळी आतील रत्न
		ऊ. शेवटचे कीर्तन
		ए. देशाचे भवितव्य
		एं. लोकभाषा हीच ज्ञानभाषा
		ओ. ठिणगी
		औ. कुळबिन
		पेपर २.: (ऐच्छिक भाषा):
		अ. भोमक्या
BAII		आ. आपण माणसात जमा नाही.
BAII	Marathi	पेपर२ (द्वितीय भाषा):
		अ. छत्रपती शिवाजी महाराजांच्या कार्याचे स्वरूप.
		आ. लोकसंस्कृती आणि जागतिकीकरण
D.A.II		इ. बिरसा
BAII	History	Paper II: Work of Chhatrapati Shahu Maharaj.
		raper v & VII: Jainism: Life and Work of Phaguar
		ividitavii.
		Buddhism: Life and work of Gautam Buddha.
B SC II	Botany	Paper VIII: Work of Akbar:Din-e-llahi Religion
-	·	Paper XIII: Medicinal, legume, Ornamental Plants and their importance in human welfare
BAIII	History	Paper XIV: French revolution, Internal Deligion
B A III	11: 1:	- Taper M. Socialism, Nationalism, Civil Rights Management
3011	Hindi	पेपर X: हिंदी साहित्य का इतिहास, कबीर, तुलसीदास,सूरदास.
B SC III	Zoology	Paper XVIII: Visit to Diary Industry, Fishing Centre.

M.AI Political Science M.AII Political Science	Nature and significance of political theory. 1. Feminism, multiculturalism, Right to Equality. 2. Human Rights, Feminist Movement.
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Environment and Sustainability

Class	Subject	Topic
	Botany	Paper I: Role of algae, fungi, bryophyte, pteridophyte.
B SC I	Economics	Paper II (102): Population, Poverty and environment.
ВАІ	Chemistry	Paper III: Nuclear Chemistry, Hazard assessment Paper IV: Catalysis, Solutions, Thermodynamics,
B SC I		Electromotive force
B 2C 1	Hindi	पेपर २.: गोदान- पर्यावरण की चर्चा.
BAI		Paper VII: Alcohols and Phenols, Acids and Bases
B Sc-II	Chemistry	Thermodynamics and distribution law
B Sc-II	Zoology	Paper VII: Study of animal Biodiversity, Migration in birds. Poisonous snakes and Non Poisonous snakes
BAII	History	Paper V: Indus valley civilization. Paper VIII:Work of Jahangir and Shahajan.
BAII	Economics	Paper 102: Sustainable Development.
B SC III	Zoology	Paper XVII: 1.Ecology, Scope of Ecology, Biotic and antibiotic factors. 2.Environmental Biology: Fresh Water, Marine water and Terrestrial eco systems.
B SC III	Chemistry	Paper XIII: Photochemistry.



Professional Ethics

Professional Ethics		
	Subject	Topic
Class	History	Paper I: Shivaji Administrative system and
BAI	, ,,,	policies- Civil, Military, Judicial, Religious.
вАІ	Chemistry	Paper III & VI: Qualitative and Quantitative
DAI		analysis, Preparations and Estimations.
ваг	Hindi	Paperll: Prayojanmulakhindi, Translation, Letter
		Writing, Advertisement,
B SC II	Botany	Paper XIII: Ornamental, Medicinal Plants, Food,
		Fodder Plants.
	Chemistry	Paper IX: Volumetric Analysis, Gravimetric
B SC II		Analysis, Preparations and Estimations,
		Qualitative and Quantitative Analysis.
BAII	Hindi	पेपर III & VI: सम्प्रेषणम्लक हिंदी
		पेपर VI & VIII: प्रयोजनम्लक हिंदी.
D. A. III	Economics	Paper 115: Trusteeship concept by mahatma
B.A. III	Economics	Gandhi.
BAIII	Hindi	पेपर X & XVI: रोतिकल
<i>57</i> (111	Zoology	Paner XVIII & XXII: Economic Zoology, Fishery
B SC III	2001069	Science, Biostatistics, Bio-informatics and
		medical zoology.
	Chemistry	Paper XIII: Nano Materials, Organic synthesis,
B SC III		Spectroscopic and ethical handling of chemicals.
		Paper XVI: Inorganic Materials, Colloids.
		Paper XVII: Corrosion and passivity, heterocyclic
		compounds, Carbohydrates, Vitamins and
	1	synthetic dyes, Agrochemicals, Soaps and
		detergents, Synthetic polymers, Sugar, synthetic
		reagents, Chromatography, preparation and
		estimations, qualitative and quantitative analysis.
		alialysis.



B. Sc. Second Semester

Course Code – ZOL- 202 Zoology Paper: V

GENETICS - I

1.	Elements of heredity & variation	0.4
	Definition of genetics and variation	04
2.	Mendel's laws of heredity in short Gene interaction	
	Definition- modifications in Mendelian phenotypic ratio like, Epitasis	05
	Supplementary gene Complementary gene	
3.	Multiple Alleles	05
	Coat Colour in rabbit. ABO Blood group in man, Rh factor	
4.	Cytoplasmic inheritance.	80
	Definition of maternal effect. Coiling shell in snail (Limnea peregra Male sterility.	
	CO ₂ sensitivity in <i>Drosophila</i> .	
	Kappa particles in <i>Paramecia</i> .	
5.	Sex Determination	80
	Chromosome theory in sex determination	
	Genic balance theory of sex determination Triploid intersexes and Cypandremersha in Dresser hills	
	Triploid intersexes and Gynandromorphs in <i>Drosophila.</i> Sex linked inheritance: X linked and Y linked	
6.	Mutation	15
	Brief introduction	13
	Gene mutation: - Definition and classification	
	Chromosomal aberration (structural & numerical)	
	Spontaneous & induced mutation	

Total Periods

45



B. A. Ist Year – History SYLLABUS

SEMESTER Ist

PAPER NO. 01: SHIVAJI AND HIS TIMES (A.D. 1630-A.D.1707)

Perio	ds
1. Rise of Maratha Power – Causes, Geography, Political, Socio-religious and economic background, Shahaji Bhosle. 1	()
2. Early expeditions of Shivaji: Concept of Hindavi Swaraj,	
Capture of Torana, Afjalkhan Episod, Siddi Johar's invasion	
Of Panhala Fort.	12
- 3.Shivaji – Mughal relations: Attack on Shahistakhan.	
Invasion of Mirja Raja Jaisinh and the Treaty of Purander, Shiviji's visit to Agra and back to Raigadh.	12
4. Coronation of Shivaji and his Karnataka Expeditions	O8
5. Chatrapati Sambhaji.	05
6. Maratha War of Independence.	05
7.Civil, Judicial and Military Administration during this period	08
7.CIVII, o deliciar area	
Total Periods	60

Note:-

60 periods =04 Cridits.



Total Perio	ds: 60
iii) Indian National Congrass- Maharashtrian Leaders.	12
ii) Poona Sarvajanik Sabha.	
i) The Bombay Association.	
5. National Movement in Maharashtra:	
iii) Revolt of Vasudev Balwant Phadke.	12
ii) Outbreak of 1857 and Maharashtra.	
i) Romoshi, Bhill and Koli Uprising.	
4. Early resistance to colonial rule:	
Ramabai.	12
Phule, M.G. Ranade, Gopal Gensh Agarkar, Pandita	
Gopal Hari Deshmukh (Lokhidwadi), Mahatma Jyotiba	
3. Early Socio-religious Reformers: Balshastri Jambhekar	
Press, Activities of Christian Missionaries.	12
2. Early phase of British Rule: Administration, Education	
Of Maharashtra.	
1.Early Socio-religious and economic conditions	12
(A.D.1818 – A.D.1905)	Periods
PAPER NO. 02:- History of Modern Maharashtra	

Note:- 60 Periods = 04 Credits.

Washi Dist.Oshi

डॉ. वाबासाहेव आंबेडकर मराठवाडा विद्यापीठ,औरंगाबाद

बी. ए. / बी. कॉम. / बी. एस्सी./बी.एस.डव्ल्यू. प्रथम वर्ष मराठी (प्रथम भाषा) अभ्यासक्रमाकरिता शैक्षणिक वर्ष जून २०१३ -२०१४ पासून

सत्र पहिले

कोड नं. MAR009: अभ्यास पत्रिका गद्य-पद्य व उपयोजित मराती

भाग १ ला

तारिका २०

गद्य विभाग

अ- घटक

(99)

(१) सरीक रक्षण - म्हाइंगट

(२) अर्जदस्त - रांत एकनाथ

(३) राजाची कर्तव्ये - रामचंद्रपंत अमात्य

(४) जिजाऊ आमची सून जाली - दत्ताजी त्रिमल वाकेनवौत्र

(५) तुम्ही सदाचरणाने वागा - तारावाई शिंदे

(६) परमेश्वराचे भवितव्य ! - श्री.म.माटे

रात्याग्रही बसव (अन् तचने) - -

पद्य विभाग

व - घटक तासिका-२० धुळी आतील रत्न (9) मुकंदराज कुश्चळ भूमीवरी उगवली तुळसी -(2) संत नागदेव आनंदे वोवीया (3)संत निर्मळा भासा बांघोनि मराठिया (8) फादर स्टिफन्स पूर्वभाग्यदिशा (4) संत जनीजनादन पाडसदेवा (ξ) रांत दासोपंत यातिभेद कुळकर्म गुरुषी मूळ नाहिरे - रामानंद खामी (19) ऐसे केलेया गोपाळे (८) संत शेख महमद मन करा रे प्रसन्न (९) रांत तुकाराम (90) तुइया प्रीतीचे होनाजी -बाळा

जयदेवीताई लिगाडे

डॉ.वावासाहेव आंबेडकर मराठवाडा विद्यापीठ,औरंगावाद

शैक्षणिक वर्ष जून २०१३ -२०१४ पासून विषय:मराठी वी.ए.प्रथम वर्ष (ऐच्छिक)

कोड नं.MAR-१०२

अभ्यासपत्रिकेचे नाव : नाट्यात्म साहित्य

(अभ्यासपत्रिका दुसरी)

सत्र पहिले

तासिका -६०

नाटयात्म साहित्य

अ) फाटलेला पतंग ब) चिंगी महिन्याची झाली नाही तोच - शंकर गोविं : दिवाकर

२. उपरे - रा.रं.वोराडे

३. मुलगी झाली हो.... - ज्योति म्हापसेकर

४. यातना उत्सव - वापू घोक्षे

F.Y.B.A. Economics (Revised Syllabus)

Semester - I

Total Marks:-50

INDIAN ECONOMY (COMPULSORY) - Paper-ECO-102

OBJECTIVES:

The objective of the paper at the F.Y.B.A. level would be to sharpen the analytical faculty of the students, by highlighting an integrated approach to be functioning aspects of the Indian economy, keeping in view the scope for alternative approaches. Such an analysis is essential because the Indian economy is a unique amalgam of alternative competing and often conflicting theories and a proper understanding of its working of its working is imperative if the student is to comprehend the ramifications that underlie most of the observed phenomena in the Indian economic set-up. The emphasis of the paper is on overall social, political and economic environment influencing policy decisions. To develop all these themes, the courses are divided into specific modules.

1. STRUCTURE OF THE INDIAN ECONOMY

- 1.1 Characteristics of the Indian Economy as a less developed economy.
- 1.2 Features: Natural Resources- Land, Water and Forest Resources and Minerals, Need for sustainable development.
- 1.3 Population: Broad features, size and growth rates sex composition. Birth rate death rate, Density, Literacy, Sex composition, Age composition, Occupational distribution, Rural Urban Population- Life expectancy, Rural Urban Migration occupational istribution- Problems of over population, population policy.

2. HUMAN RESOURCE DEVELOPMENT

- 2.1 Human Development Index (HDI): Concept and Meaning, Indicators, Importance
- 2.2 Gender Related Development Index (GDI):
- 2.3 Human Poverty Index (HPI)
- 2.4 HDI Inter country and inter- state comparison

3. POVERTY & UNEMPLOYMENT

- 3.1 Concept of Poverty- Measurement of Poverty Causes of Poverty- Measures to removal of Poverty.
- 3.2 Nature & Types of Unemployment.

4. PLANNING IN INDIA

- 4.1 Background of Indian planning-National Planning Committee, Bombay Plan, Peoples Plan, Gandhian Plan, The Planning Commission.
- 4.2 Objectives & Strategy of Indian Planning.
- 4.3 Achievements & Failures of Five-Year Plan.
- 4.4 Current Five Year Plan Objectives, Allocations & Targets.

4.5 New Economic Reforms.

बी.ए. प्रथम वर्ष

ऐच्छिक हिंदी : प्रथम सत्र

प्रश्नपत्र 1: उपन्यास साहित्य

उद्देश्य:

- सामान्य आस्वादन और अभिरूचि का परिसंस्कार
- 2. जीवन मूल्यों के प्रति आस्था
- 3. उपन्यास साहित्य का अध्ययन
- .4. लेखन तथा भाषण कौशल का विकास

अध्ययन-अध्यापन पद्धित :

- 1. व्याख्यान
- 2. दृक-श्रव्य साधनों का प्रयोग
- 3. कार्यशाला
- 4. परियोजना

> पाठ्यपुस्तकें :

- 1. अमिता : यशपाल : लोकभारती प्रकाशन, इलाहाबाद
- 2. आपका बंटी : मन्नू भंडारी : राधाकृष्ण प्रकाशन, दिल्ली

पाठ्यांश :

- 1. हिंदी उपन्यास : स्वरूप एवं विकास
- 2. 'अमिता' उपन्यास का संवेदनागत अध्ययन
- 3. 'अमिता' उपन्यास का शिल्पगत अध्ययन
- 4. 'आपका बंटी' उपन्यास का संवेदनागत अध्ययन
- 5. 'आपका बंटी' उपन्यास का शिल्पगत अध्ययन

संदर्भ ग्रंथ:

- 1. यशपाल के उपन्यास : समस्यामूलक अध्ययन : डॉ. सीलम व्यंकटेश राज : सीलम प्रकाशन, नामपल्ली हैदराबाद 01
- 2. यशपाल का उपन्यास साहित्य : डॉ. सरोज बजाज, ऋषभचरण जैन

- 3. इतिहास और कल्पना का सुंदर समन्वय: अमिता: डॉ. बी.आर. धापसे, अभय प्रकाश, कानपुर 208021
- मन्नू भंडारी की कथा यात्रा : संपादक डॉ. किशोरसिंह तथा डॉ. मीरा सक्लेना : ज्ञान प्रकाशन,
 कानपुर
- मन्नू भंडारी का रचना संसार : डॉ. मीना ईप्पन, जवाहर पुस्तकालय, स्वर बाजार मथुरा, उत्तरप्रदेश
- हिंदी के समकालीन उपन्यासों में राजनीतिक चेतना : डॉ. सुकुगार भंडां, विकास प्रकाशन, कानपुर
- हेंदी के चर्चित उपन्यासकार : डॉ. भगवतीचरण मिश्र, राजपाल अँड रान्स, कश्मीरी गेट, दिल्ली 06

बी.ए. प्रथम वर्ष

ऐच्छिक हिंदी: प्रथम सत्र

प्रश्नपत्र 2: नाटक साहित्य

> उद्देश्य:

- . हिंदी नाटक तथा रंगमंच का अध्ययन
- . संवेदना का विकास
- . नाट्यास्वादन तथा नाट्यालोचन क्षमता का विकास
- अध्ययन-अध्यापन पद्धति :
- . व्याख्यान
- . दुक-श्रव्य साधनों का प्रयोग
- . नाट्य पठन और प्रस्तुति
- . नाट्यालोचन का अभ्यास

पाठ्यपुस्तकें :

- . विजय पर्व : डॉ. रामकुमार वर्मा, लोकभारती प्रकाशन, इलाहाबाद
- . होरी : प्रेमचंद : नाट्य रूपांतर : विष्णू प्रभाकर, राजपाल प्रकाशन, कश्मीरी मेट दिल्ली
- . अलख आजादी की : सुशीलकुमार सिंह, वाणी प्रकाशन, नई दिल्ली

* Washi Pe

B.Sc. IV Semester

Course Code - ZOL- 401

PAPER: XI

ANIMAL PHYSIOLOGY (Special Emphasis on Mammals

1. Digestion:-

Brief Introduction to digestive system.

Buccal digestion - salivary secretion and digestion.

Gastric digestion - gastric secretion and digestion.

Intestinal digestion - Pancreatic secretion, bile juices and digestion in Small intestine, digestion and absorption in large intestine.

2. Respiration:-

Respiratory organs.

Breathing mechanism.

Respiratory pigments: - Properties and function of respiratory pigment

External respiration.

Internal respiration.

Transport of gases.

3. Circulation:-

Working of mammalian heart.

Blood and its composition.

Mechanism of blood clotting.

4. Excretion:-

Structure of kidney.

Structure of uriniferous tubules.

Urine formation: - Ultra filtration selective, re-absorption and tubular: Counter current multiplier system.

5. Nerve Physiology:-

Structure of nerve cells and neuron.

Neurotransmitters.

Synapses: - Ultra structure and function.

6. Muscles Physiology:-

Ultra structure of smooth muscle, striated muscles, and cardiac musc

Muscle contraction.

Simple twitch and fatigue

7. Reproduction :-

Structure of gonads, Gametogenesis.

Role of sex hormones in Reproduction.

Reproductive cycles - oestrous and menstrual cycle

Total Periods

I/C Principal

Karmaveer Mamasaheb Jagdale Mahavidyalaya, Washi.

* Washi &

डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीट, औरंगावाद

वी.ए./वी.एरसी./वी.एस.डब्ल्यू

द्वितीय वर्ष प्रथम भाषा अभ्यासक्रमाकरिता

संपादक

मराठी अभ्यास मंडळ

डॉ. वावासाहेब आंवेडकर मराठवाडा विद्यापीठ, औरंगावाद

शैक्षणिक वर्ष जून २०१४ पासून लागू - सन्न पहिले

कोड नं. MAR - 03

गाण : ५०

अभ्यासपत्रिका ३ री गद्य - पद्य उपयोजित मराठी

घटक क्र. १

गद्य विभाग

तासिका - २०

पाठाचे नाव

लेखक

৭) छत्रपती शिवाजी महाराजांच्या कार्याचे स्वरूप प्र.न. देशपांडे

२) लोकसंस्कृती आणि जागतिकीकरण

डॉ.द.ता. भोराले

3) मरणानं डाव साधला, नशिबानं हात दिला !

सौ. सिंधुताई सपकाळ

४) लोकराजे मा.खा. पवार साहेब

प्रा. लक्ष्मण ढोवळे

५) वही

स्रेश पाटील (इर्लेकर)

घटक क्र. २

पद्य विभाग

तासिका - २०

कविता

कवी

व) निष्कर्ष

सुहासिनी इर्लेकर

२) आकाशाएवढा

सदानंद सिनगारे

3) साऱ्या घरालाच लागली वाळवी

प्रदीप पाटील

४) कुणबी माझा !

अनिल गव्हाणे

५) बीरसा

वाबाराव मङावी

६) अरूंद दारातून वाहेर पडताना

संजीवनी तडेगावक



PAPER NO. 11 – WOMEN'S STRUGGLE IN MODERN INDIA (A.D. 1850- A.D. 1947) SUGGESTED READINGS:

1	Agnew Vijay	Elite Women in Indian Politics; Delhi Vikas 1979
2	Altekar A.S.	The Positions of women in Hindu Civilisation; Motital Banarasidas, Delhi, 1978
3	Basu A. and Ray B.	Women's Struggle: A History of the all India Women Conference, 1927-1990; Delhi, Manohar 1990
4	Borhwick M.	The Changing Rle of women in Bengal 1849-1905; Princet on University Press, Princeton, 1984
5	Chakravarti Uma and Kumkum Roy	Breaking out of invisibility: Rewriting the History: Changing perception of the Role of women in Politics and Society; UNESCO, Berg. 1988
6	Dehejia, Vidya	Representing the Body: Gender Issues in Indian Art. Kali for women, Delhi 1997
7	Desai Neera	Women in Modern India; Vora. Mumbai-1957
8	Everett, Jana M	Women and Scial Change in India; Heritage Publisher, Delhi, 1981
9	Forbrd, Geraldine	Women in Modern India: Cambridge University Press, Cambridge, 1996.
10	Jayawardene Kumari	Feminism and Nationalism in Third World; Zed Books, London, 1986
11-	Joshi V.C. (Ed.)	Rammohan Roy and the Process of Modernisation in India, Delhi- 1975
12	Krishnamurty, J. Ed.	Women in Colonial Indian: Essay on Survival work and the State; OUP, Delhi,1989
13	Leslie I, Julia Ed	Eoles and Rituals for Hindu Women; Frirleigh dickinsin University Press, Rutherford, N.J. 1991
14	Liddle and Rama Joshi	Daughters of Independence: Gender, Caste and Class in India; Zed Books London, 1986
15	Mani, Lata	Contentious Tradition: The Debate on Sati in Colonial Indian; University of California Press, Berkeley, 1998
16	Mazumdar, Vina	Symbols of Power: Studies on the Political Status of Women in Indin; Allied Delhi, 1979.
17	Minault Gail	Scheduled Scholars: Women's education and Muslim Social Reform in Colonial India; OUP, Delhi, 1998
18	Hate Chandrakala	Changing Status of Women
19	Randive Vimal	Women Workers of India
20	Kaul Krishana Prasad	The Position of Women Indian Society.
21	Minault Gail	The Extended family: Women and Political Participation in India and Pakistan; South Asia Book. Columbia Mo, 1981
22	Misra Rekha	Women in Mughal India (1526-1748 AD) Munshirans Manoharlal, Delhi, 1967
23	Murshid Ghulam	Reactant Debutante: Response of Bengali Women to Modernization 1849-1905 Rajshahi University,



-		Rajshahi, 1983
24	Nair Janaki	Women and Law in Colonial India: Social History, Kalifor Women; Delhi 1996
25	Nanda B.R. (Ed)	Indian Women: From Purdah to Modernity; Vikas. Delhi, 1976
26	Ray,Bharati and Basu, Aparna(Ed)	From freedom to Independence women and ifty years of India's Independence: OUP Delhi,1999
27	Sangari, Kumkum and Sudesh Vaidya	Recasting Women; Essays on Colonial History, Kali for Women: Delhi, 1990
28	Siha, Mrianlini	Colonial Masculinity: Manchester University Press, Manchester 1995
29	Taru, Susie and K. Lalita (eds)	Women Writings in Indian Vol. 1 600 BC to the eartly Twentieth Century, Vol. II The Twentieth Century 1960-1991
30	Towards Equality:	Report of the Committee on the Status of women in India; Delhi, 1975.

मनाठी किन्की संकर्भ ग्रंथ सूची

8	यशावंतवाव चक्हाण महावाष्ट्र मुक्त विद्यापीठ	ब्राधुनिक भावतातील वजी जीवन
₹	के. जा. टिळक	महाबाष्ट्राची तेजिक्शिमी पंडिता भूमाबाई
3	डॉ. कमलाबाई केशपांडे	विजयांच्या कायह्याची आरचाल
У	गालक्षी आवरे	विधवा विवाह चळवळ
ч	लक्ष्मीबाई टि:ळक	'अमृति चिन्हें
۲,	यमाषाई बामडे	आमच्या आयुष्यातील काही आठवणी
lo .	डॉ. अयोजिनी खाषम	ञ्जी शिक्षाणाची पाटचाल
4	गोकावारी प्रमुख्यान	क्षेण्हा माणूस जागा होतो
9	विध्यंभ मा.श्री.	्रशी बमाबाई बानडे, ट्यक्ति आणि कार्य
10	गवाणकन्न नोहिणी	ক্র্যেন লঙ্কনী স্ন মাত্যী ফ্রাঞ্চী ইত্যিসত
११	भागवत कमल व হ্রন্ম	`२ेजी घळवळीची प्राटचाल
१२	लिमये नीला, केशापांडे निलिमा	बाष्ट्रीय २०१३ ातंज्याची चळवळ, दलित व २००१ मुक्ति

Washi Dist. Oslin

B.Sc. III (Practical) Semester -VI Paper XXI

(Genetics and Biotechnology)

(45 L)

- 1. Quiz
- 2. Working out laws of inheritance by using seed mixtures
- 3. Problems based on gene interaction
- 4. Problems based on sex linked inheritance

बी.ए. प्रथम वर्ष

ऐच्छिक हिंदी : प्रथम सत्र

प्रश्नपत्र 1: उपन्यास साहित्य

⊳ उद्देश्य:

- सामान्य आस्वादन और अभिरूचि का परिसंस्कार
- 2. जीवन मूल्यों के प्रति आस्था
- 3. उपन्यास साहित्य का अध्ययन
- .4. लेखन तथा भाषण कौशल का विकास
- अध्ययन-अध्यापन पद्धति :
- 1. व्याख्यान
- 2. दृक-श्रव्य साधनों का प्रयोग
- 3. कार्यशाला
- 4. परियोजना

पाठ्यपुस्तकें :

- 1. अमिता : यशपाल : लोकभारती प्रकाशन, इलाहाबाद
- 2. आपका बंटी : मन्नू भंडारी : राधाकृष्ण प्रकाशन, दिल्ली

> पाठ्यांश:

- 1. हिंदी उपन्यास : स्वरूप एवं विकास
- 2. 'अमिता' उपन्यास का संवेदनागत अध्ययन
- 3. 'अमिता' उपन्यास का शिल्पगत अध्ययन
- 'आपका बंटी' उपन्यास का संवेदनागत अध्ययन
- 5. 'आपका बंटी' उपन्यास का शिल्पगत अध्ययन

संदर्भ ग्रंथ:

यशपाल के उपन्यास : समस्यामूलक अध्ययन : डॉ. सीलम व्यंकटेश राज : सीलम प्रकाशन,
 नामपल्ली हैदराबाद - 01

2. यशपाल का उपन्यास साहित्य : डॉ. सरोज बजाज, ऋषभचरण जैन

B.A. First Year

SEMESTER - I

Paper Code - 101

(Effective from academic year 2013-14)

BASIC CONCEPTS OF POLITICAL SCIENCE

Total: 50 marks Examination: 50 marks

1) State

Periods Allotted: 15

- 1.1 Meaning and Nature
- 1.2 Elements of state
- 1.3 Theories of origin of state: Divine theory, Social Contract theory, Evolutionary theory
- 2) Government

Periods Allotted: 15

- 2.1 Meaning and Definition
- 2.2 Organs of Government: Legislature, Executive and Judiciary
- 2.3 Types of Government: Unitary, Federal, Parliamentary & Presidential
- 3) Sovereignty

Periods Allotted: 15

- 3.1 Meaning, Definition & Types
- 3.2 Austin's Theory of Sovereignty
- 3.3 Pluralistic Theory of Sovereignty
- 4) Citizenship & Rights

Periods Allotted: 15

- 4.1 Citizenship: Meaning, Types and methods of acquisition
- 4.2 Meaning, Definition and Types of Rights and Duties

PAPER NO. 02:- History of Modern Maharashtra	
(A.D.1818 – A.D.1905)	Periods
1.Early Socio-religious and economic conditions	12
Of Maharashtra.	
2. Early phase of British Rule: Administration, Education.	
Press, Activities of Christian Missionaries.	12
3. Early Socio-religious Reformers: Balshastri Jambheka:	
Gopal Hari Deshmukh (Lokhidwadi), Mahatma Jyotiba	
Phule, M.G. Ranade,Gopal Gensh Agarkar, Pandita	
Ramabai.	12
4. Early resistance to colonial rule:	
i) Romoshi, Bhill and Koli Uprising.	
ii) Outbreak of 1857 and Maharashtra.	
iii) Revolt of Vasudev Balwant Phadke.	12
5. National Movement in Maharashtra:	
i) The Bombay Association.	
ii) Poona Sarvajanik Sabha.	
iii) Indian National Congrass- Maharashtrian Leaders.	12
Total Penod	- ls; 60

Note:- 60 Periods = 04 Credits.

I/C Principal
Karmaveer Mamasaheb Jagdale
Mahavidyalaya, Washi.

Mu

डॉ .बावासाहेब आंवेडकर मराठवाडा विद्यापीठ,औरंगावाद

बी. ए. / बी. कॉम. / बी. एरसी./बी.एस.डब्ल्यू. प्रथम वर्ष मराठी (प्रथम भाषा) अभ्यासक्रमाकरिता शैक्षणिक वर्ष जून २०१३ -२०१४ पासून

सत्र दुसरे

कोड नं. MARoo२: अभ्यास पत्रिका गद्य-पद्य व उपयोजित मराती

भाग- २ रा

गद्य विभाग

अ-घट	क		तासिका-२०
(9)	शेवटचे कीर्तन		संत गाडगेबाबा
(२)	देशाचे भवितव्य		डॉ. बाबासाहेव आवेडकर
(3)	लोकभाषा हीच ज्ञानभाषा		यशवंतराव चल्हाण
(8)	कोवळे मरण		भालचंद्र नेमार्ड
(५)	ठिणगी	-	रामराव झुंजारं
(٤)	भूक		महाद्व गायतः व
	पद	। विभाग	
ล-ย	टक		तासिका-२०

ब-घटक		•		तासका-रू
(9)	कुळंबिण	-	ग. जोतिबा फुले	
(२)	निर्झरास		बालकवी	
(३)	नवमहाराष्ट्र गीत	-	सुरेश भट	
(৪)	आई		ग्रे स	
(y)	गिरोबा		वीर धवल परब	
(६)	गल्टीलुटालुटीचा झिंग	लपालपा -	अस्ता कान्	
(0)	विरसा मुंडा		गुजंग मेश्राम	
(८)	गुणवत्तेचा निकष		संगाजी सावळकर	
(9)	म्लोबल मेंदीची नक्षी		अजीम नवाज सही	
(9o)	वाप		रांजय आधान	
(99)	काय असतं प्रेम		ं प्रतीक्षा गायकवाड ү	1111.5



डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद

वी.ए./बी.एरसी./वी.एस.डत्ल्यू

द्वितीय वर्ष प्रथम भाषा अभ्यासक्रमाकरिता

संपादक

मराठी अभ्यास मंडळ

डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद

शैक्षणिक वर्ष जून २०१४ पासून लागू सन्न पहिले

कोड नं. MAR - ०३

ग्रावा : ५०

अभ्यासपत्रिका ३ री गद्य - पद्य उपयोजित मराठी

घटक क्र. १

गद्य विभाग

तासिका - २०

पाठाचे नाव

लेखक

9) छत्रपती शिवाजी महाराजांच्या कार्यांचे स्वरूप प्र.न. देशपांडे

२) लोकसंस्कृती आणि जागतिकीकरण

डॉ.द.ता. भोसले

३) मरणानं डाव साधला, नशिबानं हात दिला !

सौ. सिंधूताई सपकाळ

४) लोकराजे मा.खा. पवार साहेब

प्रा. लक्ष्मण ढोबळे

५) वही

सुरेश पाटील (इर्लेकर)

घटक क्र. २

पद्य विभाग

तासिका - २०

कविता

कवी

निष्कर्ष

सुहासिनी इर्लेकर

२) आकाशाएवढा

सदानंद सिनगारे

3) साऱ्या घरालाच लागली वाळवी

प्रदीप पाटील

४) कुणबी माझा !

अनिल गव्हाणे

५) बीरसा

बाबाराव मडावी

६) अरूंद दारातून वाहेर पडताना

संजीवनी तडेगावकर,



HISTORY SYLLABUS IIND

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD.

SYLLABUS OF B. A. IInd YEAR (HISTORY)

(SEMESTERWISE)

SEMESTER-IIIrd

PAPER NO. V - HISTORY OF EARLY INDIA (UPTO B. C. 300)

Sr.No	Name of the Chapter	Periods Alloted
1	A) Religious and secular Literature, Foreign Accounts B) Archaeological, Numismatic Sources	10
2	A) Stone age culture B) Harappan civilization – Major sites, Town planning, Socio – Religious and Economic Life.	12
3	Vedic culture: Original home of Aryas Early Vedic age – Society, economy, Religion Later Vediv age – polity, society, economy and religion	12
4	A) Religious Movements – Jainism and Buddhism B)Philosophy - Upnishadas, Shaddarshan and Charwak	12
5	A) Janapadas and Mahajanapadas – Rise of Magadha B)Mauryan Empire – Chandragupta Mauryan, Ashoka, Mauryan Economy, Administration. Art and Architecture.	14
	Total Period	60

Washi Dist. Oshi

I/C Principal Karmaveer Mamasaheb Jagdale Mahavidyalaya, Washi.

(2) angule

3

Books of Station in History

Dr. Sobesthuil Ambedium Marethwada

University Amangabad

SYLLABUS OF B. A. IInd YEAR (HISTORY)

(SEMESTERWISE)

$\mathsf{SEMESTER} \cdot \mathsf{IV}^\mathsf{th}$

PAPER NO. VII - HISTORY OF INDIA (B. C. 300 - A. D.650)

Sr.No	Name of the Chapter	Periods Alloted
1	Sources: Literary And Archaeological Sources	06
2	Brief Survey of Political Changes: Sungas and Kanvas, Allexandar's invasion. Shakas, satavahanas, western Kshtrapas. Kushan, Gupta, Wakataka dynesty, Harsha wordhan Sangam age	12
3	Socio – Economic Life: Structure of Society, Social Traditions, Education, Status of women Economic Condition and urbanization.	12
4	Religious life: Propogation of Jainism, Buddhism, Shaivism and Vaishnavism	12
5	Development of Arts and Architecture : Temple Architecture – Evolution of Major regional styles	10
6	Language and Literature – Sanskrit, Prakrit, Kannad and Sangam.	08
	Total Period	60

Total – 60

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DR.BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,AURANGABAD Faculty Of Science

B.Sc. II year (Practical) Semester -IV

Paper -XIII

Gymnosperms and Utilization of plants

(Based on paper no - XI)

45L

Gymnosperms:

- a) Cycas
- i. Habit, young leaf, bulbils, male cone, microsporophyll, megasporophyll, pollen grains, mature seed.
- ii. Study through permanent slides-Normal root (T.S.). Stem (T.S.), Ovule (L.S.).
- iii. Study through hand section-Coralloid root (T.S.), Rachis (T.S.), Leaflet (T.S.).

b) Pinus

- i. Habit, long and dwarf shoot, scale leaves, foliage leaves, male cone, female cone, pollen grains (W.M.), winged seed.
- ii. Study through hand sections and permanent slides Root (T.S.), Stem (T.S.), Needle (T.S.).
- iii. Study through permanent slide T.L.S. & R.L.S. of stem, L.S. of male cone, L.S. of female cone.
- c) Gnetum
- i) Habit, T. S. of Stem, Male cone and female cone.

Paleobotany:

- a) Types of fossils (Specimens).
- b) Lygynopteris (Specimen / Permanent slide).

Utilization of plants:

- a) Food plants Study of the morphology, structure, and histochemical tests of food storing tissue in Jowar & Wheat.
- b) Histochemical test of lignin and cellulose.
- c) Cultivation of Oyster (Pleurotus) mushroom on agricultural waste.
- d) Vegetable oils hand section of Groundnut & Sunflower Seed and staining of oil droplets by Sudan III.
- e) Study of the sources of Timber, Gum, Medicinal plants, Cosmotics and Perfumes.
- f) Study of Black pepper, Clove, Cinnamon, Cumin, Coriander.
- f) Field notebook, specimen collection, and tour report.

Karmaveer Mamasaheb Jagdale Mahavidyalaya, Washi.

PAPER NO. 09 - HISTORIOGRAPHY

	EKTA	
0116	GGESTED READINGS:	
SUC	3012011212	Introduction to the Philosophy of History 1
-	Aaron Ramond	
1	Barnes H.E.	Historical Inevitability, London, 1954 Historical Inevitability of Thought.
2	Berlin Isaiah	Historical Inevitability, Bondary
3	Berim Isalan	A History of Freedom of Thought. A History of Freedom of London 1951
4	Bury J. B.	A History of Freedom of Thoughts History of Human relations: London 1951 History of Human History: Chicago, 1961.
5	Burtterfiled Herbert	and market of the filler of th
6	Cohen M.R.	The Idea of History: London 1961 The Idea of History: London 1961
7	Collingwood R.G.	the theory and Didelice, The
8	Croce Bendetto	History as System: New York 1961 History as System: New Hayen 1955
9	Geast	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
10	Geyl Pieter	Use and Abuse of Miscony: London, 1963
11	Geyl Pieter	Encounters in History : Dondon, 1932
12	Gooch G.P.	History and Historians in the Chicago, 1963
	Gottachalk Louis (Ed)	Generalization in the Writing of History, Cheege, The Problem of History and Historiography; Allahabad, 1946 The Problem of History London, 1962
13	Joshi V.V.	me busham of History and House
14		Freedom and HISIOIV LUMON,
	Lewis H.D.	mi and History' Longon, 1990
16	Mises L.V.	Time 11 - Calso Doct' New YOR 1757
17	Muller H.J.	
18	Popper K.R.	Lictorical Experience, 1997
19	Randall J.H.	Undersanding History: New York 1957 Undersanding History: New York, 1948
20	Russel Bertrend	History of Historical Writing; New York, 1948
21	Thomson J.W.	
22	Toyndee A.J.	Historigraphy; Surjeet Book Depot, Delhi, 1974
23	R.C.Majumdar & A.N.	
	Shrivastav	What is History; Continental Publisher, 1954.
24	E.H. Carr	
25	Sen S.P. (E.d)	Historians and Historiography in Modern India. History its theory and method; Macmillan India Ltd. Madras,
26	B. Shaikh Ali	
20		1078
27	K.N. Chitnis	Research Methodology in History; Pune 1979
28	Gardiner	Theories of History
29	Gardiner	Guide to Historical Method
27	Cardinor	

मयाठी□ हिंकी संकर्भ ग्रंथाची सूची ३

ई.एच.काम अनुवादक		1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		इतिहाश म्हणजे काय कॉिंग्टिनेन्टल प्रकाशन,
प्रा. वि.गो.लेले	1	पुणे
		इतिहाशका इतिहाश हिर्याणा शाहित्य
		वालाहमी चंहिगह, १९८८
क्ष मोविंद्रचंद्र पांठे		इतिहानाः २वक्षप एवं भिध्वांत याजव्यान
Diromorphic and		हिं की ग्रंथ अकावमी, जयपुर १९९८
. दी. को आंधी		पुत्राणकथा व वाञ्तवता
	-	इतिहाशतील अम्तःप्रवाह
		'भाधन चिकित्भा िलोकपाड्य गृह, गुंधई १९७६
	-	इतिहाश शाश्त्र आणि कलां□केशमुन्ध
	गार्डन चाईल्ड डॉ. गोविंद्यंद पांडे डी. डी. कोशोबी द.वि. केतकम ग.ह. यामे	गार्डन चाईल्ड डॉ. गोविंदचंद पांडे डी. डी. कोशीबी द. वि. केतकार ग. ह. खारे

HISTORY SYLLABUS FINAL

PAPER NO. 14 - LANDMARKS IN THE HISTORY OF MODERN WORLD

Sr.No.	Name of the Chapter	Period
•		Allotted
1	Renaissance and Reformation in Chapter	10
2	American war of Independence	08
***************************************	Causes, Course and Consequences	
3	French Revolution:	08
	Causes, Course and Consequences	00
4	Industrial Revolution:	10
	Background, Development, Significance.	10
5	European imperialism in Asia & Africa	08
	First World War: Causes and Effects	00
6	Russian Revolution of 1917:	08
	Causes, Course and Consequences.	08
7	Second World War:	08
	Causes, Course and Consequences	00
	Total periods:	60

NOTE:

1] 60 periods = 04 credits

बी.ए. तृतीय वर्ष पेपर क्र. X - आदि तथा मध्यकालिन हिंदी साहित्य का इतिहास पंचम सत्र (Semester -V)

उद्देश्य:

- १. साहित्य आस्वादन अभिरूची का परिसंस्कार
- २. जीवन मूल्यों के प्रति आख्था
- ३. हिंदी साहित्य की परम्परा से परिचय

अध्ययन-अध्ययन प्रक्रिया

- १. व्याख्यान पद्धति
- २. लेखन एवं पठन कौशल वृद्धि के लिए अध्ययन

१) हिंदी साहित्येतिहास: लेखन स्त्रोत एवं परम्परा

- हिंन्दी साहित्येतिहास लेखन के प्रमुख स्त्रोत
- हिंन्दी साहित्येतिहास लेखन परम्परा

२) आदिकाल

- आदिकाल की सामाजिक, सांस्कृतिक तथा राजनितिक पृष्ठभूमि
- आदिकालीन साहित्यः वीरगाथा , जैन, सिद्ध तथा नाथ साहित्य
- रचनाकार -अमीर खुसरो, विद्यापति, नामदेव

३) भक्तिकाल

- भक्तिकाल की सामाजिक, सांस्कृतिक तथा राजनितिक पृष्ठभूमि
- निर्गुण भक्ति साहित्य संत साहित्य , सूफी साहित्य
- सगुण भक्ति साहित्य रामभक्ति साहित्य, कृष्ण भक्ति साहित्य
 रचनाकार -कबीर, जायसी, तुलसीदास, सूरदास

४) रीतिकाल

- रीतिकाल की सामाजिक, सांस्कृतिक तथा राजनितिक पृष्टभूमि
- रीतिकालीन साहित्य रीतिबद्ध, रीतिसिद्ध तथा रीतिमुक्त
- रचनाकार-केशवदास, पद्माकर, बिहारी , घनानंद, भूषण

प्रश्नपत्र का प्रारूप एवं अंक विभाजन

		कुल अक- ५०
9)	संपूर्ण पाठ्यक्रम पर लघुत्तरी प्रश्न विकल्पसहित-	90
	संपूर्ण पाठ्याक्रम पर दीर्घोत्तरी प्रश्न विकल्पसहित -	१५
3)	संपूर्ण पाठचाक्रम पर दीर्घोत्तरी प्रश्न विकल्पसहित -	94
૪)	संपूर्ण पाठ्यक्रम पर टिप्पणियाँ चार में से दो -	90

Washi Karmaveer Mamasaheb Jagdal Mahavidyalaya, Washi.

B.Sc. V Semester

Course Code - ZOL- 504 PAPER: XVIII - A

FISHERY SCIENCE – I (PRACTICAL) (Elective Paper)

I.	Study of freshwater fishes. Major carps Other carps. Cat fishes Clupoides	03
2. St	udy of brackish water fishes.	02
	Hilsa hilsa, Chanos chanos (milkfish), Latis calcarifer, Tilapia	
3.	Study of marine ware fishes. Oil sardine Mackerel Ribbon -fish Bombay-duck Pomfret Sole Polynemus	03
4.	Water analysis	05
5.	Visit to local or any reservoir and marine fish landing centre and student submit a project report at the time of practical examination	should be 02

Washi Dist.Os. Moshi Dist.Os. Moshi

I/C Principal Karmaveer Mamasaheb Jagdale Mahavidyalaya, Washi.

Total practical periods: -

15

DEPARTMENT OF POLITICAL SCIENCE M.A. SYLLABUS

Course Code	e: PSC- 401 No.of. Credits: 04 Semester: I (M.A.Course)	
Course Title	e: Western Political Theory	
Assignments	s/ Sessional: 20 Marks	
Semester Ex	ams: 80 Marks	
Course Obj	ectives: The aim of this course is to introduce students, the meaning	ng and natura
of political th	neory, debates as well as recent theoretical trends in the discipline.	ig and nature
Pre-Requisit	tes:	
Units	Course Content	Hours
I	Nature and significance of Political theory	12
	- Meaning of Political Theory	12
	- Distinction between Political Theory and Political	
	Philosophy, Political Theory and Political Ideology	
	- Uses of Political Theory	
П	The Nature of Tradition of Classical Political Theory	12
	- Normative Political Theory,	
TTT	- Empirical Political Theory	
m	Decline of Political Theory	12
	- Influences led to Decline of Political Theory,	
	- Devid Eastin;s and Alfred Cobban's arguments of Decline of Political Theory	
IV	Revival of Political Theory	12
	- Traditional base in revival of Political Theory, works of	12
	Arendt, Herbert Marcuse, Leo Strauss, Oakeshot,	
	- Recent works in revival of Political Theory- Berlin's view	
	on liberty and John Rawls theory of justice.	
V	Short Introduction to Recent Trends in Political Theory:	12
	- Social justice and Right theory,	
	Feminist Political Theory,Liberalism and Communitarism,	
	- Rational Political Theory,	
	Total Sixty Hours includes contact Hours	(0)
	- State States Hours metades contact Hours	60

Essential Readings:

- 1. A.Heywood, Political Theory, An Introduction, London Macmillan, 1999
- 2. Robert E Guoodin and Hans Dieter Klingemann, *A Handbook of Political Science*, Oxford, 1996 see part VI: Political Theory.
- 3. W.Kymllicka, Contemporary Political Philosophy: An Introduction, Oxford, The Clarendon Press, 1990
- 4. G.H. Sabine, A History of Political Theory, New York Henry Hord, 1937.

New Coolds with Semester System Syllebus 2011-2012 Cry by Kishin Kale



DEPARTMENT OF POLITICAL SCIENCE M.A. SYLLABUS

Assignme	itle: Modern Trends in Political Theory ents / Sesssional: 20 Marks	
OCHICSICI	Evame: VOM	
Course C	Discrives: The Course provides the students with an overview of the cuneory. It will help the students gain insight into the divergent trends in the second control of the control of the students.	
heory	neory. It will help the students gain insight into the divergent trends in the n	Irrent trand
neory	gan maight into the divergent trends in the n	10dern politica
	sites;	reactif politica
Units	Course C	
I	Social Justice: Rawls and his critics	Hours
II		12
11	Theory of Rights: Current debates	
777		12
111	Feminist Political Theory	
17.		12
IV	Libertarianism & Communitarianism	
	- Communicarianism	12
V	Theory of Welfare State and its critique	
	state and its critique	12

Suggested Reading

- 1. John, Rawls, Justice as Fairness: A Restatement, Delhi, Universal Law Publishers, 2004
- 2. George Sabine, A History of Political Theory, Oxford & Ibh Publishing, 1973
- 3. Meena, Deshpande, Contemporary Political Theory, Bangalore, Bharatiya Vidya Bhavan, 2000
- 4. O.P. Gauba, An Introduction to Political Theory, Macmillan 2009,
- 5. Andrew Heywood, Political theory: An Introduction, Pal Exclusive, 2004
- 6. Sushila Ramaswamy, Political Theory: Ideas and Concepts, Macmillan India,
- 7. J.C. Johary, Contemporary Political Theory, Sterling 2007
- 8. Nayyar Shamsi, Modern Political Theory, Anmol, 2006
- 9. Paul Schumaker, The Political Theory Reader, John Wiley and Sons, 2010
- 10. Attracta Ingram, A Political Theory of Rights, Oxford University Press, 1995
- 11. S.R. Sharma & A.S. Kohli, The Welfare State, Anmol, 1997
- 12. Jan Narveson, The Libertarian Idea, Broadview Press, 2001
- 13. B.N. Ray, Liberalism and Communitarian Challenge, Kanshika Publishers, 1999
- 14. Sushila Singh, Feminism: Theory, Criticism & Analysis, Pencraft International,
- 15. Bhole Bhaskar, Rajakiya Siddhanta ani Vishleshan, 2002
- 16. Rege M. P, Swatantrya, Samata ani Nyaya, Mumbai, 2005

mester System Syllaton 2011-2011



Karmaveer Mamasaheb Jagdale Mahavidyalaya, Washi.

B. Sc. I Year (Theory) Semester - I Paper I (Diversity of Cryptogams - 1)

YY., 24 H	45L
Unit - 1 1.1 Viruses:	
General characters, classification based on host, economic importa	mee
TMV – structure and multiplication	(04)
1.2 Mycoplasma:	10.1
General characters	(01)
1.3 Bacteria:	
General characters, ultra structure, classification based on shape,	
reproduction, economic importance	(05)
1.4 Cryptogams;	17070
General characters, classification according to G.M. Smith up to class le	vel (01)
1.5 Lichens:	
General characters, nature of association, forms of thalli, economic	(04)
importance, structure and reproduction in <i>Usnea</i>	ן דיטן
Unit - 2	
 Algae: 1.1 General characters, classification according to F.E. Fritsch (1935) 	
up to the class level, economic importance.	(02)
2.2 Systematic position, occurrence, thallus structure, reproduction:-ve	
asexual and sexual, (excluding development of sex organs) and gray	hic life
cycle with respect to following types:	
i. Cyanophyceae – <i>Nostoc</i>	(02)
ii. Chlorophyceae – Chara	(03)
iii. Xanthophyceae – Botrydium	(02)
iv. Phaeophyceae – Sargassum	(03)
v. Rhodophyceae - Batrachospermum	(03)
Unit - 3	
3. Fungl:	
3.1 General characters, classification according to Alexopoulous and	
Mims (1979) up to the class level, economic importance	(03)
3.2 Systematic position, occurrence, structure of mycelium,	
reproduction - asexual, sexual and graphic life cycle with respect to th	e
following types:	
i) Oomycetes - Albugo	(03)
	(02)
ii) Zygomycetes – Mucor	(02)
iii) Ascomycetes - Eurotium	(03)
iv) Basidiomycetes – Agaricus	(02)
v) Deuteromycetes – Cercospora	(~-)



F.Y.B.A. Economics (Revised Syllabus)

Semester – I

Total Marks:-50

INDIAN ECONOMY (COMPULSORY) - Paper-ECO-102

OBJECTIVES:

The objective of the paper at the F.Y.B.A. level would be to sharpen the analytical faculty of the students, by highlighting an integrated approach to be functioning aspects of the Indian economy, keeping in view the scope for alternative approaches. Such an analysis is essential because the Indian economy is a unique amalgam of alternative competing and often conflicting theories and a proper understanding of its working of its working is imperative if the student is to comprehend the ramifications that underlie most of the observed phenomena in the Indian economic set-up. The emphasis of the paper is on overall social, political and economic environment influencing policy decisions. To develop all these themes, the courses are divided into specific modules.

1. STRUCTURE OF THE INDIAN ECONOMY

- 1.1 Characteristics of the Indian Economy as a less developed economy.
- 1.2 Features: Natural Resources- Land, Water and Forest Resources and Minerals, Need for sustainable development.
- 1.3 Population: Broad features, size and growth rates sex composition, Birth rate death rate, Density, Literacy, Sex composition, Age composition, Occupational distribution, Rural Urban Population- Life expectancy, Rural Urban Migration occupational istribution- Problems of over population, population policy.

2. HUMAN RESOURCE DEVELOPMENT

- 2.1 Human Development Index (HDI): Concept and Meaning, Indicators, Importance
- 2.2 Gender Related Development Index (GDI):
- 2.3 Human Poverty Index (HPI)
- 2.4 HDI Inter country and inter- state comparison

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3. POVERTY & UNEMPLOYMENT

- 3.1 Concept of Poverty- Measurement of Poverty Causes of Poverty- Measures to removal of Poverty.
- 3.2 Nature & Types of Unemployment.

4. PLANNING IN INDIA

- 4.1 Background of Indian planning-National Planning Committee, Bombay Plan, Peoples Plan, Gandhian Plan, The Planning Commission.
- 4.2 Objectives & Strategy of Indian Planning.
- 4.3 Achievements & Failures of Five-Year Plan.
- 4.4 Current Five Year Plan Objectives, Allocations & Targets.
- 4.5 New Economic Reforms.

+ page

First Semester

Paper-III

Lab Course-I

45 Hrs. 3 Hrs / Week

I

Volumetric Analysis:

10 Hrs.

- Preparation of 0.1N. NaOH solution and its standardization by given oxalic acid solution.
- Preparation of 0.1 N oxalic acid solution and its standardization by given KMNO₄ solution.

II **Inorganic Qualitative Analysis:**

15 Hrs.

- Identify two acid and two basic radical from the given binary mixture.
- a] $CdSO_4 + NH_4Cl$
- b] $BaCO_3 + Al_2 (NO_3)_3$
- c] $ZnCO_3 + KBr$
- d] $MnCO_3 + MgSO_4$
- el NiSO₄ + MgCO₃

Ш

Physical Chemistry

20 Hrs.

Eudiometer:

Determination of Equivalent

weight of mg. weight of mg.

Viscometer:

To Determine Viscosity of

given liquid (Water / Ethanol) by

viscometer.

Staglanometer:

To determine surface tension of

given liquid.

Chemical Kinetics: *To study the effect of acid

strength on the hydrolysis of an

ester.

*To determine the specific reaction

rate of the hydrolysis methy1/ ethy1 acetate catalyzed by

hydrogen ions at room

temperature.

Colorimeter:-

Verification of Lambert-Beer's law using

Spectrophotometer. [Colorimeter].

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Second Semester

Paper-IV

Physical Chemistry

(45 Hrs) 3 Hrs. / Week

I Mathematical Concepts:

06 Hrs.

Logarithmic relations, curve sketching, linear graphs and calculation of slopes, differentiation of functions like $k^x e^x$, x^n , $\sin x$, $\log x$; maxima and minima, partial differentiation.

II <u>Gaseous States:</u>

08 Hrs.

Postulates of kinetic theory of gases, kinetic gas equation, Deduction of Gas Laws: Boyles Law, Charles Law, Grahams Law of diffusion, Avogadro's hypothesis, deviation from ideal behavior, van der Waals equation of state. Critical Phenomena: PV isotherms of real gases.

III Chemicals Kinetics and Catalysis:

10 Hrs.

Chemical Kinetics and its scope, rate of reaction, factors influencing the rate of reaction - concentration, temperature, pressure, solvent, light, catalyst concentration dependence of rates. Derivation of rate law and characteristics of simple chemical reactions - zero order, first order, second order, Pseudo order, half life. Effect of temperature on rate of reaction. Arrhenius equation, concept of activation energy.

Catalysis: Definition, types, and characteristics of catalysis, homogeneous, heterogeneous catalysis - Enzyme catalysis and its application.

IV <u>Liquid State:</u>

6 Hrs.

Intermolecular forces, structure of liquids (a qualitative description).

Differnce between solids, liquids and gases.

Liquid Crystals: Classification, structure of nematic and cholestric phases.

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V Solid State:

7 Hrs

Types of solids, Amorphous, crystalline and difference between them, Miller Indices.

Laws of crystallography - (i) Law of constancy of interfacial angels (ii)Law of rationality of indices (iii) Law of symmetry. Symmetry elements in crystals. X-ray diffraction by crystals. Derivation of Bragg equation.

VI <u>Colloidal State</u>:

8 Hrs

- Definition of colloids, classification of colloids.
- Solids in liquids (sols): properties kinetic, optical and electrical; stability of colloids, protective action. Hardy Schulze Law.
- Liquids in liquids (emulsions): types of emulsions, preparation.
- Liquids in Solids (gels): classification, preparation and properties, general applications of colloids.

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B.Sc. (Second Year) (Third Semester)

Organic Chemistry

Paper VII

45 Hrs

1) Alcohols:

06 Hrs.

Definition: *Monohydric Alcohols:* Methods of Formation by reduction of Aldehydes, Ketones, Carboxylic Acids and Esters (one e.g. each) Acidic Nature, Reactions of Alcohols.

Dihydric Alcohols: Method of Formation of Ethylene Glycol-industrial method and From Alkenes using Oso₄, Chemical Reactions of Ethylene Glycolnitration, Acylation, Oxidation (Using Pb (OAc)4 without Mechanism Pinacol-Pinacolone rearrangement, *Trithydric Alcohols:* Preparation of Glycerol from propane, Reactions of Glycerol.

2) Phenols: 06 Hrs.

Preparation of Phenol from Cholorobenzene, Cumene and Benzene Sulphonic Acid, Physical properties, Acidic Nature of Phenol, Resonance stabilization of Phenoxide Ion. Reactions of Phenols-Electrophilic Aromatics Substitution, Acylation, Carboxylation (Without Mechanism) Reactions with Mechanism-intermolecular Fries Rearrangement, Claisen Rearrangement, Gattermann Synthesis and reamer Tiemann Reaction.

3) Aldehydes and Ketones:

10 Hrs.

Aldehydes: Preparation of Aldehydes from Acid Chloride, Gattermann-Koch Synthesis Ketones-Preparation from Nitriles and from Carboxylic Acid, Physical Properties of Aldehydes and Ketones. Mechanism of Nucleophilic Additions to Carbonyl Group with particular emphasis on Benzoin, Aldol Knoenenagel condensations, Mannich Reactions. Use of Acetals as Protecting Group. Oxidation of Aldehydes using Chromium Trioxide, Baeyer-Villeger Oxidation of Ketones.

M.,

4) Carboxylic Acids:

09 Hrs.

Acidity of Carboxylic Acids, Effects of substituent's of substituents on Acid strength, preparation of Acetic Acid from Co2 from Nitriles, from Acid Chloride, Anhydride, Ester and Amide. Physical Properties and reactions of Carboxylic Acids-Synthesis of Acid Chloride, Ester and Amide, Hell-Volhard-Zelinsky Reaction. Reduction using LiAIH4, Mechanism of Decarboxylation, hydroxyl Acids-Malic, Tartaric and Citric Acid. Methods of Formation and Chemical reactions of Acrylic Acid.

5) Organic Compounds of Nitrogen:

14 Hrs.

Preparation of *Nitroalkanes*. Nitration of Benzene and Their Reduction in Acidic, Neutral and Basic Media.

Amines-Basicity of Amines, Amine Salt as PTC. Preparation of Alkyl and Aryl Amines (Reduction of Nitro Compounds', Nitriles) Reductive Amination, Hoffmann Bromamide Reactions. Reactions of Amines-Electrophilic Aromatic Substitution in *Aryl amines*, Reactions of Amines with Nitrous Acid.

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B.Sc. (Second Year) (Third Semester)

Physical Chemistry

Paper VIII

45 Hrs (3 Hrs/week)

1) Thermodynamics: I

15 Hrs.

Definition: of Thermodynamic Terms: System, Surrounding types of system, intensive and extensive properties. Thermodynamic Process, Concept of heat and work. Work done in reversible and irreversible process, concept of maximum work (W_{max}), Numerical Problems.

First law of Thermodynamics: Statement, Definition of Internal energy and Enthalpy.

Heat capacity, heat capacities at constant volume pressure and their relationship. Calculation of W,q, du and dH for the expansion of ideal gases under isothermal and adiabatic conditions for reversible process, Numerical problems, Hess's law of heat Summation and its application.

2) Thermodynamic-II:

20 Hrs.

Second Law of Thermodynamics: Need for the law, different statement of the law Carnot Cycle and its efficiency, Numerical Problems. Carnot Theorem. Concept of Entropy: Definition, Physical significance, Entropy as a State Function, Entropy change in Physical change, Entropy as criteria of Spontaneity & Equilibrium Entropy Change in Ideal Gases. Gibbs and Helmholtz Functions: Gibbs Function (G) and Helmoltz Function (A) as Thermodynamic Quantities. A and G as criteria for Thermodynamic Equilibrium and Spontaneity, their Advantage over Entropy change. Variation A with P, V and T.

3) Chemical Equilibrium:

10 Hrs.

Equilibrium Constant and Free Energy. Thermodynamic Derivation of Law of Mass Action. Le Chatelier's Principle. Reaction Isotherm and Reaction Isochore. Clapeyron Equation, Clausius-Clapeyron Equation and its Application.

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B. Sc. III Semester

Course Code - ZOL- 301

PAPER: VII

VERTEBRATE ZOOLOGY

1. Agnatha:- Out line classification, general characters and affinities of Cyc

2. Pisces: - Out line classification and general characters.

Scoliodon: - External characters, Digestive system, Respiratory system, Blood Vascular System and Nervous System.

3. Amphibia: - Out line classification and general characters.

Development of frog: - Fertilization Cleavage Blastula Gastulation an formation of germinal layers.

Neotony in Amphibia Parental care in amphibia.

4. Reptilia: - Out line classification and general characters.

Calotes:-External features, Respiratory system and Blood vascular s
Poisonous and non- poisonous snakes.

5. Aves: - Out line classification and general characters.

Columba livia: - External features, Respiratory system,
Embryology of chick.-Cleavage Blastula Gastulation and formation of
germinal layers and extra embryonic membrar
Flight adaptation in birds.

Migration in Birds.

6. Mammalia: - Out line classification and general characters.

Ratus ratus: - External features, Blood Vascular System,
Urino-genital System and Adaptive radiation in mammile Placentation in Mammals.

Total Periods

HISTORY SYLLABUS IIND

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD.

SYLLABUS OF B. A. IInd YEAR (HISTORY)

(SEMESTERWISE)

SEMESTER-IIIrd

PAPER NO. V - HISTORY OF EARLY INDIA (UPTO B. C. 300)

		Periods Alloted
Sr.No	Name of the Chapter	10
1	A) Religious and secular Literature, Foreign Accounts	
	B) Archaeological, Numismatic Sources	12
2	A) Stone age culture	
	B) Harappan civilization – Major sites, Town planning, Socio –	
	Religious and Economic Life.	
		12
3	Vedic culture: Original home of Aryas Early Vedic age –	
	Society, economy, Religion Later Vediv age – polity, society,	
	economy and religion	
	Lo. Libiam	12
4	A) Religious Movements – Jainism and Buddhism	
7	B)Philosophy - Upnishadas, Shaddarshan and Charwak	
		14
5	A) Janapadas and Mahajanapadas – Rise of Magadha	
,	- Chandragillia Migui Yuri	
	B)Mauryan Empire - Chandragopta Mauryan Economy, Administration. Art and Architecture.	
	Total Period	60

Washi Pa

I/C Principal

Karmaveer Mamasaheb Jagdale

Mahavidyalaya, Washi.

Chairman

Based of Spelles to History

Dr. Bebesship Amberikar Marethwada

University: Aurangabad

HISTORY SYLLABUS IIND

PAPER NO.- VIII - HISTORY OF MUGHAL INDIA (A. D. 1526 - A. D. 1757)

Cu Ni-	Name of the Chapter	Periods Alloted
Sr.No	Sources : Literary and Archaeological	06
2	A Brief survey of political History of Mughal period : Babar, Humayun and shershsah Sur, Akbar, Jahangir, Shahjahan and Aurangzeb, Later Mughals	10
3	Mughal Administration: A) Civil, Military and Judical B)Ruling Classes – 1) Nobility, Zamindar, Mansabdar and Jagirdar	12
4	Economic Development : Agriculture Economy – Land Revenue. Trade and Commerce, Currency system, Urbanization.	10
5	Religious and Social Life. A)Religious policies of Mughal Emperor, Impact of Islam. Sufism, Sikhism, Hindu Religion Vaishnav cult. B)Society – Rural and urban ,slavery, Education and statues of Women.	12
6	A) Art and Architecture, School of paintings B)Language and Literature: Sanskrit, Persian and Regions Languages	10 al
	Total Period	60

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B.Sc. V Semester

Course Code - ZOL- 503 PAPER: XVII

ECOLOGY (PRACTICAL)

	the the mothed	02
1.	Estimation of productivity of pond ecosystem using white and dark bottle method.	U.L
	Determine the following parameters of soil. > pH > Alkalinity > Chlorinity > Salinity	04
3	Analysis of DO, CO ₂ , Salinity, Chlorinity of water sample.	04
		•
4.	Study of animal association ship with example (Charts/photo) -Competition, mutual parasitism, predation and commensalisms.	01
5.	Estimation of population density by Quadrate method on field and by Simulation method.	04
6.	Preparation of permanent slides of following Spirogyra, Verticella, Odogonium, Daphnia, Cyclops, Mysis, Cypris, keretella	
7.	Project report: - Forest or fresh water ecosystem.	

Total practical periods: - 15

Washi be washi be washi Dist. Oshi Dist. Osh



B. SC. THIRD YEAR

Paper XIII

Physical Chemistry [Vth Semester]

45 Hrs. (3 Hrs/week)

1 Elementary Quantum Mechanics

10 Hrs.

Black body radiation, Planck's radiation law, photoelectric effect, Bohr's modes of hydrogen atom (no derivation) and its defects. Compton effect. De Broglie Hypothesis, the Heisenberg's uncertainty principles, Harmiltonian operator, Schrödinger wave equation and its importance, physical interpretation of the wave function, postulates of quantum mechanics. Schrödinger wave equation for H-atom, separation into three equations (without derivation), quantum numbers and their importance.

II Spectroscopy

10 Hrs.

Introduction - Electromagnetic radiation, regions of the spectrum, basic features of different spectrometers, statement of the Born-Oppenheimer approximation. Rotational Spectrum - Diatomic molecules, energy levels of a rigid rotor (semi classical principles), selection rule, rotational spectra of rigid diatomic molecule, determination of bond length, numerical problems.

III Photochemistry

08 Hrs.

Introduction of radiation with matter, difference between thermal and photochemical processes. Laws of photochemistry, Grothus - Drapper law, Stark-Einstein law, Jablonsiki diagram qualitative description of fluorescence, phosphorescence, non-radiative processes (Internal conversion, Intersystem crossing), quantum yield, photosensitized reactions.

IV Physical properties and molecular structure

10 Hrs.

Optical activity and its measurement, dipole moment and its measurement by temperature change method, magnetic property and its measurement by Guoy

)

First Semester

45 Hrs. 3 Hrs / Week Lab Course-I Paper-III 10 Hrs. Volumetric Analysis: I Preparation of 0.1N. NaOH solution and its standardization by given oxalic acid solution. Preparation of 0.1 N oxalic acid solution and its standardization by given KMNO₄ solution. 15 Hrs. Inorganic Qualitative Analysis: II Identify two acid and two basic radical from the given binary mixture. b] $BaCO_3 + Al_2 (NO_3)_3$ a] $CdSO_4 + NH_4Cl$ d] $MnCO_3 + MgSO_4$ c] $ZnCO_3 + KBr$ el NiSO₄ + MgCO₃ 20 Hrs. **Physical Chemistry** III **Determination of Equivalent Eudiometer:** weight of mg. weight of mg. To Determine Viscosity of Viscometer: given liquid (Water / Ethanol) by viscometer. To determine surface tension of Staglanometer: given liquid. Chemical Kinetics: *To study the effect of acid strength on the hydrolysis of an ester. *To determine the specific reaction rate of the hydrolysis methy1 / ethy1 acetate catalyzed by hydrogen ions at room temperature. Verification of Lambert-Beer's law using

Spectrophotometer. [Colorimeter].

Washi

Colorimeter:-

Second Semester

Paper-VI

Lab Course-II

45 Hrs (3 Hrs. / Week)

I Organic Qualitative Analysis:

30 Hrs.

Nature / Functional group / Element / Derivative / Physical constant

- * Benzoic acid, * salicylic acid, * β-naphthol, * p-nitroaniline,
- * Naphthalene, * Acetanilide.

II Organic Estimation:

15 Hrs.

- Phenol by Bromination
- Estimation of basicity, molecular weight of organic acid (oxalic/acetic acid)

बी.ए./बी.कॉम./बी.एस.सी./बी.एफ.ए.

प्रथम वर्ष : प्रथम सत्र

द्वितीय भाषा

प्रश्नपत्र 1 : सामान्य हिंदी - 1

- > उद्देश्य:
- 1. संवेदना का विकास
- भाषा कौशल का विकास
- अध्ययन-अध्यापन पद्धति :
- 1. व्याख्यान
- 2. दक-श्रव्य साधनों का प्रयोग
- 3. स्वाध्याय/परियोजना
- > पाठ्यक्रम:
- अ) कहानी साहित्य:

पाठ्यपुस्तक:

- 1. कथा संसार : सम्पादक/समन्वयक : डॉ. माधव सोनटक्के हिंदी पाठ्य सिमिति वाणी प्रकाशन, नई विल्ली (पाठ्यक्रम में समाविष्ट कहानियाँ : स्त्री और पुरूष, हार की जीत, दो बाँके, गौरी, एटम बम, पंचलाईट, अपरिचित)
- आ) हिंदी भाषा :
- 1. हिंदी भाषा : उद्भव और विकास : सामान्य परिचय
- 2. देवनागरी लिपि : स्वरूप एवं विकास
- 3. हिंदी वर्तनी का मानक रूप
- 4. पारिभाषिक शब्दावली : स्वरूप और समस्याएँ
- संदर्भ ग्रंथ ः
- हिंदी कहानी का विकास : मधुरेश : सुमित प्रकाशन
- 2. हिंदी कहानी के सौ वर्ष : डॉ.एन.एम. सण्णी, जवाहर पुस्तकालय, आगरा
- 3. साठोत्तरी हिंदी लेखिकाओं की कहानियों में नारी : डॉ. मंगल कप्पीकेरे : विकास प्रकाशन, कानपुर
- 4. व्यावहारिक हिंदी : डॉ. माधव सोनटक्के : जयभारती प्रकाशन, इलाहाबाद
- 5. अच्छी हिंदी : रामचंद्र वर्मा : लोकभारती प्रकाशन, इलाहाबाद
- 6. व्यावहारिक हिंदी व्याकरण : हरदेव बाहरी : लोकभारती प्रकाशन, इलाहाबाद
- 7. हिंदी व्याकरण : व्योमेशचंद्र शुक्ल : वाणी प्रकाशन, दिल्ली

Washi * Washi

DR.BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD

Faculty Of Science

B.Sc. II year (Practical)

Semester -IV Paper -XIII

Gymnosperms and Utilization of plants (Based on paper no - XI)

45L

Gymnosperms:

a) Cycas

- i. Habit, young leaf, bulbils, male cone, microsporophyll, megasporophyll, pollen grains, mature seed.
- ii. Study through permanent slides-Normal root (T.S.). Stem (T.S.), Ovule (L.S.).
- iii. Study through hand section-Coralloid root (T.S.), Rachis (T.S.), Leaflet (T.S.).

b) Pinus

- i. Habit, long and dwarf shoot, scale leaves, foliage leaves, male cone, female cone, pollen grains (W.M.), winged seed.
- ii. Study through hand sections and permanent slides Root (T.S.), Stem (T.S.), Needle (T.S.).
- iii. Study through permanent slide T.L.S. & R.L.S. of stem, L.S. of male cone, L.S. of female cone.

c) Gnetum

i) Habit, T. S. of Stem, Male cone and female cone.

Paleobotany:

- a) Types of fossils (Specimens).
- b) Lygynopteris (Specimen / Permanent slide).

Utilization of plants:

- a) Food plants Study of the morphology, structure, and histochemical tests of food storing tissue in Jowar & Wheat.
- b) Histochemical test of lignin and cellulose.
- c) Cultivation of Oyster (Pleurotus) mushroom on agricultural waste.
- d) Vegetable oils hand section of Groundnut & Sunflower Seed and staining of oil droplets by Sudan III.
- e) Study of the sources of Timber, Gum, Medicinal plants, Cosmotics and Perfumes.
- f) Study of Black pepper, Clove, Cinnamon, Cumin, Coriander.
- f) Field notebook, specimen collection, and tour report.

B.Sc. (Second Year) (Third Semester)

Lab Course-III

Paper IX

90 Hrs (6 Hrs/week)

Section A (Physical Chemistry)

Non Instrumental (Any Five)

i.	To determine critical solution temperature of Phenol- water	
	system.	
ii.	To determine solubility of benzoic acid at different	
	Temperature and determine H of dissolution process.	
iii.	To determine heat of neutralization (\triangle Hn) of Na OH and HCl	
iv.	To determine heat of neutralization (\triangle Hn) of Na OH and Acetic	
	acid.	
v.	Partition coefficient of Benzene-water system using benzoic acid.	
vi.	To determine the equilibrium constant for the reaction: $KI + I_2 >$	
	KI ₃ .	
vii.	Determine the molecular mass of polymer from viscometry	
	measurements.	
viii.	To investigate the Kinetics of iodination of Acetone.	

Section B (Inorganic Chemistry) Gravimetric Estimation: (Any Three)

i.	Estimation of Zinc gravimetrically as Zinc ammonium phosphate (ZnNH ₄ PO ₄)
ii.	Estimation of Mn gravimetrically as Manganese Ammonium Phosphate
	(MnNH ₄ PO ₄)
iii.	Estimation of Nickel gravimetrically as Ni-DMG
iv.	Estimation of Barium gravimetrically as Ba-Chromate (BaCrO ₄)
v.	Estimation of Aluminum as Aluminum Oxinate.
vi.	To determine the equilibrium constant for the reaction: KI + I ₂ -KI ₃
vii.	Determine the molecular mass of polymer from viscometry measurements.
viii.	To investigate the Kinetics of Iodination of acetone.

Complexometric Titration: (Any Two)

i.	Estimation of Zinc by EDTA solution using EBT indicator.
ii.	Estimation of Nickel by EDTA using Murexide indicator
iii.	Estimation of copper by EDTA using fast sulphon black F
	indication
iv.	Estimation of Lead By EDTA using Xylenol Orange indicator.

Washi & Washi

बी.कॉम. द्वितीय वर्ष : द्वितीय भाषा हिंदी (SL. Hindi) संप्रेषणमूलक व्यावसायिक हिंदी तृतीय सत्र - (Semister -III) सत्र पद्धति २०१४ से लागु

• उद्देश्य:

- प्रयोजनगूलक भाषा अध्ययन
- २) वाणिज्य व्यवसाय के भाषा कौशल्य
- व्यावसायिक लेखन कौशल्य

• अध्ययन -अध्यापन पद्धति

- व) व्याख्यान पद्धति
- २) लेखन एवं पठन कौशल वृद्धि के लिए अभ्यास
- ३) दृक-श्रव्य माध्यमाँ का प्रयोग

• पाठचपुरतक

भंप्रेषणमूलक व्यावसायिक हिंदी -१ सं. हिंदी पाठ्य समिति ओरिएंटल
 व्लैक स्वान लौंगमन प्रा.लि., हिमायतनगर, हैद्राबाद -५००४२९

पाठ्यक्रम

- ৭) भाषा और भाषा शिक्षण
 - भाषा : तात्पर्य एवं स्वरूप
 - २) भाषा के प्रकार्य
 - ३) भाषा के विविध रुप
 - ४) भाषा शिक्षण की प्रक्रिया
 - ५) भाषा कौशल्य : श्रवण,वाचन, भाषण, लेखन.

२) प्रयोजनमूलक भाषा और हिंदी

- प्रयोजनमूलक भाषा : तात्पर्य एवं स्वरूप
- २) प्रयोजनमूलक भाषा की विशेषताएँ
- प्रयोजनमूलक हिंदी के विभिन्न रूप
- ४) वैश्वीकरण के परिप्रेक्ष्य में हिंदी भाषा का महत्त्व

Washi Porton

3) वाणिज्य - व्यवसाय और हिंदी

- व) वाणिज्य- व्यापार से तात्पर्य एवं स्वरूप
- २) वाणिज्य- व्यापार के साधन
- वाणिच्य- च्यापार और भाषिक प्रकार्य
- प्राणिज्य च्यावसाधिक भाषा संरचनात्मक विशेषताएँ

४) व्यावसायिक - संप्रेपण

- १) संप्रेषण से तात्पर्य एवं स्वरूप
- २) संप्रेषण के प्रमुख प्रकार : भाषिक तथा भाषेत्तर
- ३) व्यावसायिक पत्राचार
 - (क) व्यापारिक- व्यावहारिक सामान्यपत्र आवेदन पत्र, प्रत्यय या साखपत्र, संदर्भ तथा साख के जाँच पत्र,मूल्यज्ञापन पत्र, आदेशों के निरसन सम्बन्धी पत्र, शिकायत पत्र,समायोजन पत्र, तगादा या वसूली पत्र, विक्रय प्रतिनिधित्त्व संबंधी पत्र
 - (ख) विशेष व्यावहारिक पत्र -बीमा तथा वीमा पत्र -रेल तथा जहाज द्वारा माल परिवहन से संबंधीत पत्र
- ५) निवध- लेखन
 - १) निबंध : तात्पर्य एवं स्वरूप
 - २) निबंध लेखन : व्यावसायिक / आर्थिक विषय पर निबंध लेखन

प्रश्न पत्र का प्रारूप

		कुल अंक -५०
प्र.१	पाठ्यक्रम पर दीर्घोत्तरी प्रश्न	94
у. २	पाठ्यक्रम पर दीर्घोत्तरी प्रश्न	94
у. з	निवंध लिखिए (व्यावसायिक / आर्थिक विषय पर निबंध)	90
й.8	पाठ्यक्रम पर टिप्पणियाँ	
	अ) विकल्प सहित टिप्पणी	оч
	आ) विकल्प सहित टिप्पणी	оч



बी.एरसी. द्वितीय वर्ष : द्वितीय भाषा (SL. Hindi) प्रश्नपत्र -III सामान्य हिंदी :३ तृतीय सत्र - (Semister -III) सत्र पद्धति २०१४ से लागू

उद्देश्य:

- १) साहित्य आरचादन अभिरूची का परिसंस्कार
- २) जीवन मुल्यों के पति आरथा
- ३) अत्याधुनिक इलेक्ट्रानिक माध्यमों का परिचय

अध्ययन -अध्यापन प्रक्रिया

- १) व्याख्यान पद्धति
- २) लेखन एवं पठन कौशल वृद्धि लिए अभ्यास
- ३) दक-श्रव्य माध्यम का प्रयोग

पाठ्यपुरतक:

अ.गद्य के विविध आयाम, संपा.-प्रो.जयमोहन एम.एस., वाणी प्रकाशन, नई दिल्ली

- पाठचक्रम में समाविष्ठ रचनाएँ
 - १) आत्मवृत्त : मेरा जीवन
 - २) रेखाचित्र- नीलकंठ मोर
 - ३) संरगरण -कमला
 - ४) निबंध- शिरीष के फुल
 - ५) यात्रावृत्त चीडो पर चाँदनी

आ. प्रयोजनमूलक हिंदी

- प्रयोजनमूलक भाषा
 - अ) भाषा का स्वरूप एवं महत्त्व
 - आ) भाषा की परिभाषा , विशेषताएँ एवं प्रकार्य
 - इ) वैश्वीकरण के परिप्रेक्ष्य में हिदी भाषा का महत्त्व
- २) भाषा शिक्षण : स्वरूप एवं प्रक्रिया
 - अ) भाषा शिक्षण की प्रक्रिया,

आ) भाषा कौशल

१.श्रवण कीशल

२.भाषण कौशल

३.वाचन कौशल

४.लेखन कौशन

- 3) व्यावसायिक हिन्दी
 - अ) याणिज्य व्यापार : तात्पर्य एवं स्वरूप
 - आ) वाणिज्य व्यापार के साधन
 - इ) वाणिज्य व्यापार और भाषिक प्रकार्य
 - ई) वाणिज्य- व्यावसायिक भाषा : संरचनात्मक विशेषताएँ
 - उ) व्यावसायिक पत्र लेखन
- ४) निबंध लेखन :
 - अ) निबंध : तात्पर्य एवं स्वरूप
 - आ) निबंध लेखन : साहित्यिक / सामाजिक/ समसामायिक समस्या /

वैज्ञानिक विषय

संदर्भ ग्रंथ :

- १) साहित्य विधाओं की प्रकृति: देवी शंकर अवस्थी
- २) हिंदी गद्य : विन्यास और विकास : डॉ. रामस्वरूप चतुर्वेदी
- हिंदी का गद्य पर्व : डॉ. नामवर सिंह
- ४) हिंदी के अध्यतन अनुप्रयोग : डॉ. माधव सोनटक्के
- ५) प्रयोजनमूलक तथा व्यावहारिक हिंदी : डॉ. सुकुमार भंडारे

 Agrawal A. N. (2010) Indian Economy: Problem of Development and planning, New Age International Publishers, New Delhi.

ECO-115: Indian Economic Thinkers

Objectives:

This paper is essential for a student who aspires for advanced training in economics in India. The evolution of economic idea in each instance was as much a response to immediate economic problems and policy issues as much as it was a self-conscicus attempt to refine earlier analysis by correcting mistakes and filling in the gaps in analysis.

Unit- I: Economic Thought of Koutilya:

Economic policies, concept of welfare state, principle of taxation.

Unit- II: Economic Ideas of Nauroji, Ranade and Datt:

Economic ideas of Dadabhai Nauroji – contribution to economic policies, Drain Theory, M.G. Ranade- Economic policies, political economic policies. R.C. Dutt- Economic ideas. Manvendra Roy- Economic ideas and concept of new humanism.

Unit- II: Economic Ideas of Mahatma Gandhi: Economic ideas of Mahatama Gandhi—Sarvodaya, Village Swaraj, Swadeshi. Dr. B.R.Ambedkar- State socialism, Problems of Rupee, Public finance. Mahatma Phule's views on agriculture, reasons of farmer's poverty. D.R. Gadgil- Economic planning & cooperation, Y.B. Chavan: Thoughts of agriculture, industries & socialism.

Unit- IV: Economic Thoughts of Amartya Sen:

Economic welfare, Social Choice.

B.Sc. V Semester

Course Code - ZOL- 504 PAPER: XVIII - A

FISHERY SCIENCE - I (PRACTICAL) (Elective Paper)

03 1. Study of freshwater fishes. Major carps Other carps. Cat fishes Clupoides 02 2. Study of brackish water fishes. Hilsa hilsa, Chanos chanos (milkfish), Latis calcarifer, Tilapia 03 Study of marine ware fishes. 3. Oil sardine Mackerel Ribbon -fish Bombay-duck Pomfret Sole Polynemus 05 Water analysis 4. Visit to local or any reservoir and marine fish landing centre and student should be submit a project report at the time of practical examination 5. Total practical periods: -15





B.Sc. VI Semester Course Code - ZOL- 604 PAPER: XXII - A FISHARY SCIENCE - II (PRACTICAL) (Elective Paper)

1.	Primary productivity of ponds (plankton studies).	02
2	identification, classification and culturaable significance of following.	03
	Catla, rohu, mrigal, catfishes, exotic canoj	
3	Collection and identification of fish parasites and worms.	04
4	Removal of fish pituitary gland and preparation of pituitary extract	02
5	Identification of crafts and gears. Gill net, Rampanni, Satpalti, Machwa, Catamaran.	02
6.	A visit to fish farm and fish processing centre is compulsory.	02
	Total Practical Periods	15



B. SC. THIRD YEAR

Paper XVI

Inorganic Chemistry [VIth Semester]

45 Hrs. (3 Hrs/week)

1. Metal-Ligand Bonding in Transition Metal Complexes

12 Hrs

Limitations of Valence Bond Theory

An Elementary idea of Crystal Field Theory

Crystal Field Splitting in Octahedral, Tetrahedral and

Square Planar Complexes

Factors affecting Crystal Field Parameters

2. Electronic Spectra of Transition Metal Complexes

7 Hrs

Types of Electronic Transitions

Selection rules for d -d transitions

Spectro -chemical series

Orgel Energy level diagram for d¹, d⁵ and d⁹

Electronic Spectrum of $[Ti (H_2O)6]^{3+}$ complex ion.

 ${\bf 3.\ Organometal lic\ Compounds}$

10 Hrs

Definition, Nomenclature and classification of Organometallic Compounds

Preparation, Properties, Bonding and Applications of alkyls and aryls of - Li,

Al, Hg, Sn and Ti.

A Brief account of metal - ethylenic Complexes

Nature of bonding in metal carbonyls.

31.S-[F]NPW-02 June-2015-16 All Syllabus Science S.L. B.Sc.Chemistry IIIrd Yr. Sem.V & VI - 15 -

4. Bioinorganic Chemistry

10 Hrs

Essential and trace elements in biological processes

Metalloporphyrins with special reference to hemoglobin and myoglobin

Biological role of alkali (Na $^+$, K $^+$) and alkaline earth metal ions(Mg $^{2+}$, Ca $^{2+}$).

Nitrogen fixation

5. Chromatography

06 Hrs

Definition and classification of chromatography

Paper and Thin Layer Chromatography

Method of Development (Ascending, Descending Chromatography)

Locating Technique (UV-light / Chemicals)

R f value

Comparison between paper and TLC

Applications.

I/C Principal

Karmaveer Mamasaheb Jagdale Mahavidyalaya, Washi.

B. SC. THIRD YEAR

Paper XVII

Organic Chemistry [VIth Semester]

45 Hrs. (3 Hrs/week)

1. Heterocyclic Compounds

13 Hrs.

Introduction: Molecular orbital picture and aromatic characteristics of pyrrole, furan, thiophene and pyridine, Methods of synthesis and chemical reactions with particular emphasis on the mechanism of electrophilic substitution. Mechanism of nucleophilic substitution reactions in pyridine. Comparison of basicity of pyridine, piperidine and pyrrole. Condensed Heterocyles: Introduction, Preparation of Quinoline (Skraups Synthesis), Isoquinoline (Bischler - Napirlaski) and Indole (Fischer indole Synthesis).

2. Carbohydrates

10 Hrs.

Defination, Introduction and Classification.

Monsaccharides-Interconversion of Glucose and Fructose, chain lengthening, chain shortening of aldoses. Conversion of Glucose in to mannose. Determination of openchain structure of glucose & pyranose ring structure of glucose. Mechanism of Mutarotation and Introduction to disaccharides (maltose, sucrose and lactose) and

Polysaccharides (Starch and cellulose) without involving structure determination.

3. Synthetic Polymers.

07 Hrs.

Introduction, Classification based on nature of synthesis (without mechanism) with examples. (Addition and condensation polymers). Properties, uses and synthesis of polyvinyl chloride, polyvinyl acetate, polystyrene, polyacrylonitrile, Nylon 6, Nylon 66. Introduction to synthetic and natural rubber, properties, uses and synthesis of Buna N., Neoprene and silicon rubber.

4. Synthetic Dyes and Drugs

15 Hrs.

Synthetic Dyes - Definition, colour and constitution (electronic concept) of dye, classification based on chemical constitution, synthesis of methyl orange, Congo red, malachite green, crystal violet, Alizarin and indigo dyes.

Synthetic Drugs - Defination, introduction, classification of drugs. Properties of ideal drug. Synthesis of chloromycetien,paracetamol,phenacetien,

sulphaguainidine.

I/C Principal

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