



Hutatma Smarak Samiti's  
**HUTATMA RASHTRIYA ARTS & SCIENCE COLLEGE, ASHTI (SHAHID)**

TAH.ASHTI, DIST.WARDHA

**Re-accredited With B+ Grade By NAAC**

**Dr. S. S. Nimhare**  
M.Sc., Ph.D.  
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M.9119480041

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Ref.No.

Date :

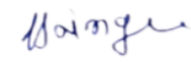
Date: 22/09//2023

**FEEDBACK ACTION TAKEN REPORT ACADEMIC YEAR 2022-23**

Sr. No.	Stakeholder	Suggestion Given/ Issue	Action Taken
1.	Student	Opportunities must be provided for field visits	Field visit opportunities as well as training opportunities were provided to the students.
2.	Student	More focus should be given on placement assistance.	Efforts for students' placements are going on as a result of the candidates got placed.
3.	Student	To arrange expert Lecture by Academic expert.	Expert Lectures were organized and documents are maintained accordingly.
4.	Student/ Faculty	Please provide remote access to e-resources of Library.	Remote Access to e-resources its on process on the Institute website.
5.	Student/ Faculty	ICT enabled teaching learning should be encouraged.	Faculty Members were instructed to conduct 3-4 lectures on ICT as a beginning.
6.	Alumni	Aptitude and communication skills of students must be taken care	By arranging training by external agency aptitude and communication skills are sharpened, for their better.
7.	Parent	Facility to pay fees in installments is required.	The facility is taken in charge.
8.	Parent	Need extra classes for difficult subjects.	Extra classes are conducted.
9.	Alumni	Competitive exam guidance must be provided	Arranged guidance programs for Competitive exams.
10.	Alumni/ Parent	More placement interviews should be arranged.	Efforts in this regard are going on.

  
IQAC Co-ordinator  
Hutatma Rashtriya Arts & Sci  
College, Ashti, Dist Wardha



  
Principal  
Hutatma Rashtriya Arts & Science  
College, Ashti (Sh.) Dist. Wardha.



*Hutatma Smarak Samiti's*  
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**Dr. B. D. Ridhorkar**  
Off. Principal

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e-mail : hascashti@gmail.com  
Ph. 07156-225817

Ref.No. HRC/2458/B

Date : 04/02/2020

**Suggestions Given by the Faculty Member of the HEI to the Board of Studies**

To,

The Chairman

Board of Studies in Marathi

Rashtrasant Tukdoji Maharaj Nagpur University

Nagpur

Subject: Request to consider suggestions on curriculum as per feedback obtained from the faculty in the next revise of curriculum.

Respected Sir,

With reference to the above mentioned subject we kindly request you to consider following suggestions on curriculum as per feedback obtained from the faculty in the next revise of curriculum.

1. Literature composed by Saints should be included for inculcating moral, ethical and spiritual values in students.
2. Writings of the social reformers should be included to propagate progressive thoughts and view among the students.
3. The course contents, based on language skills should be included in the curriculum.

*Dr. Rekha Wadikhay*  
04/02/2020  
Chairman, Marathi  
BOS, Rashtrasant Tukadoji Maharaj  
Nagpur University, Nagpur.



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OFFICIATING PRINCIPAL  
H.R. Art & Science College  
Ashti, Dist. Wardha

राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ, नागपूर

मानव्य विद्या शाखा (HUMANITIES)

बी. ए. आवश्यक मराठी

अभ्यासक्रम 2022-23 पासून पुढे नुरू

### Program Objectives

#### बी. ए. आवश्यक मराठी - विषयाची उद्दिष्टे

- १ मराठी भाषेतील प्रमुख अभिजात साहित्याचा व साहित्यिकांचा परिचय घडविणे.
- २ मराठी भाषा आणि साहित्य यामंबंधीची आवड निर्माण करणे.
- ३ विद्यार्थ्यांच्या वाङ्.मयीन व कलाविषयक अभिरुचीचा विकास करणे.
- ४ साहित्याभ्यासातून जीवनविषयक व समाजविषयक ज्ञान विकसित करणे, प्रगल्भ करणे.
- ५ समकालीन म्पर्धेच्या व इंग्रजी भाषेच्या अतिक्रमणाच्या परिस्थितीत मराठी भाषेच्या संरक्षण व संवर्धनावरोबरच तिचे शुद्ध व अविकृत रूप टिकविण्याच्या दृष्टीने जागरूकता निर्माण करणे.
- ६ भाषा व्यवहारासाठी आवश्यक ती लेखन, भाषण, वाचन ही कौशल्ये विकसित करणे.
- ७ भाषिक कौशल्याचे विविध आविष्कार आणि संपर्क-प्रसार माध्यमे यांचा परस्परसंबंध समजावून देणे.
- ८ भाषेचे तसेच साहित्याचे आकलन आणि जीवनव्यवहारात उपयोजन करण्यास प्रवृत्त करणे.

#### बी. ए. भाग १ आवश्यक मराठी - अभ्यासक्रमाची उद्दिष्टे (Course Objectives)

- १ मराठी भाषेच्या समृद्धीची जाणीव करून देणे.
- २ भाषेच्या व साहित्याच्या अभ्यासाद्वारे भारतीय संस्कृती आणि इतिहासाची ओळख करून देणे.
- ३ विविध साहित्यप्रकारांची ओळख करून देणे.
- ४ विद्यार्थ्यांची भाषिक कौशल्ये विकसित करणे व त्यांना रोजगाराभिमुख बनविणे.
- ५ नैतिक मूल्ये रुजविणे.

#### सत्र १

#### घटक १ (गद्य विभाग)

१. भाषावाला वाळकः पांगुरवणे - म्हाडेंभट
२. शिक्षण - जोतीराय फुले
३. तरुणांना! निर्भय बना, शूर बना - स्वामी विवेकानंद
४. नववर्षाच्या उदयाचलावर उद्योगाचे ध्वजारोपण - राष्ट्रसंत तुकडोजी महाराज
५. कोंकणाची कथा - अरविंद गोखले

#### घटक २ (पद्य विभाग)

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Asht Dist. Waraha



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१. माय मराठी - मुकुंदराज
२. ज्ञानेश्वरांचे अभंग - संत ज्ञानेश्वर
३. दवाचे शेंब - केशवसुत
४. भंगू दे काठिण्य माझे - बा. सी. मर्हेकर
५. चार शब्द - नारायण सुर्वे

### घटक ३ (व्यावहारिक मराठी)

- १ व्यावहारिक मराठी : स्वरूप आणि भूमिका
- २ भाषिक संवादव्यवहाराची मूलतत्त्वे

### घटक ४ (भाषिक कौशल्याधारित अभ्यासघटक)

- १ वाक्यप्रचार-म्हणी संग्रह करणे
- २ शब्दसंग्रह वाढविणे, सुविचार संग्रह करणे
- ३ प्रत्यक्ष संवाद
- ४ विविध संस्था, ग्रंथालयांना भेट देणे

### सत्र २

#### घटक १ (गद्य विभाग)

- १ भारतीय लोकशाहीचे भवितव्य काय? - डॉ. बाबासाहेब आंबेडकर
- २ गाडगेवावांनी शाळा दिली - सीमा साखरे
- ३ अजातशत्रू अटलजी - शरद पवार
- ४ कृष्णविवर - जयंत नारळीकर
- ५ विवेकवाद - नरेंद्र दाभोळकर

#### घटक २ (पद्य विभाग)

- १ मृण्मयी - इंदिरा संत
- २ उपःकाल होता होता - सुरेश भट
- ३ पुन्हा एकदा - यशवंत मनोहर

४ मेंढर - विठ्ठल वाघ

५ आई! मारू नकोस गर्भात - उपाकिरण आत्राम

#### घटक ३ (व्यावहारिक मराठी)

- १ पत्रलेखन
- २ सारांश लेखन

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OFFICIATING PRINCIPAL  
R. An & Science College  
Asau Dist. Wardha



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**घटक ४ (भाषिक कौशल्याधारित अभ्यासघटक)**

- १ स्व-परिचय लिहिणे
- २ नोकरीसाठी अर्ज लिहिणे
- ३ तक्रार पत्र तयार करणे
- ४ लेख, कथा इत्यादीचा सारांश लिहिणे

**Course Outcomes – (अभ्यासक्रमाचे परिणाम)**

१. विद्यार्थी भाषेचे सुयोग्य उपयोजन करू शकेल.
२. पत्रलेखन, सारांशलेखन यासारखी भाषिक कौशल्ये विकसित होऊन कार्यालयीन भाषाव्यवहारात तसेच जीवनव्यवहारात उपयुक्त ठरतील.
३. एकाग्रतेने वाचन करण्याची सवय लागेल.
४. भाषिक संवाद व्यवहारामुळे विद्यार्थ्यांचा सामाजिक व वैयक्तिक विकास होईल.
५. अचूक आणि अविलंब विचार करण्याची क्षमता निर्माण होईल.
६. विचारांचा नेमका वेध घेण्याची क्षमता निर्माण होईल.
७. अभ्यासक्रमाची उद्दिष्टे साध्य होतील.

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21/11/22

21/11/2022

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OFFICIATING PRINCIPAL  
M.R. Art & Science College  
Asmt, Dist. Nasha



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Hutatma Smarak Samiti's  
**HUTATMA RASHTRIYA ARTS & SCIENCE COLLEGE, ASHTI**  
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Off. Principal

Website : www.hutatmaasc.org  
e-mail : hascashti@gmail.com  
Ph. 07156-225817

Ref.No. HRC/2458/A

Date : 04/02/2020

To,  
The Chairman  
Board of Studies in English  
Rashtrasant Tukdoji Maharaj Nagpur University  
Nagpur

Subject: Request to consider suggestions on curriculum as per feedback obtained from the faculty in the next revise of curriculum.

Respected Sir,

With reference to the above mentioned subject we kindly request you to consider following suggestions on curriculum as per feedback obtained from the faculty in the next revise of curriculum.

- 1 Employability skills like resume writing, business communications, etc.be included.
- 2 Precise Writing, Paragraph Writing, Unseen Passage, etc. be included to enhance reading and analyzing ability
- 3 More number of poems and prose to be included.

Hope you consider our request and expect a positive response for the same.

Reed  
Dulje  
U.W.Dabhi  
BOS Eng  
Chairman.



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OFFICIATING PRINCIPAL  
H.R.Art & Science College  
Ashti, Dist.Wardha

**Rashtrasant Tukadoji Maharaj Nagpur University**  
**Syllabus Prescribed for**  
**Bachelor of Arts (B.A.) Part I Examination**  
**Compulsory English First Semester**  
**(To be implemented from the session 2020-21 and onwards)**

**Theory marks: 80**

**Internal Assessment: 20**

**Prescribed Textbook:**

*A Novel Beginning* edited by Urmila Dabir, Priya Wanjari, Renu Dalela (Orient BlackSwan)

**Objectives-**

1. To generate interest of the students in English Language through Interesting lessons.
2. To motivate the students through the Life Sketches of successful entrepreneurs.
3. To develop interest in poetry through poems which are easy to comprehend.
4. To make the students understands the poems of different genres.
5. To make students understand structure of sentences through prescribed grammar.

**Outcome**

1. The moral imparted in Prose will have an positive impact on the mindset of the students.
2. The life of great personalities will motivate them to toil to be successful.
3. The syllabus will contribute in vocabulary enhancement.
4. The learners will get an opportunity to study Indian and English poets and develop a critical outlook through comparison.
5. The drafting skills of the learners will be honed through the prescribed items of grammar.

**Unit I – Prose**

1. **The Thief – Ruskin Bond**
2. **Between the Mosque and the Temple – Boman Desai**
3. **A Letter by Hazlitt to His Son - William Hazlitt**
4. **Education Provides a Solid Foundation - A. P. J. Abdul Kalam**

**Unit II – Personalities**

1. Ramchandrarao Kirloskar and Laxmanrao Kirloskar
2. Sudha Murty
3. Muhammad Yunus

**Unit III - Poetry**

1. **In the Bazaars of Hyderabad – Sarojini Naidu**
2. **Daffodils - William Wordsworth**
3. **To Autumn – John Keats**
4. **The Highwayman - Alfred Noyes**

**Unit IV - Grammar and Composition**

1. Comprehension
2. **Letter Writing (Application with Resume, Placement of Order, Complaint Letter)**
3. Synonyms and Antonyms

**Internal Assessment:**

There shall be two Assignments based on prescribed syllabus carrying 10 marks each. (10 X 2 =20)

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**Rashtrasant Tukadoji Maharaj Nagpur University**  
**Syllabus Prescribed for**  
**Bachelor of Arts (B.A.) Part I Examination (Second Semester)**  
**Compulsory English**  
**(To be implemented from the session 2020-21 and onwards)**

**Theory marks: 80**

**Internal Assessment:20**

**Prescribed Textbook: *A Novel Beginning* edited by Urmila Dabir, Priya Wanjari, Renu Dalela (Orient BlackSwan)**

**Objectives-**

1. To keep the interest of the learners alive though lessons containing humour and but conveying a moral at the same time
2. To attract the students to attend classes, interesting and inspiring life sketches of people who brought revolutionary changes have been included.
3. To inculcate the quality of Patriotism and to convey evils of materialism selected poems have been incorporated on such themes
4. The grammar and composition portion intends to develop confidence regarding grasping and understanding of English language and encourage proper use of tenses.

**Outcomes-**

1. The learners will get an opportunity to study lessons based on themes containing humour, emotional bonding, ethics and values as these qualities are well expected in an Indian citizen.
2. The life sketches of successful people will motivate them to excel despite adverse conditions.
3. The poems will encourage the learners to shun violence and materialism
4. Through Grammar and Composition the learners will gain confidence in Spoken English

**Unit I – Prose**

1. The Romance of a Busy Broker - O. Henry
2. Miss Brill - Katherine Mansfield
3. The Homecoming - Rabindranath Tagore
4. Values in Life - Rudyard Kipling

**Unit II – Personalities**

1. Ratan Tata
2. Sundar Pichai
3. Louis Braille

**Unit III - Poetry**

1. An Irish Airman Foresees His Death - W. B. Yeats
2. Money Madness – D.H. Lawrence
3. Stay Calm – Grenville Kleiser
4. The Lotus - Toru Dutt

**Unit IV - Grammar and Composition**

1. Comprehension
2. Paragraph Writing
3. Subject-Verb Agreement

**Internal Assessment:**

There shall be two Assignments based on prescribed syllabus carrying 10 marks each. (10 X 2 =20)



*K. Heringe*  
**OFFICIATING PRINCIPAL**  
R. Art & Science College  
Ashti Dist. Wardha

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*V.V. Bhagdar*

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D.V.N.

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Ph. 07156-225817

Ref.No. HRC/2458/C

Date : 04/02/2020

**Suggestions Given by the Faculty Member of the HEI to the Board of Studies**

To,  
The Chairman  
Board of Studies in Zoology  
Rashtrasant Tukdoji Maharaj Nagpur University  
Nagpur

Subject : Request to consider suggestions on curriculum as per feedback obtained from the faculties in the next revise of curriculum.

Respected Sir,

With reference to the above mentioned subject we kindly request you to consider following suggestions on curriculum as per feedback obtained from the faculties in the next revise of curriculum.

1. Some general topics of specific importance in Phylum Coelenterata should be included .
2. Instead of study of all larvae , stages of life cycle like fertilization should be included in Phylum Annelida .
3. Topics on Applied Zoology should be included in specific Applied Zoology paper .
4. In Phylum Arthropoda , scope of syllabus should be limited

Hope you consider our request and expect a positive response for the same.

Received  
GBZade  
(Dr. S.B. Zade)  
Chairman  
BOS, Zoology  
R.T.M. Nagpur  
University Nagpur.



H. Ringe  
**OFFICIATING PRINCIPAL**  
H. R. Art & Science College  
Ashti Dist. Wardha

**RASHTRASANT TUKADOJI MAHARAJ, NAGPUR UNIVERSITY, NAGPUR**  
**SYLLABUS FOR B.Sc. ZOOLOGY (SEMESTER PATTERN)**  
**(With effect from the academic year 2013-2014)**

The semester pattern syllabus for B.Sc. Three Year Degree Course in the Subject - Zoology comprises of six semesters. Each semester is based on six theory periods and six practical periods per week. The examination of each semester shall comprise of two theory papers each of three hours duration and carries 50 marks each and a practical of 4 hours duration carries 30 marks. Internal assessment for each semester based on two theory papers of 10 marks each and shall be conducted by university approved teachers. Internal assessment marks should be submitted to the university one month prior to the final examination. Candidates are expected to pass separately in theory, internal assessment and practical examination.

**Semester - I**

**Paper - I : Life and Diversity of Animals - Nonchordates (Protozoa to Annelida)**

**Unit - I**

**(9 Periods)**

- 1.1 Protozoa : General characters and classification up to classes
- 1.2 Paramoecium : Structure and reproduction
- 1.3 Plasmodium : Structure and life cycle
- 1.4 Parasitic Protozoans of Man : Entamoeba, Trypanosoma, Giardia and Leishmania - Mode of infection and its control

**Unit - II**

**(9 Periods)**

- 2.1 Porifera : General characters and classification up to classes
- 2.2 Sycon : Structure, reproduction and development, Canal system in sponges
- 2.3 Coelenterata : General characters and classification up to classes
- 2.4 Obelia : Structure and life cycle, corals and coral reef formation

**Unit - III**

**(9 Periods)**

- 3.1 Helminthes : General characters and classification up to classes
- 3.2 Ascaris : External morphology, reproductive system and life cycle
- 3.3 Taenia solium : Structure and life cycle
- 3.4 Elementary idea of parasitic adaptations in helminthes

**Unit - IV**

**(9 Periods)**

- 4.1 Annelida : General characters and classification up to classes
- 4.2 Leech : Morphology, digestive and urinogenital system
- 4.3 Trochophore larva and its significance
- 4.4 Vermiculture and its importance

**Semester - I Paper - II : Environmental Biology**

**Unit - I**

**(9 Periods)**

- 1.1 Atmosphere: Major zones and its importance, composition of air
- 1.2 Hydrosphere: Global distribution of water, Physico-chemical characteristics of water
- 1.3 Lithosphere: Types of rocks, formation of soil
- 1.4 Renewable and non-renewable energy sources

**Unit - II**

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2.1 Ecosystem - Definition and types

2.2 Detailed study of pond ecosystem

2.3 Food chain, food web and ecological pyramids

2.4 Energy flow in an ecosystem, Single channel, Y – shape and Universal model

Unit – III

(9 Periods)

3.1 Biodiversity and its conservation

3.2 Causes of reduction of biodiversity

3.3 Wildlife conservation acts (1972 and 1984), Introductory study of national parks and sanctuaries – Tadoba, Kanha, Bharatpur and Nagzira

3.4 Hot spots of biodiversity in India

Unit – IV

(9 Periods)

4.1 Sources, effect and control measures of air pollution, Acid rain, green house effect, ozone depletion and global warming

4.2 Sources, effect and control measures of water pollution

4.3 Sources effect and control measures of noise pollution

4.4 Toxic effect of heavy metals (lead, cadmium and mercury) – Bioaccumulation and biomagnification

### Semester – II

#### Paper – III : Life and Diversity of Animals –

#### Nonchordates (Arthropoda to Hemichordata)

Unit – I

(9 Periods)

1.1. Arthropoda : General characters and classification up to classes

1.2. Cockroach : Mouth parts, digestive system and reproductive system

1.3. Insects as Vectors : Mosquito, Housefly, Sandfly, Tse-Tse fly

1.4. Study of crustacean larvae : Nauplius, Zoea and Megalopa; Social behavior in honey bees

Unit – II

(9 Periods)

2.1 Mollusca : General characters and classification up to classes

2.2 Pila : Morphology, digestive, respiratory and reproductive system

2.3 Pearl formation in Mollusca

2.4 Molluscan larvae : Glochidium and Veliger

Unit – III

(9 Periods)

3.1 Echinodermata : General characters and classification up to classes

3.2 Asterias : External features and digestive system

3.3 Water vascular system and locomotion in Starfish

3.4 Echinoderm larvae : Bipinnaria and Auricularia

Unit – IV

(9 Periods)

4.1 Hemichordata : General characters and phylogeny

4.2 Balanoglossus : External features and digestive system

4.3 Reproduction in Balanoglossus, Tornaria larva

4.4 Affinities of Balanoglossus



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**Semester – II**  
**Paper – IV: Cell Biology**

**Unit – I**

- (9 Periods)
- 1.1 Ultrastructure of prokaryotic and eukaryotic cell
  - 1.2 Plasma membrane: Structure- Fluid Mosaic Model and functions
  - 1.3 Endoplasmic reticulum: Types, ultrastructure and functions
  - 1.4 Golgi complex: Ultrastructure and functions

**Unit – II**

- (9 Periods)
- 2.1 Ultrastructure of mitochondria
  - 2.2 Oxidative phosphorylation – Glycolysis and Krebs's cycle
  - 2.3 Electron Transport Chain and terminal oxidation
  - 2.4 Lysosome: Structure, polymorphism and functions 6

**Unit – III**

- (9 Periods)
- 3.1 Nucleus: Ultrastructure of nuclear membrane
  - 3.2 Structure and functions of nucleolus
  - 3.3 Chromosome: Structure and types, structure of nucleosome
  - 3.4 Giant chromosomes: Lamp-brush and polytene chromosome

**Unit – IV**

- (9 Periods)
- 4.1 Ribosome: Structure, types, Lake's model and functions
  - 4.2 Somatic cell division: Cell cycle and Mitosis
  - 4.3 Meiosis (different phases and significance), synaptonemal complex
  - 4.4 Cellular ageing and cell death, Elementary idea of cancer and its causative agents



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**RASHTRASANT TUKADOJI MAHARAJ**  
**NAGPUR UNIVERSITY**

**Changes in SYLLABUS for consideration of the Faculty and  
Academic Council Recommended by Board of Studies in ZOOLOGY**

**Faculty of SCIENCE and TECHNOLOGY**

**B. Sc. ZOOLOGY SEM-I**

Subject and Semester	Paper No.	Matter to be DELETED	Matter to SUSTITUTED
<b>B.Sc ZOOLOGY SEM-I</b>	<b>Paper – I : Life and Diversity of Animals- Nonchordates (Protozoa to Annelida)</b>	2.4 Obelia: structure and life cycle, corals and coral reef formation. 4.3 Trochophore larva and its significance	2.4 Obelia: structure and life cycle, Polymorphism in hydrozoa. 4.3 Copulation, fertilization and cocoon formation in leech.
	<b>Paper -II : Environment Biology</b>	3.3 Wildlife conservation acts (1972 and 1984), Introductory study of national parks and sanctuaries- Tadoba, Kanha, Bharatpur and Nagzira. Hot spots of biodiversity in India.	3.3 Wildlife conservation act 1972, Zoological survey of India: formation and role in animal conservation. 3.4 Hot spots of biodiversity in India. Study of national parks and sanctuaries- Tadoba, Melghat and Nagzira. 4.4 Causes and effects of space pollution



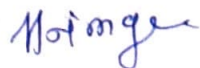
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	<b>Practical</b>	4. Mounting: Nereis parapodia, Jaws of Leech, Nephridia of Leech	<p style="text-align: center;"><b>Section A</b></p> <p>Study of museum specimens by specimen /Charts /Model (Classification of animals up to orders).</p> <p>2. Study of permanent slides: by specimen/Charts.</p> <p>3. Dissection: Virtual dissection by using computersoftware/ programme.</p> <p>4. Mounting: Zooplanktons, Spicules and gemmules of sponge.</p>
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**B.Sc. Zoology SEM -II**

Subject and SEMESTER	Paper No.	Matter to be DELETED	Matter to SUSTITUTED
	<b>Paper - III : Life and Diversity of Animals- Nonchordates (Arthropoda to Hemichordata)</b>	<p>1.2 Cockroach: Mouth parts, digestive system and reproductive system.</p> <p>1.4. Study of crustacean larvae: Nauplius, Zoea and Megalopa; <b>Social behavior in honey bees.</b></p> <p>2.3 Pearl formation in Mollusca</p> <p>3.3 Water vascular system and <b>locomotion in starfish</b></p>	<p>1.2 Cockroach: Mouth parts, digestive system and internal male and female reproductive systems.</p> <p>1.4. Study of crustacean larvae : Nauplius, Zoea and Megalopa;</p> <p>2.2. Pila: Morphology and digestive system</p> <p>2.3. Pila: Respiratory and reproductive system</p> <p>3.3 Water vascular system in starfish</p>



  
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