

सरगुजा विश्वविद्यालय  
अम्बिकापुर (सरगुजा-छ.ग.)

(छ.ग. विश्वविद्यालय अधिनियम क्र. 18/2008 द्वारा स्थापित व जिगमित)



पाठ्यक्रम

बी. ए.-१ (B.A. - 1)

बी.ए. क्लासिक्स-१ (B.A. CLASSICS-1)

परीक्षा वर्ष : 2011

कुलसंचिव

सरगुजा विश्वविद्यालय, अम्बिकापुर

छत्तीसगढ़

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: अधिकृत मुद्रक एवं प्रकाशक :

गीता पब्लिकेशन, महामाईपारा, रायपुर (छत्तीसगढ़)

**SCHEME OF EXAMINATION**

<b>Subject</b>	<b>Paper</b>	<b>Max. Marks</b>	<b>Min. Marks</b>
i) Environmental Studies		75	
Field Work		25 }	33
A. Foundation Course			
i) Hindi Language - I		75	26
ii) English Language - II		75	26
B. Three Core Subject :-			
1. Hindi Literature	I	75 }	50
	II	75 }	
2. Sanskrit Literature	I	75 }	50
	II	75 }	
3. English Literature	I	75 }	50
	II	75 }	
4. Philosophy	I	75 }	50
	II	75 }	
5. Economics	I	75 }	50
	II	75 }	
6. Political Science	I	75 }	50
	II	75 }	
7. History	I	75 }	50
	II	75 }	
8. Ancient Indian History	I	75 }	50
Culture & Archaeology	II	75 }	
9. Sociology	I	75 }	50
	II	75 }	
10. Geography	I	50 }	33
	II	50 }	
	Practical	50	17
11. Mathematics	I	50 }	
	II	50 }	50
	III	50	
12. Statistics	I	50 }	33
	II	50	
	Practical	50	17

(5)

### PART - I

#### SULLABUS FOR ENVIRONMENTAL STUDIES" FOR UNDER GRADUATE

1. "इन्वाहमेन्टल साईसेंस" के पाठ्यक्रम को स्नातक स्तर भाग-एक की कक्षाओं में विश्वविद्यालय अनुदान आयोग के निर्देशानुसार अनिवार्य रूप से शिक्षा सत्र 2003-2004 (परीक्षा 2004) से प्रभावशील किया गया है। स्वशास्त्र महाविद्यालयों द्वारा भी अनिवार्य रूप से अंगीकृत किया जाएगा। भाग 1, 2 एवं 3 में से किसी भी वर्ष में पर्यावरण प्रश्न-पत्र उत्तीर्ण करना अनिवार्य है। तभी उपाधि प्रदाय योग्य होगी।
2. पाठ्यक्रम 100 अंकों का होगा, जिसमें से 75 अंकर सैद्धांतिक प्रश्नों पर होगे एवं 25 अंक क्षेत्रीय कार्य (Field Work) पर होगे।
3. सैद्धांतिक प्रश्नों पर अंक - 75 (सभी प्रश्न इकाई आधार पर रहेंगे जिसमें आंतरिक विकल्प रहेगा)
 

(अ) लघु प्रश्नोंतीर	-	25 अंक
(ब) निर्बंधात्मक	-	50 अंक
4. Field Work - 25 अंकों का मूल्यांकन आंतरिक मूल्यांकन पद्धति से कर विश्वविद्यालय को प्रेषित किया जावेगा। अभिलेखों की प्रयोगिक उत्तर पुस्तिकाओं के समान संबंधित महाविद्यालयों द्वारा सुरक्षित रखेंगे।
5. उपरोक्त पाठ्यक्रम से संबंधित परीक्षा का आयोजन वार्षिक परीक्षा के साथ किया जाएगा।
6. पर्यावरण विज्ञान विषय अनिवार्य विषय है, जिसमें अनुत्तीर्ण होने पर स्नातक स्तर भाग-एक के छात्र/छात्राओं को एक अन्य विषय के साथ पूरक की पात्रता होगी। पर्यावरण विज्ञान के सैद्धांतिक एवं फ़िल्ड वर्क में संयुक्त रूप से 33% (तीस प्रतिशत) अंक उत्तीर्ण होने के लिए अनिवार्य होंगे।
7. स्नातक स्तर भाग-एक के समस्त नियमित/भूतपूर्व/अमहाविद्यालयीन छात्र/छात्राओं को अपना फ़िल्ड वर्क सैद्धांतिक परीक्षा की समाप्ति के पश्चात 10 (दस) दिनों के भीतर संबंधित महाविद्यालय/परीक्षा केन्द्र में जमा करेंगे एवं महाविद्यालय के प्राचार्य/केन्द्र अधीक्षकों/परीक्षकों की नियुक्ति के लिए अधिकृत रहेंगे तथा फ़िल्ड वर्क जमां होने के सात दिनों के भीतर प्राप्त अंक विश्वविद्यालय को भेजेंगे।

### PART - I

#### SULLABUS FOR ENVIRONMENTAL STUDIES" FOR UNDER GRADUATE M.M.75

##### UNIT-I THE MULTI DISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES :

Definition, scope and importance

Need for public awareness.

##### Natural Resources :

Renewable and nonrenewable resources :

Natural resources and associated problems.

- (a) Forest resources : Use and over-exploitation, deforestation, case studies, Timber extraction, mining, dams and their effects on forests and tribal people.
- (b) Water resources : Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and problems.
- (c) Mineral resources : Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
- (d) Food resources : World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
- (e) Energy resources : Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources. Case studies.
- (f) Land resources : Land as a resources, land degradation, man induced landslides, soil erosion and desertification.

- Role of an individual in conservation of natural resources.
- Equitable use of resources for sustainable life-styles.

(9 Lecture)

## **UNIT-II ECOSYSTEMS**

**Concept of an ecosystems.**

**Structure and function of an ecosystem.**

- Producers, consumers and decomposers.

- Energy flow in the ecosystem.

- Ecological succession.

- Food chains, food webs and ecological pyramids.

- Introduction, types, characteristic features, structure and function of the following ecosystem :

- a. Forest ecosystem

- b. Grassland ecosystem

- c. Desert ecosystem

- d. Aquatic ecosystems (Ponds, streams, lakes, rivers, oceans, estuaries)

(9 Lecture)

## **UNIT-III Biodiversity and its Conservation**

- Introduction - Definition : genetic, species and ecosystem diversity.

- Biogeographical classification of India.

- Value of biodiversity : consumptive use, productive use, social, ethical, aesthetic and option values.

- Biodiversity at global, National and local levels.

- India as mega-diversity nation.

- Hot-spots of biodiversity

- Threats to biodiversity : habitat loss, poaching of wildlife, man-wildlife conflicts.

- Endangered and endemic species of India.

- Conservation of biodiversity : In situ and Ex-situ conservation of biodiversity

(9 Lecture)

## **UNIT-IV Environmental Pollution**

### **Definition**

- Causes, effects and control measures of -

- a. Air pollution

- b. Water pollution

- c. Soil pollution

- d. Marine pollution

- e. Noise pollution

- g. Nuclear hazards.

- Solid waste management : Causes, effects and control measures of urban and industrial wastes.

- Role of an individual in prevention of pollution.

- Pollution case studies

- Disaster management : floods, earthquake, cyclone and landslides.

### **Human Population and the Environment**

- Population growth, variation among nations.

- Population explosion - Family Welfare Programme.

- Environment and human health.

- Human Rights.

(9 Lecture)

## **UNIT-V Social Issues and the Environment**

- From Unsustainable to Sustainable development.
- Urban problems related to energy.
- Water conservation, rain water harvesting, watershed management.
- Resettlement and rehabilitation of people, its problems and concerns, Case studies.
- Environmental ethics : Issues and possible solutions.
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies,
- Wasteland reclamation.
- Consumerism and waste products.
- Environment Protection Act
- Air (Prevention and Control of Pollution) Act.
- Water (Prevention and Control of Pollution) Act.
- Wildlife Protection Act.
- Forest Conservation Act.
- Issues involved in enforcement of environmental legislation.
- Public awareness.
- Value Education
- HIV/AIDS
- Women and Child Welfare.
- Role of Information Technology in Environment and Human Health.
- Case Studies.

(9 Lecture)

## **FIELD WORK**

- Visit to a local area to document environmental assets-river/forest/grassland/hill/mountain.
- Visit to local polluted site : Urban/Rural/Industrial/Agriculture.
- Study of common plants, insects, birds.
- Study of simple ecosystems-pond, river, hill slopes, etc. (Field work Equal to 5 lecture hours)

## **REFERENCES :**

1. Agarwal K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
2. Bharucha Erach, the Biodiversity of India, Mapin Publishing Pvt. Ltd. Ahmedabad 380 013, India. Email : mapin@icenet.net(R)
3. Brunner R.C., 1989, Hazardous Waste Incineration, Mc Graw Hill Inc. 480p.
4. Clark R.S., Marine Pollution, Clanderson Press Oxford (TB).
5. Cunningham, W.P. Cooper, T.H. Gorham, E & Hepworth, M.T. 200,
6. Dr A.K. Environmental Chemistry, Wiley Estern Ltd.
7. Down to Earth, Centre for Science and Environment (R)
8. Glotck, H.P. 1993 Water in crisis, Pacific Institute for studies in Devt, Environment & Security. Stockholm Eng. Institute. Oxford Univ. Press. 473p.
9. Hawkins R.E. Encyclopedia of Indian Natural History, Bombay Natural History Society, Mumbai (R).
10. Heywood, V.H. & Watson, R.T. 1995 Global Biodiversity Assessment, Cambridge Univ. Press 1140p.
11. Jadhav H. & Bhosale, V.H. 1995, Environmental Protection and Laws. Himalaya Pub. House, Delhi 284p.
12. McKinney M.L. & School R.M. 1996, Environmental Science systems & Solutions, Web enhanced editio, 639p.

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**पाठ्यक्रम**

**B. Sc. Part - I**

**बी.एस.सी. भाग - १**

**परीक्षा वर्ष : 2011**

कुलसचिव

सरगुजा विश्वविद्यालय, अम्बिकापुर  
छत्तीसगढ़

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: अधिकृत मुद्रक एवं प्रकाशक :

गीता पब्लिकेशन, महामाईपारा, रावंपुर (छत्तीसगढ़)

**SCHEME OF EXAMINATION**

Subject	Paper	Max. Marks	Total Marks	Min. Marks
Environmental Studies		75	100	33
Field Work		25		
<b>Foundation Course</b>				
Hindi Language	I	75	75	26
English Language	II	75	75	26
Notes : प्रत्येक खंड में से 2 (दो) प्रश्न हल करने होंगे। सभी प्रश्न समान अंक के होंगे।				
<b>Three Elective Subject :</b>				
1. Physics	I	50	100	33
	II	50		
	Practical	50		17
2. Chemistry	I	33		
	II	33	100	33
	III	34		
	Practical	50		17
3. Mathematics	I	50		
	II	50	150	50
	III	50		
4. Botany	I	50	100	33
	II	50		
	Practical	50		17
5. Zoology	I	50	100	33
	II	50		
	Practical	50		17
6. Geology	I	50	100	33
	II	50		
	Practical	50		17
7. Statistics	I	50	100	33
	II	50		
	Practical	50		17
8. Anthropology	I	50	100	33
	II	50		
	Practical	50		17

(5)

B.Sc.-I

## PART - I

### SULLABUS FOR ENVIRONMENTAL STUDIES" FOR UNDER GRADUATE

1. "इन्वाहरेन्टल साईंसेस" के पाठ्यक्रम को स्नातक स्तर भाग-एक की कक्षाओं में विश्वविद्यालय अनुदान आवंग के निर्देशानुसार अनिवार्य रूप से शिक्षा सत्र 2003-2004 (परीक्षा 2004) से प्रभावशील किया गया है। यहाँसी महाविद्यालयों द्वारा भी अनिवार्य रूप से अंगीकृत किया जाएगा। भाग 1, 2 एवं 3 में से किसी भी वर्ष में पर्यावरण प्रश्न-पत्र उत्तीर्ण करना अनिवार्य है। उभी उपाधि प्रदाय योग्य होंगी।
2. पाठ्यक्रम 100 अंकों का होगा, जिसमें से 75 अंकर सैद्धांतिक प्रश्नों पर होंगे एवं 25 अंक क्षेत्रीय कार्य (Field Work) पर होंगे।
3. सैद्धांतिक प्रश्नों पर अंक - 75 (सभी प्रश्न इकाई आधार पर रहेंगे जिसमें आंतरिक विकल्प रहेगा)
 

(अ) लघु प्रश्नोत्तर	-	25 अंक
(ब) निबंधात्मक	-	50 अंक
4. Field Work - 25 अंकों का मूल्यांकन आंतरिक मूल्यांकन फॉर्म से कर विश्वविद्यालय को प्रेपित किया जावेगा। अभिलेखों की प्रयोगिक उत्तर पुस्तिकाओं के समान संबंधित महाविद्यालयों द्वारा सुरक्षित रखेंगे।
5. उपरोक्त पाठ्यक्रम से संबंधित परीक्षा का आयोजन वार्षिक परीक्षा के साथ किया जाएगा।
6. पर्यावरण विज्ञान विषय अनिवार्य विषय है, जिसमें अनुत्तीर्ण होने पर स्नातक स्तर भाग-एक के छात्र/छात्राओं को एक अन्य विषय के साथ पूरक की पात्रता होगी। पर्यावरण विज्ञान के सैद्धांतिक एवं फ़ील्ड वर्क में संयुक्त रूप से 33% (तेंतीस प्रतिशत) अंक उत्तीर्ण होने के लिए अनिवार्य होंगे।
7. स्नातक स्तर भाग-एक के समस्त नियमित/भूतपूर्व/अमहाविद्यालयीन छात्र/छात्राओं को अपना फ़ील्ड वर्क सैद्धांतिक परीक्षा की समाप्ति के पश्चात 10 (दस) दिनों के भीतर संबंधित महाविद्यालय/परीक्षा केन्द्र में जमा करेंगे एवं महाविद्यालय के प्राचार्य/केन्द्र अधीक्षकों/परीक्षकों की नियुक्ति के लिए अधिकृत रहेंगे तथा फ़ील्ड वर्क जमा होने के सात दिनों के भीतर प्राप्त अंक विश्वविद्यालय को भेजेंगे।

## PART - I

### SULLABUS FOR ENVIRONMENTAL STUDIES" FOR UNDER GRADUATE

M.M. 75

#### UNIT-I THE MULTI DISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES :

Definition, scope and importance

Need for public awareness.

#### Natural Resources :

Renewable and nonrenewable resources :

Natural resources and associated problems.

- (a) Forest resources : Use and over-exploitation, deforestation, case studies, Timber extraction, mining, dams and their effects on forests and tribal people.
- (b) Water resources : Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and problems.
- (c) Mineral resources : Use and exploitation, environmental effects of extracting and

- (d) using mineral resources, case studies.
- (e) Food resources : World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
- (f) Energy resources : Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources. Case studies.
- (g) Land resources : Land as a resources, land degradation, man induced landslides, soil erosion and desertification.
  - Role of an individual in conservation of natural resources.
  - Equitable use of resources for sustainable life-styles.

(9 Lecture)

## **UNIT-II ECOSYSTEMS**

**Concept of an ecosystems.**

**Structure and function of an ecosystem.**

- Producers, consumers and decomposers.
- Energy flow in the ecosystem.
- Ecological succession.
- Food chains, food webs and ecological pyramids.
- Introduction, types, characteristic features, structure, and function of the following ecosystem :
  - a. Forest ecosystem
  - b. Grassland ecosystem
  - c. Desert ecosystem
  - d. Aquatic ecosystems (Ponds, streams, lakes, rivers, oceans, estuaries)

(9 Lecture)

## **UNIT-III Biodiversity and Its Conservation**

- Introduction - Definition : genetic, species and ecosystem diversity.
- Biogeographical classification of India.
- Value of biodiversity : consumptive use, productive use, social, ethical, aesthetic and option values.
- Biodiversity at global, National and local levels.
- India as mega-diversity nation.
- Hot-spots of biodiversity
- Threats to biodiversity : habitat loss, poaching of wildlife, man-wildlife conflicts.
- Endangered and endemic species of India.
- Conservation of biodiversity : In situ and Ex-situ conservation of biodiversity

## **UNIT-IV Environmental Pollution**

(9 Lecture)

**Definition**

- Causes, effects and control measures of -
  - a. Air pollution

- b. Water pollution
- c. Soil pollution
- d. Marine pollution
- e. Noise pollution
- g. Nuclear hazards.
- Solid waste management : Causes, effects and control measures of urban and industrial wastes.
- Role of an individual in prevention of pollution.
- Pollution case studies
- Disaster management : floods, earthquake, cyclone and landslides.

#### **Human Population and the Environment**

- Population growth, variation among nations,
- Population explosion - Family Welfare Programme,
- Environment and human health.
- Human Rights.

(9 Lecture)

#### **UNIT-V Social Issues and the Environment**

- From Unsustainable to Sustainable development.
- Urban problems related to energy.
- Water conservation, rain water harvesting, watershed management.
- Resettlement and rehabilitation of people, its problems and concerns. Case studies.
- Environmental ethics : Issues and possible solutions.
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- Wasteland reclamation.
- Consumerism and waste products.
- Environment Protection Act
- Air (Prevention and Control of Pollution) Act.
- Water (Prevention and Control of Pollution) Act.
- Wildlife Protection Act.
- Forest Conservation Act.
- Issues involved in enforcement of environmental legislation.
- Public awareness.
- Value Education.
- HIV/AIDS
- Women and Child Welfare.
- Role of Information Technology in Environment and Human Health.
- Case Studies.

(9 Lecture)

#### **FIELD WORK**

- Visit to a local area to document environmental assets-river/forest/grassland/hill/mountain.
- Visit to local polluted site : Urban/Rural/Industrial/Agriculture.

B.Sc.-I



Principal  
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(9)

- Study of common plants, insects, birds.
- Study of simple ecosystems-pond, river, hill slopes, etc. (Field work Equal to 5 lectures hours)

**REFERENCES :**

1. Agarwal K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
2. Bharucha Erach, the Biodiversity of India, Mapin Publishing Pvt. Ltd. Ahmedabad 380 013, India. Email : mapin@icenet.net(R)
3. Bruinner R.C., 1989, Hazardous Waste Incineration, Mc Graw Hill Inc. 480p.
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8. Gloick, H.P. 1993 Water in crisis, Pacific Institute for studies in Deve, Environment & Security. Stockholm Eng. Institute. Oxford Univ. Press. 473p.
9. Hawkins R.E. Encyclopedia of Indian Natural History, Bombay Natural History Society. Mumbai (R).
10. Heywood, V.H. & Watson, R.T. 1995 Global Biodiversity Assessment, Cabridge Univ. Press 1140p.
11. Jadhav H. & Bhosale, V.H. 1995, Environmental Protection and Laws, Himalaya Pub. House. Delhi 284p.
12. Mckinney M.L. & School R.M. 1996, Environmental Science systems & Solutions, Web enhanced editio, 639p.
13. Mhaskar A.K., Matter Hazardous, Techno-Science Publication (TB).
14. Miller T.G. Jr., Environmental Science, Wadsworth Publishing Co. (TB).
15. Odum, E.P. 1971, Fundamentals of Ecology, W.B. Saunders Co. USA, 574p.
16. Rao M.N. & Datta, A.K. 1987, Waste Water treatment, Oxford & IBH Publ. Co. Pvt. Ltd. 345p.
17. Sharma B.K., 2001, Environmental Chemistry, Goel Publ. House, Meerut.
18. Survey of the Environment, The Hindu (M).
19. Townsend C., Harper J., and Michael Begon, Essentials of Ecology, Blackwell Science (TB).
20. Trivedi R.K. Handbook of Environmental Laws, Rules, Guidelines, Compliances and Standards, Vol. I and II, Environment Media (R).
21. Trivedi R.K., and P.K. Goel, Introduction to air pollution, Techno-Science Publications (TB).
22. Wagner K.D., 1998, Environmental Management, W.B. Saunders Co, Philadelphia, USA 499p.

(M) Magazine  
 (R) Reference  
 (TB) Textbook.

*C.N.29*  
**Principal**  
 T.S.S. Govt. College, Pathalgaoon  
 Distt. Jasalpur (C.G.)

सरगुजा विश्वविद्यालय  
अम्बिकापुर (सरगुजा-छ.ग.)

(छ.ग. विश्वविद्यालय अधिनियम क्र. 18/2008 द्वारा स्थापित व निगमित)



पाठ्यक्रम

बी.काम. भाग - १  
B. Com. Part - I

परीक्षा वर्ष : 2011

कुलसंचिव  
सरगुजा विश्वविद्यालय, अम्बिकापुर  
छत्तीसगढ़



मूल्य : 20/-

**B.COM. PART-I**  
**SCHEME OF EXAMINATION**

Subject			Max. Marks	Min. Marks
i) Environmental Studies	75		100	33
Field Work	25			
<b>A. FOUNDATION COURSE</b>				
i) Hindi Language - I		75		26
ii) English Language - II		75		26
Notes: प्रत्येक खंड में से 2 (दो) प्रश्न हल करने होंगे। सभी प्रश्न समान अंक के होंगे।				
<b>B. THREE COMPULSORY GROUPS</b>				
<b>GROUP - I</b>				
<b>Accounting :</b>				
i) Financial Accounting-I	75			50
ii) Business Mathematics-II	75			
<b>GROUP - II</b>				
<b>Business Management :</b>				
i) Business Communication-I	75			50
ii) Business Reg. Framework-II.	75			
<b>GROUP - III</b>				
<b>Applied Economics :</b>				
i) Business Environment-I	75			50
ii) Business Economics-II	75			
<b>Computer Application (Vocational) :</b>				
i) Computer Fundamentals & office Automation	50			
ii) Computer Financial Accounting	50			150
iii) Practical & Viva voce	50			
<b>Tax Procedure &amp; Practice (Vocational) :</b>				
i) Indian Tax System	50			
ii) Income Tax Law	50			150
iii) Practical & Viva voce	50			

**USE OF CALCULATORS**

The students of Degree/P.G. Classes will be permitted to use of Calculators in the examination hall from annual 1986 examination on the following conditions as per decision of the standing committee of the Academic Council at its meeting held on 31-1-1986.

1. Student will bring their own Calculators.
2. Calculators will not be provided either by University or examination centres.
3. Calculators with memory and following variables be permitted +, -, x, ., square reciprocal, exponentials, log squares, root, trigonometric functions viz, sine, cosine, tangent etc. factorial summation, xy, yx and in the light of objective approval of marks and demerits of the viva only will be allowed.

(5)

## PART. - I

### SYLLABUS FOR ENVIRONMENTAL STUDIES" FOR UNDER GRADUATE

1. "इन्वाहरमेन्टल साइंसेस" के पाठ्यक्रम को स्नातक स्तर भाग-एक की कक्षाओं में विश्वविद्यालय अनुदान आगें त्रि निर्देशानुसार अनिवार्य रूप से शिक्षा सत्र 2003-2004 (परीक्षा 2004) से प्रभावशील किया गया है। स्वयंभू महाविद्यालयों द्वारा भी अनिवार्य रूप से अंगीकृत किया जाएगा।  
वी.काम. भाग 1, 2 एवं 3 में से किसी वर्ष में पर्यावरण अध्ययन प्रश्न-पत्र उर्णीण करना अनिवार्य है। तभी उपाधि प्रदाय होगी।
2. पाठ्यक्रम 100 अंकों का होगा, जिसमें से 75 अंक सैद्धांतिक प्रश्नों पर होंगे एवं 25 अंक क्षेत्रीय कार्य (Field Work) पर होंगे।
3. सैद्धांतिक प्रश्नों पर अंक - 75 (सभी प्रश्न इकाई आधार पर रहेंगे जिसमें आंतरिक विकल्प रहेगा)
 

(अ) लघु प्रश्नोंतरीय	25 अंक
(ब) निर्बंधात्मक	50 अंक
4. Field Work. - 25 अंकों का मूल्यांकन आंतरिक मूल्यांकन पद्धति से कर विश्वविद्यालय को प्रेपित किया जावेगा। अभिलेखों की प्रयोगिक उत्तर पुस्तिकाओं के समान संबंधित महाविद्यालयों द्वारा सुरक्षित रखेंगे।
5. उपरोक्त पाठ्यक्रम से संबंधित परीक्षा का आयोजन वार्षिक परीक्षा के साथ किया जाएगा।
6. पर्यावरण विज्ञान विषय अनिवार्य विषय है, जिसमें अनुर्तीर्ण होने पर स्नातक स्तर भाग-एक के छात्र/छात्राओं को एक अन्य विषय के साथ पूरक की पात्रता होगी। पर्यावरण विज्ञान के सैद्धांतिक एवं फ़ील्ड वर्क में संयुक्त रूप से 33% (तीसांसे प्रतिशत) अंक उत्तीर्ण होने के लिए अनिवार्य होंगे।
7. स्नातक स्तर भाग-एक के समस्त नियमित/भूतपूर्व/अमहाविद्यालयीन छात्र/छात्राओं को अपना फ़ील्ड वर्क सैद्धांतिक परीक्षा की समाप्ति के पश्चात 10 (दस) दिनों के भीतर संबंधित महाविद्यालय/परीक्षा केन्द्र में जमा करेंगे एवं महाविद्यालय के प्राचार्य/केन्द्र अधीक्षकों/परीक्षकों की नियुक्ति के लिए अधिकृत रहेंगे तथा फ़ील्ड वर्क जमा होने के सात दिनों के भीतर प्राप्त अंक विश्वविद्यालय को भेजेंगे।

## PART - I

### SYLLABUS FOR ENVIRONMENTAL STUDIES" FOR UNDER GRADUATE

M.M. 75

#### UNIT-I THE MULTI DISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES :

Definition, scope and importance

Need for public awareness.

Natural Resources :

Renewable and nonrenewable resources :

Natural resources and associated problems.

- (a) Forest resources : Use and over-exploitation, deforestation, case studies, Timber extraction, mining, dams and their effects on forests and tribal people.
- (b) Water resources : Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and problems.
- (c) Mineral resources : Use and exploitation, environmental effects of extracting and

- using mineral resources, case studies.
- (d) Food resources : World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
- (e) Energy resources : Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources. Case studies.
- (f) Land resources : Land as a resources, land degradation, man induced landslides, soil erosion and desertification.
  - Role of an individual in conservation of natural resources.
  - Equitable use of resources for sustainable life-styles.

(9 Lecture)

## **UNIT-II ECOSYSTEMS**

**Concept of an ecosystems.**

**Structure and function of an ecosystem.**

- Producers, consumers and decomposers.
- Energy flow in the ecosystem.
- Ecological succession.
- Food chains, food webs and ecological pyramids.
- Introduction, types; characteristic features, structure and function of the following ecosystem :

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

(9 Lecture)

## **UNIT-III Biodiversity and its Conservation**

Introduction - Definition : genetic, species and ecosystem diversity.

Biogeographical classification of India.

Value of biodiversity : consumptive use, productive use, social, ethical, aesthetic and option values.

Biodiversity at global, National and local levels.

India as mega-diversity nation.

Hot-spots of biodiversity

Threats to biodiversity : habitat loss, poaching of wildlife, manwildlife conflicts.

Endangered and endemic species of India.

Conservation of biodiversity : In situ and Ex-situ conservation of biodiversity

(9 Lecture)

## **UNIT-IV Environmental Pollution**

**Definition**

Causes, effects and control measures of -

- a. Air pollution
- b. Water pollution
- c. Soil pollution
- d. Marine pollution
- e. Noise pollution
- g. Nuclear hazards.

Solid waste management : Causes, effects and control measures of urban and industrial wastes.

Role of an individual in prevention of pollution.

Pollution case studies

Disaster management : floods, earthquake, cyclone and landslides.

#### **Human Population and the Environment**

Population growth, variation among nations,

Population explosion - Family Welfare Programme.

Environment and human health.

Human Rights.

(9 Lecture)

#### **UNIT-V Social Issues and the Environment**

From Unsustainable to Sustainable development.

Urban problems related to energy.

Water conservation, rain water harvesting, watershed management.

Resettlement and rehabilitation of people, its problems and concerns. Case studies.

Environmental ethics : Issues and possible solutions.

Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.

Wasteland reclamation.

Consumerism and waste products.

Environment Protection Act

Air (Prevention and Control of Pollution) Act.

Water (Prevention and Control of Pollution) Act.

Wildlife Protection Act.

Forest Conservation Act.

Issues involved in enforcement of environmental legislation.

Public awareness.

Value Education

HIV/AIDS

Women and Child Welfare.

Role of Information Technology in Environment and Human Health.

Case Studies.

(9 Lecture)

(8)

## FIELD WORK

- Visit to a local area to document environmental assets-river/forest/grassland/hill/mountain.
- Visit to local polluted site : Urban/Rural/Industrial/Agriculture.
- Study of common plants, insects, birds.
- Study of simple ecosystems-pond, river, hill slopes, etc. (Field work Equal to 5 lecture hours)

## REFEPENCES :

1. Agarwal K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
2. Bharucha Erach, the Biodiversity of India, Mapin Publishing Pvt. Ltd. Ahmedabad 380 013, India, Email : mapin@icenet.net(R)
3. Brunner R.G., 1989, Hazardous Waste Incineration, Mc Graw-Hill Inc. 480p.
4. Clark R.S., Marine Pollution, Clanderson Press Oxford (TB).
5. Cunningham, W.P. Cooper, T.H. Gorham, E & Hepworth, M.T. 200,
6. Dr A.K. Environmental Chemistry, Wiley Eastern Ltd.
7. Down to Earth, Centre for Science and Environment (R)
8. Gloick, H.P. 1993 Water in crisis, Pacific Institute for studies in Dev, Environment & Security. Stockholm Eng. Institute, Oxford Univ, Press. 473p.
9. Hawkins R.E. Encyclopedia of Indian Natural History, Bombay Natural History Society, Mumbai (R).
10. Heywood, V.H. & Watson, R.T. 1995 Global Biodiversity Assessment, Cambridge Univ. Press 1140p.
11. Jadhav H. & Bhosale, Y.H. 1995, Environmental Protection and Laws. Himalaya Pub. House. Delhi 284p.
12. McKinney M.L. & School R.M. 1996, Environmental Science systems & Solutions, Web enhanced édition, 639p.
13. Mhaskar A.K., Matter Hazardous, Techno-Science Publication (TB).
14. Miller T.G. Jr., Environmental Science, Wadsworth Publishing Co. (TB).
15. Odum, E.P. 1971, Fundamentals of Ecology, W.B. Saunders Co. USA, 574p.
16. Rao M.N. & Datta, A.K. 1987, Waste Water treatment. Oxford & IBH Publ. Co. Pvt. Ltd. 345p.
17. Sharma B.K., 2001, Environmental Chemistry, Goel Publ. House, Meerut.
18. Survey of the Environment, The Hindu (M).
19. Townsend C., Harper J., and Michael Begon, Essentials of Ecology, Blackwell Science (TB).
20. Trivedi R.K. Handbook of Environmental Laws, Rules, Guidelines, Compliances and Standards, Vol. I and II, Environment Media (R).
21. Trivedi R.K., and P.K. Goel, Introduction to air pollution, Techno-Science Publications (TB).
22. Wagner K.D., 1998, Environmental Management. W.B. Saunders Co. Philadelphia, USA 499p.

(R) Reference

(M) Magazine

(TB) Textbook

B.Com. - Part-I

*Rajendra*  
Principal

T.S.S.Govt. College, Pathalgaoan  
Distt-Jashpur (C.G.)

(9)

# SANT GHIKA GURU VISHWAVIDYALAYA SARGUJA AMBIKAPUR (C.G.)



CHOICE BASED CREDIT SYSTEM  
(CBCS)  
2018-19

## Syllabus

### M.A. Sociology





## M.A.(Sociology) SECOND SEMESTER

Course Code	Course Title	Course Description	Credits	Contact Hours Per Week			Final Assessment (Hrs.)		Marks	
				L	T	P	Int.		E	M
							Expt.	Total		
MAS 201	CCC	CLASSICAL SOCIOLOGICAL THINKERS ✓	3	3	2	01	1	0	20	30
MAS 202	CCC	QUANTITATIVE RESEARCH TECHNIQUES IN SOCIOLOGY ✓	3	3	2	01	1	0	20	30
MAS 203	CCC	THEORETICAL PERSPECTIVES IN SOCIOLOGY ✓	3	3	2	01	1	0	20	30
MAS 211	CCC	FIELD WORK	3	3	00	00	00	00	00	00
MAS 205	DSC	SOCIAL OUTREACH AND SKILLS DEVELOPMENT* ✓	3	3	00	00	00	1	10	20
MAS 301	ECC-II	ENVIRONMENTAL AND FOREST LAWS	3	3	2	01	1	00	20	30
MAS 302	ECC-II	SOCIOLOGY OF DEVELOPMENT								
MAS 303	ECC-II	SOCIOLOGY OF HEALTH								
MAS 304	ECC-II	POLITICAL SOCIOLOGY								
MAS 305	ECC-II	INDIAN RURAL SOCIETY ✓								
CLICK HERE TO DOWNLOAD SYLLABUS (images/syllabus/COLLEGE/sociorsem2.pdf)				TOTAL = 30	-	-	-	-	-	-

Note: '\*' stands for field study with educational Tour.

सामाजिक शोधगति एवं वैश्वानिकी

Principal

T.S.S.Govt.College.Pathalgaoj  
Distt.Jashpur (C.G.)

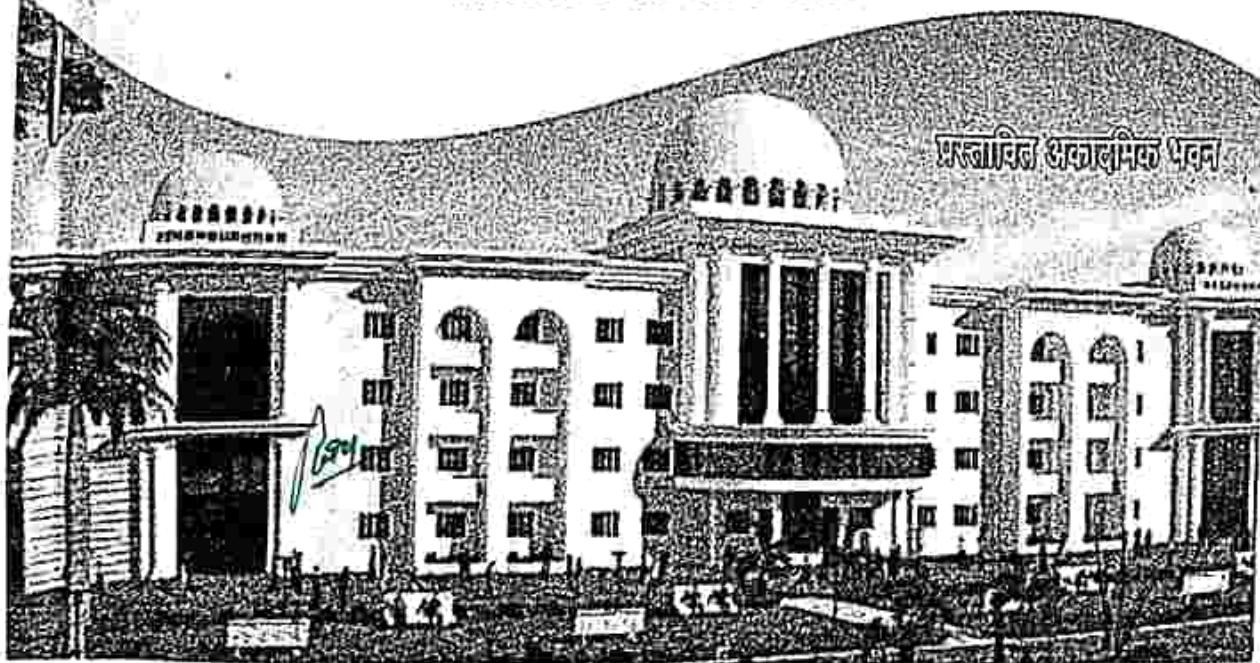
# SANT GHIRA GURU VISHWAVIDYALAYA SARGUJA AMBIKAPUR (C.G.)



CHOICE BASED CREDIT SYSTEM  
(CBCS)  
2018-19

## Syllabus

Master of M.Com.



## M. COM. SECOND SEMESTER

Course Code	Paper/Subject	Cre dit	Contract			EoSE (Hrs.)
			L	T	P	
MCM201	Business Economics	6	4	3	0	3 0
MCM202	Specialized Accounting	6	4	3	0	3 0
MCM203	Accounting for Managerial Decision	6	4	3	0	3 0
MCM202- OSC (Compulso- ry)	Social Outreach & Skill Development	6	4	3	0	3 0
ECC/CB- B01	Environment & Forest Law					
ECC/CB- B02	Advanced Statistics					
ECC/CB- B03	Business Law					
ECC/CB- B04	Marketing Strategy					
ECC/CB- B05	Advertising & Sales Management		6	4	3	0 3 0
ECC/CB- B06	Personnel Management					
MINIMUM CREDIT IN INDIVIDUAL SUBJECT IS 6 AND IN COMPLETE SEMESTER IT WOULD BE 30		30				

  
 Principal  
 T.S.S.Govt.College,Pathalgabba  
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