

Teaching Plan

Name of the Faculty: Dr. Mukesh

Name of the Course : B.Sc. (H) Computer Science

Semester: II

Sec (if any): B

Title of the paper: Ability enhancement credit course (AECC Jan- May 2016)

Month	Topics Covered	References
January	Air pollution Water Pollution Types, causes, effects and controls (4 lectures) 1 lecture alternate week field trip/ presentation	Bharucha, E. 2003, Textbook for Environmental Studies, University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune. 361. Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia: Saunders. Singh, J.S., Singh, S.P. and Gupta, S.R. 2006. Ecology, Environment and Resource Ecology, Environment and Resource Conservation. Anamaya Publishers.
February	Soil pollution Noise Pollution Types, causes, effects and controls (4 lectures) 1 lecture alternate week field trip/ presentation	-do-
March	Nuclear hazards and human health risks (4 lectures) 1 lecture alternate week field trip/ presentation	-do-
April	Solid waste management: Control measures of urban and industrial waste & case studies. (4 lectures) 1 lecture alternate week field trip/ presentation	-do-

The tentative date of assignment/test/project

Assignment: 15 March 2016

Test/ Presentation: 25 February 2016

Teaching Plan

Name of the Faculty : Jyoti Kumari

Name of the Course : B.Sc (hons) Comp. Sci.

Semester : II Sec (if any): B

Title of the Paper : Programming in Java

Month	Topics Covered	References
January	Chapter 1-8: Introduction to java, data types, variables, operators, control statements, OOPs concepts, classes, methods, objects, inheritance Chapter-15: String Handling Test(Last Week) Practical Lab: Program 1-10	[1]
February	Chapter-16: Exploring java.lang Chapter-10: Exception Handling Chapter-12: Enumeration & Autoboxing Chapter-11: Multithreaded Programming Chapter-13: I/O, applets, Reading/Writing from consoles/files. Test(Third week) Assignment-1(Last Week) Practical Lab: Program 11-15, 18-22	[1]
March	Chapter-9: Packages and Interfaces Chapter-21: Networking Chapter-22: Applet class Assignment-2(Last Week) Practical Lab: Program 16-17, 23-26	[1]
April	Chapter-23: Event Handling Practical Lab: Program 27-30	[1]

References:

[1] Herbert Schildt, Java:The complete Reference, 9th Edition

Teaching Plan

Name of the Faculty : Ms. Astha Goyal

Name of the Course : B.Sc.(H) Computer Science- CBCS

Semester : IInd Sec (if any) : B

Title of the Paper : Discrete Structures

Month	Topics Covered	References
January	Introduction- Set, Relations, Functions, Permutations and Combinations Practicals: Q1,Q2,Q3,Q4,Q5,Q10(sets, relations, combinatorics)	1. C.L.Liu & Mahopatra, Elements of Discrete Mathematics, 4 th Edition, Tata McGraw Hill. 2. Rosen, Discrete Mathematics and its Applications, 6 th Edition. 3. T.H. Coremen , Introduction to Algorithms, Prentice Hall, 3 rd Edition.
February	Growth of Functions, Generating Functions, Recurrence Relation Practicals: Q14,Q15, Q16 (growth of functions) Q8,Q9 (functions, recurrence) Q11, Q12,Q13 (recurrence Relations) Test-1 Assignment	
March	Graphs and Trees Practicals: Q17-24 (graphs) Test-2	
April	Logic (Propositional and Predicate) Practicals: Q6,Q7 (Logic) Practical Examination	

Note: 1. There will be a continuous assessment of the practicals followed by an internal examination.

2. Refer to the above table for tentative dates of Assignments/Tests.

Teaching Plan

Name of the Faculty : Ms. Rochana Chaturvedi

Name of the Course : B.Sc.(H) Computer Science- CBCS

Semester : IInd Sec (if any) : A

Title of the Paper : Discrete Structures

Month	Topics Covered	References
January	Introduction- Set, Relations, Functions, Permutations and Combinations Practicals: Q1,Q2,Q3,Q4,Q5,Q10(sets, relations, combinatorics) Assignment	1. C.L.Liu & Mahopatra, Elements of Discrete Mathematics, 4 th Edition, Tata McGraw Hill. 2. Rosen, Discrete Mathematics and its Applications, 6 th Edition. 3. T.H. Coremen , Introduction to Algorithms, Prentice Hall, 3 rd Edition.
February	Growth of Functions, Generating Functions, Recurrence Relation Practicals: Q14,Q15, Q16 (growth of functions) Q8,Q9 (functions, recurrence) Q11, Q12,Q13 (recurrence Relations) Test-1	
March	Graphs and Trees Practicals: Q17-24 (graphs) Test-2	
April	Logic (Propositional and Predicate) Practicals: Q6,Q7 (Logic) Practical Examination	

Note: 1. There will be a continuous assessment of the practicals followed by an internal examination.

2. Refer to the above table for tentative dates of Assignments/Tests.

Teaching Plan

Name of the Faculty: Dr. (Ms). Shalu Chandra

Name of the Course and Subject: B.Sc (H) Computer Science (Environmental Science)

Semester: II

Sec (if any): B

Title of the paper: Ability enhancement credit course (AECC Jan- May 2016)

Month	Topics Covered	References
January	<p>Unit 6 : Environmental Policies & Practices</p> <ul style="list-style-type: none"> • Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture • Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. • Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context. <p>(7 lectures)</p> <p>1 lecture per week field trip/presentation</p>	<p>Bharucha, E. 2003, Textbook for Environmental Studies, University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune. 361.</p> <p>Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia: Saunders.</p> <p>Singh, J.S., Singh, S.P. and Gupta, S.R. 2006. Ecology, Environment and Resource Ecology, Environment and Resource Conservation. Anamaya Publishers.</p>
February	<p>Unit 5 : Environmental Pollution</p> <ul style="list-style-type: none"> • Environmental pollution : types, causes, effects and controls; Air, water, soil and noise pollution • Nuclear hazards and human health risks • Solid waste management: Control measures of urban and industrial waste. • Pollution case studies. (8 lectures) <p>1 lecture per week field trip/presentation</p>	-do-
March	<p>Unit 7 : Human Communities and the Environment</p> <ul style="list-style-type: none"> • Human population growth: Impacts on environment, human health and welfare. • Resettlement and rehabilitation of project affected persons; case studies. • Disaster management: floods, earthquake, cyclones and landslides. (6 lectures) <p>1 lecture per week field trip/presentation</p>	-do-
April	<p>Unit 7 : Human Communities and the Environment</p> <ul style="list-style-type: none"> • Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan. • Environmental ethics: Role of Indian and other religions and 	-do-

	<p>cultures in environmental conservation. • Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi). (6 lectures) 1 lecture per week field trip/presentation</p> <p>The tentative date of assignment/test/project</p> <p>Assignment: 15 March 2016 Submission: March 2016</p> <p>Test/Presentation: 25 February 2016</p>	
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Note: The tentative date of assignment/test/project may also be provided.

The schedule of Field trip may also be provided.

Teaching Plan

Name of the Faculty: Ms. Geetanjali Sageena

Name of the Course: B.Sc. (H) Computers Science

Semester: II

Sec (if any): A

Title of the paper: Ability enhancement credit course (AECC Jan- May 2016)

Month	Topics Covered	References
January	<p>Unit 1 : Introduction to environmental studies Multidisciplinary nature of environmental studies;• Scope and importance; Need for public awareness. (2 lectures)</p> <p>Unit 2 : Ecosystems What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem:• food chains, food webs and ecological succession. Case studies of the following ecosystems : a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) (6 lectures) 1 lecture per week field trip/presentation</p>	<p>Bharucha, E. 2003, Textbook for Environmental Studies, University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune. 361.</p> <p>Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia: Saunders.</p> <p>Singh, J.S., Singh, S.P. and Gupta, S.R. 2006. Ecology, Environment and Resource Ecology, Environment and Resource Conservation. Anamaya Publishers.</p>

February	<p>Unit 3 : Natural Resources : Renewable and Non-renewable Resources Land resources and land use change; Land degradation, soil erosion and desertification. • Deforestation: Causes and impacts due to mining, dam building on environment, forests, • biodiversity and tribal populations. Water : Use and over-exploitation of surface and ground water, floods, droughts, conflicts • over water (international & inter-state). Energy resources : Renewable and non renewable energy sources, use of alternate energy • sources, growing energy needs, case studies. (8 lectures)</p> <p>Unit 4 : Biodiversity and Conservation Levels of biological diversity : genetic, species and ecosystem diversity; Biogeographic zones • of India; Biodiversity patterns and global biodiversity hot spots India as a mega-biodiversity nation; Endangered and endemic species of India • Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological • invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and • Informational value. (8 lectures)</p> <p>1 lecture per week field trip/ presentation</p>	-do-
March	<p>Unit 5 : Environmental Pollution Environmental pollution : types, causes, effects and controls; Air, water, soil and noise • pollution Nuclear hazards and human health risks • Solid waste management: Control measures of urban and industrial waste. • Pollution case studies. (8 lectures)</p> <p>Unit 6 : Environmental Policies & Practices Sustainability and sustainable development. Climate change, global warming, ozone layer depletion, acid rain and impacts on human • communities and agriculture Environment Laws: Environment Protection Act; Air (Prevention • & Control of Pollution) Act; Water (Prevention and control</p>	-do-

	<p>of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.</p> <p>(7 lectures) 1 lecture per week field trip/ presentation</p>	
April	<p>Unit 7 : Human Communities and the Environment Human population growth: Impacts on environment, human health and welfare. • Resettlement and rehabilitation of project affected persons; case studies. • Disaster management: floods, earthquake, cyclones and landslides. • Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan. • Environmental ethics: Role of Indian and other religions and cultures in environmental • conservation. Environmental communication and public awareness, case studies (e.g., CNG vehicles in • Delhi). (6 lectures)</p> <p>Unit 8: Field work Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc. • Visit to a local polluted site- Urban/Rural/Industrial/Agricultural. • Study of common plants, insects, birds and basic principles of identification. • Study of simple ecosystems-pond, river, Delhi Ridge, etc. (Equal to 5 lectures)</p> <p>1 lecture per week field trip/ presentation</p>	-do-

The tentative date of assignment/test/project

Assignment: 15 March 2016

Test/ Presentation: 25 February 2016

Teaching Plan

Name of the Faculty: Ms. Geetanjali Sageena

Name of the Course: B.Sc. (H) Computers Science

Semester: II

Sec (if any): - B

Title of the paper: Ability enhancement credit course (AECC Jan- May 2016)

Month	Topics Covered	References
January	Unit 1 : Introduction to environmental studies Multidisciplinary nature of environmental studies;• Scope and importance; Need for public awareness. (2 lectures) 1 lecture per week field trip/ presentation	Bharucha, E. 2003, Textbook for Environmental Studies, University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune. 361. Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia: Saunders. Singh, J.S., Singh, S.P. and Gupta, S.R. 2006. Ecology, Environment and Resource Ecology, Environment and Resource Conservation. Anamaya Publishers.
February	Unit 2 : Ecosystems What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem:• food chains, food webs and ecological succession. Case studies of the following ecosystems : a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) (6 lectures) 1 lecture per week field trip/ presentation	<p style="text-align: center;">-do-</p>
March	Unit 3 : Natural Resources : Renewable and Non-renewable Resources Land resources and land use change; Land degradation, soil erosion and desertification. • Deforestation: Causes and impacts due to mining, dam building on environment, forests, • biodiversity and tribal populations. Water : Use and over-exploitation of surface and ground water, floods, droughts, conflicts • over water (international & inter-state). Energy resources : Renewable and non renewable energy sources, use of alternate energy • sources, growing energy needs, case studies. (8 lectures) 1 lecture per week field trip/	<p style="text-align: center;">-do-</p>

	presentation	
April	Unit 4 : Biodiversity and Conservation Levels of biological diversity : genetic, species and ecosystem diversity; Biogeographic zones• of India; Biodiversity patterns and global biodiversity hot spots India as a mega-biodiversity nation; Endangered and endemic species of India• Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological• invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and• Informational value. (8 lectures) 1 lecture per week field trip/ presentation	-do-

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Assignment: 15 March 2016

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