Department of Geography

Lesson plan- 2016-17 (Odd Semester)

Geography and Ecosystem, GEOG-301 Theory

Class- M. Sc. II, Semester-3

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| Month/Year | Topic to be covered |
| July, 2016 | Concept of Ecosystem- Types, components and function of ecosystem  Energy flow in ecosystem:  -food chain, food web,  -trophic levels,  -ecological production  -ecological pyramids.  Biogeochemical cycles:  -Hydrological cycle  -carbon cycle  -oxygen cycle  -nitrogen cycle |
| August, 2016 | Biome: Scheme of Classification  -factors affecting the distribution of biomes  -Tropical evergreen rain forest biome  -Savanna biome  -Monsoon biome  -Temperate biome  -Marine biome  Ecosystem approach and its relevance in geography |
| September, 2016 | Man-environment relationship  Classification of resources;  -use and ecological imbalance with  reference to  --soil resources  --forest resources  --energy resources  Biodiversity and conservation:  -preservation and conservation of ecosystem through resource management |
| October/Nov, 2016 | Problems of pollution  -concept of air, water, and noise pollution  Environment legislation  -The Stockholm Conference,  -the Earth Summit,  -Kyoto Protocol  -Copenhagen Conference,  Environmental laws in India (the Wild Life Act, Water Act, Forest Act,  Environment Protection Act and National Environment Tribunal Act).  Revision |

Note: Assignments, tests, and extracurricular activities will be conducted

Name and Signature of the Teacher

Department of Geography

Lesson plan- 2016-17 (Odd Semester)

Field Methods in Geography (Socio-economic) (Theory), GEOG-302A

Class- M. Sc. II, Semester-3

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| Month/Year | Topic to be covered |
| July, 2016 | Significance of Field work in Geography  Identification of Research Problem  Formulation of Research Design. |
| August, 2016 | Types and Sources of Data  -Primary data  -Secondary data  Preparation of Questionnaires  -design of Questionnaire  -structure of Questionnaire  Sample Design  -characteristics of sampling  -essentials of sampling  -types of sampling |
| September, 2016 | Collection of socio-economic data  -essentials and cautions  -convenience and feasibility  Retrieval and Analysis of Data |
| October/Nov, 2016 | Format of Report Writing  -design, structure and writing  Revision |

Note: Assignments, tests, and extracurricular activities will be conducted

Name and Signature of the Teacher

Department of Geography

Lesson plan- 2016-17 (Odd Semester)

Project Report based on Field Survey, GEOG-302-B

Class- M. Sc. II, Semester-3

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| Month/Year | Topic to be covered |
| July, 2016 | Introduction and meaning of Project Report based on Field Survey  Essentials of Project Report based on Field Survey  Characteristics of Project Report based on Field Survey |
| August, 2016 | Types and Sources of Data  -Primary data  -Secondary data  Preparation of Questionnaires  -design of Questionnaire  -structure of Questionnaire  Sample Design  -characteristics of sampling  -essentials of sampling  -types of sampling |
| September, 2016 | Selection, visit and collection of socio-economic data for writing project report  Collection of socio-economic data  Retrieval and Analysis of Data |
| October/Nov, 2016 | Data analysis and presentation  Report writing in laboratory  -design, structure and writing  Revision |

Note: Assignments, tests, and extracurricular activities will be conducted

Name and Signature of the Teacher

Department of Geography

Lesson plan- 2016-17 (Odd Semester)

Urban Geography, GEOG-303(i)

Class- M. Sc. II, Semester-3

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| Month/Year | Topic to be covered |
| July, 2016 | Urban Geography: nature, scope and concepts  Origin and evolution of towns  factors of urban growth  Economic base of cities: concept and employment ratio |
| August, 2016 | Functional classification of cities: concepts  scheme of classification  Rural Urban Fringe: structural characteristics and its development.  City and region: concepts of influence and dominance,  methods of delimitation of area of influence and area of dominance |
| September, 2016 | Urban morphology and landuse structure: city core, commercial, industrial and residential areas  Models of city structure:  -concentric zone model by E.W.Burgess,  -sector model by Homer Hoyt  -multiple nuclei model by Harris and Ullman |
| October/Nov, 2016 | Central place theory of Christaller and Losch  Rank size rule  Law of primate city  Social area analysis  Revision |

Note: Assignments, tests, and extracurricular activities will be conducted

Name and Signature of the Teacher

Department of Geography

Lesson plan- 2016-17 (Odd Semester)

Geography and Disaster Management, GEOG-304(iv)

Class- M. Sc. II, Semester-3

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| Month/Year | Topic to be covered |
| July, 2016 | Definition, nature and classification of disasters  Geography and disasters:  -major disasters of world,  -disaster profile of India |
| August, 2016 | Tectonic Disasters: Volcanoes, Earthquakes, Tsunamis, Landslides  Hydrological Disasters: Floods and Droughts  Climatic Disasters: Cyclones, Heavy Precipitation  Human Induced Disasters: Epidemics, Industrial and Transport Disasters; Wars and Terrorism induced Disasters |
| September, 2016 | Vulnerability to Disasters and Affecting Factors  Planning for Disaster  -Mitigation and Preparedness  Mitigation Measures of Disasters  Post Disaster Recovery and Rehabilitation |
| October/Nov, 2016 | Impacts of Disaster on Society and Economy  Remote Sensing and GIS Applications in Disaster Prevention and Monitoring  Revision |

Note: Assignments, tests, and extracurricular activities will be conducted

Name and Signature of the Teacher

Department of Geography

Lesson plan- 2016-17 (Odd Semester)

Introduction to Remote Sensing (Theory), GEOG-305(A)

Class- M. Sc. II, Semester-3

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| Month/Year | Topic to be covered |
| July, 2016 | Fundamentals: Remote Sensing, definition and scope,  EMR characteristics,  Interaction with matter,  remote sensing regions and bands and  Practice |
| August, 2016 | types of remote sensing  Aerial Photographs: aerial photos, types and scale, resolution,  geometric properties of single aerial photos,  stereoscopy,  stereoscopic parallax,  relief displacement and  Practice |
| September, 2016 | Satellite Imagery: General orbital characteristics of remote sensing satellites,  General characteristics of remote sensing sensors,  characteristics of Indian remote sensing satellite  raw Remote Sensing data  Interpretation and Application and  practice |
| October/Nov, 2016 | -Elements of image interpretation,  -image processing techniques: Visual and Digital  Applications in resource mapping and monitoring and  practice  Revision |

Note: Assignments, tests, and extracurricular activities will be conducted

Name and Signature of the Teacher

Department of Geography

Lesson plan- 2016-17 (Odd Semester)

Introduction to Remote Sensing (Practical), GEOG-305(B)

Class- M. Sc. II, Semester-3

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| Month/Year | Topic to be covered |
| July, 2016 | Identification of Flight Line and practice  Scale of Photographs and Practice |
| August, 2016 | Determination of height of objects from single vertical photographs- and practice  Identification of objects and features with stereoscope- and practice  Preparation of Thematic maps on landuse/land cover and Practice |
| September, 2016 | Georeferencing of satellite imagery in image processing software- and practice  Image to image rectification- and practice  Creating subset and practice |
| October/Nov, 2016 | Merging images of various resolution- and practice  Making false colour composite and practice  Revision |

Note: Assignments, tests, and extracurricular activities will be conducted

Name and Signature of the Teacher