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Chairperson

Board of Studies in Geography (PG)

Department of Geography

Andhra University

Visakhapatnam – 530 003

Dt: 07/11/2020

To  
The Registrar

Andhra University

Visakhapatnam – 530 003.

***Through Proper Channel***

Sir,

Sub: Submission of syllabus for third semester of M.Sc Geography for the academic year 2020-21 – Reg.

Ref: Minutes of the meeting of Chairpersons, BOS of AUCST held on 02/11/2020.

With reference to the resolutions of the above cited, I am here with submitting the hard and soft copies of the syllabus, for the Third semester of M.Sc. Geography course for the academic year 2020-21, earmarking the fifth unit of each paper for assignment. This is for your kind information and necessary action.

Thanking you,

Yours faithfully,

P. SUNEETHA

**(For 2020-21 academic year)**

**THIRD SEMESTER**

**Core Paper 1**

**Gr – 301. POPULATION GEOGRAPHY**

( Effective from the admitted batch of 2015-16)

Unit – 1 Nature and Scope of population geography-Interface between society, population, ecology and geography. Population geography and its relation with other social sciences. Sources of data and methodology of studying population geography

Unit – II World population, distribution and composition. India’s population, composition and distribution. Factors affecting the growth and distribution of population.

Unit – III Malthus theory of population and his contribution – Demographic transition theory and theory of optimum population.

Unit – IV Components of population growth – Fertility, mortality and migration. Factors affecting fertility, mortality and migration.

**Unit-V is for assignment. No questions should be set from this Unit.**

**Unit – V Population policies in developed and developing countries – India’s population policy measures to control population.**

**Text Books:**

Asha, A. Bhende & Tara Kanitkar. Principles of population studies, Himalaya Publishing House. Bombay, 1978

J.I. Clarke. Population Geography, Pergamon Press, 1965.

**References:**

UNESCO. Determinants and consequences of population trends, 1953.

W.S. Thompson. “Population”, National Book Trust, New Delhi, 1967.

Zelinsky, W. Prologues to population Geography, Prentice Hall, Englewood Chiffe, M.J., 1966.

Garnier,J.D. Geography of population, Longman and Green, 1968.

Agarwala, S,N. India’s population: Facts, problems and policy, Meerut, Meenakshi Prakasam, 1967.

Chandrasekhar, S. India’s population: Facts, problems and policy, Meerut, Meenakshi Prakasam, 1967.

**(For 2020-21 academic year)**

**THIRD SEMESTER**

**Core Paper 2**

**Gr - 302. ENVIRONMENTAL GEOGRAPHY**

( Effective from the admitted batch of 2015-16)

UNIT – I Nature and scope of environmental geography – Environmental

Geography and related sciences. Ecosystem – concepts and components,

energy and nutrients in the ecosystem – Bio - geochemical cycles.

UNIT – II Major biotic regions of the world. Man - environment relationship.

Resources use and ecological imbalance with reference to soils, forests

and energy resources. Biodiversity and its conservation.

UNIT – III Population growth and environment, carrying capacity of the earth, Land

resources and world food security. Human settlements and environment;

Industrial environment – urban environment. Man’s impact on physical &

social environments.

UNIT – IV Emerging environmental issues – environmental degradation,

environmental pollution, ozone depletion, green house gases, global

warming. Environmental quality – environmental impact assessment.

**Unit-V is for assignment. No questions should be set from this Unit.**

**UNIT – V Environmental legislation – the Stockholm Conference, the Earth Summit**

**Environmental laws in India. Environmental planning and management.**

**Environmental programs.**

**Text Books:**

Savindra Singh. Environmental geography. Prayag Pustak Bhavan, Allahabad

Bernard J. Nebel. Environmental Science – The way the world works. Prentice Hall, Englewood Cliff, NJ 07632.

**References:**

The State of India’s environment 1982 & 1984 – A citizen’s report. Centre for Science and environment, New Delhi.

Robinson, H. Biogeography, ELBS, London, 1978.

Swarup, R.V., Mishra, S.N., Janchari, V.P. Encyclopediao of ecology, environment and pollution control.

K.M. Agrawal, P.K., Sikdar, S.C. Deb. A Text book of Environment. Macmillan India Limited.

Nag, P., Kumar, V.K. and Singh, J. Geography of Environment.

Strahler, A.N. and Strahler, A.H. Geography and Man’s Environment. John Wiley and Sons, New Delhi.

Daniel B. Botkin, Edward A. Keller. Environmental Science (Earth as a living planet). John Wiley Sons Inc., New York.

Chandana, R.C. Environment. Kalyani Publishers, Ansari Road, New Delhi.

**(For 2020-21 academic year)**

**THIRD SEMESTER**

**Elective Parer I (Option 1)**

**Gr – 303-A PEDOLOGY & HYDROLOGY**

( Effective from the admitted batch of 2015-16)

UNIT – I Factors and processes of soil formation, Soil profiles, Physical and

chemical properties of soil; Classification of soils-zonal, zonal and

intra zonal, world patterns.

UNIT-II Soil erosion and conservation, Soils of India, Sustainable development of

soil resource with reference to India.

UNIT-III Hydrological cycle: Elements of hydrological cycle; Precipitation

intensity and duration; Evaporation; infiltration, water balance elements

and analysis ; flood and drought analysis.

UNIT-IV Ground water occurrences and types, Movement, Quality and quantity

measure; Nature and distribution of ground and surface water distribution

in India.

**Unit-V is for assignment . No questions should be set from this Unit.**

**UNIT-V Water conservation, Application of Remote sensing in hydrological studies.**

**Text Books:**

A.N. Strahler. Physical Geography, Wiley Eastern Pvt. Ltd., New Delhi, 1965

Chorley, R.J.(ed), Water, Earth and Man , Methuen, London,1967.

**References:**

Backman, H.O. and Brady, N.C. The nature and properties of Soils, Mc Millan, New York, 1960.

Bennet, Hugh H. Soil Conservation, McGraw Hill, New York.

Bunting, B.T.. The Geography of Soil, Hutchinson, London, 1973.

Clarke, G.R. Study of the Soil in the Field, Oxford University Press, Oxford, 1957.

Fothy, H.D. and Turk, L.M. Fundamentals of Soil Science, John Wiley, New York. 1972.

Govinda Rajan, S.V. abd Gopala Rao, H.G. Studies on Soils of India, Vikas, New Delhi, 1978

Chorley, R.J.(ed), Introduction to Physical Hydrology, Methuen, London-1969

Dakshina Murty,C.,et al., Water resources of India and their utilization in agriculture, Indian agricultural Research Institute, New Delhi,1973

Jone, J.A.A, Global Hydrology: Processess, Resources and Environmental Management, Longman, London,1997

Matter, J.R.Water Resources, Distribution, Use and management, JohnWiley, Marylane, 1984.

Toddu, D.K., Groundwater Hydrology, John Wiley, New York-1959

**(For 2020-21 academic year)**

**THIRD SEMESTER**

**Elective Paper II (option 1)**

**Gr - 304-A. DISATER MANAGEMENT STUDIES**

( Effective from the admitted batch of 2015-16)

UNIT – 1 Definition and concept of Hazards : classification of hazards; climate

change causes and implications; natural hazards: Earthquakes; volcancity,

landslides, land subsidence and avalanches; forest fires.

UNIT – II Climatic hazards : Droughts and desertification: drought preparedness and

monitoring, floods: flood control and management; thunderstorms;

tornadoes, cyclones, heat waves, cold waves, hail storms.

UNIT – III Coastal hazards: coastal erosin. Strom surge and Tsunamis; origin,

propagation and devastation.

UNIT – IV Human induced disasters: Urban and industrial disasters: Air pollution,

acid rains; Global warming and Ozone depletion, Deforestation;

Desertification; siltation; wetland degradation; Epidemics.

**Unit-V is for assignment. No questions should be set from this Unit.**

**UNIT – V Risk assessment: Disaster preparedness and management for various**

**hazards; Geo – spatial technologies for disaster management; Remote**

**Sensing applications in disaster management.**

**Text Books:**

Hewitt, K., regions of risk: a geographical introduction to disasters, Longman, London, 1997.

Schneid, T and Collins, L. Disaster management and preparedness, Lewis Publishers, Washington, DC, 1998.

**References :**

Burton, Kates, R.W and White, G.F, Environment as hzard,2ND edition, Guilfordpress, New York, 1993

Chakraborty, S.C, Natural hazards and disaster management, pragatishil prakashak, Kolkata, 2007.

Bryant Edwards (2005): Natural Hazards, Canbridge University Press, U.K.

Roy, P.S., Van Westen, C.J. Jha, V.K. Lakhera, R.C and Champathi RAY, P.K., Natural disaster and their Mitigation: Remote sensing and geographical information system perspectives, IIRS, Dehra Dun, Govt. of India, 2003

Rajib Shaw and RR. Krsihna Murthy (eds), 2009. Disaster management : Global challenges and local solutions, University Press, Hyderabad.

B. Murthy, Disaster management: text and case studies, publishers: deep publications.

Bergman E.F., Renwick W.H., and Vasantha Kumaran T., 2008: Introduction to Geography: People, Places and Environment, Pearson Education Inc.,