**SYLLABUS FOR THE SUBJECT OF GEOGRAPHY**

**PAPER- I**

**PHYSICAL GEOGRAPHY**

**Total Marks: 100**

**Course Outline:**

1. **The Universe**:-

The solar system and the Earth. Earth’s Origin, shape and size, rotation and revolution,

distribution of land and water. Geological time scale.

2. **Lithosphere**:-

Composition and internal structure of the Earth, Rocks-origin, formation and types

( igneous, sedimentary and metamorphic), plate tectonics, mountain building

geomorphic processes internal and external, earthquakes, volcanic activity, weathering,

mass wasting, erosion and deposition, cycle of erosion; landforms produced by surface

water, ground water, wind and glaciers.

**3. Elements of weather and climate:-**

Insolation, global radiation and heat balance, atmospheric temperature, compositon and

structure of atmosphere, atomosheric pressure and winds air masses and fronts

(classification, distribution and associated weather), cyclones, tornadoes, thunderstorms

and weather disturbances. Hydrological cycle. Atmospheric moisture and precipitation.

Climatic classification: Koppen’s classification with special reference to the following

types: Af, Am, Bsh, Csa and Dfc. Atmospheric pollution global warming.

4 **Hydrosphere**:-

Configuration of ocean floor, ocean deposits. Composition, temperature and salinity of

ocean water, movements of the ocean water, waves, currents and tides.

5 **Biosphere**:-

Origin and evolution of life on Earth (with reference to Geological time scale). Formation

and types of soils. Eco-Systems and world major Biomes.

6. **Study of Maps**

Topographical Maps, Aerial Photographs and introduction to Remote Sensing, Weather

maps of Pakistan.

Map projection general principles, classification of network by simple graphic methods

of the following projections.

Cylindrical, Simple, Equal Area and MerCator’s (with table) Conical with one and two

standard parallel’s and Bonne’s projections.Zenithal, Gnomonic Stereographic and

orthographic (Polar Cases).

7. **Scales: types and their use:-**

8. **Methods of representation of relief:-**

Drawing of composite contour maps with the help of given data and information

preparation of distribution maps with the help of symbols line-bar-shade dot and circle.

Simple quantitative techniques and their use in geography. Study of frequency

distribution average’s (mean median and mode), Mean deviation, standard deviation

and correlation. Index numbers and time series.

**RECOMMENDED BOOKS:**

*1. Strahler, A.N. (2004) “Modern Physical Geography” New York: John Wiley.*

*2. Gabbler, R.E, Sager, R.J and Wise, D.L (1997) “Essentials of Physical Geography”*

*Fourth Edition. Saunders College Publishing, New York.*

*3. Scott, R.C. (1996) “ Introduction to physical geography” West Publishing Co., New*

*York.*

*4. Miller, G.T. (1996) “Living in the Environment, Principles, Connections and*

*solutions”, Ninth Edition, Wadsworth.*

*5. Thurman, H.V. & Mexrill (1996) “ Essentials of Oceanography” Manson, London.*

*6. Diwan A.P. & D.K. Arora (1995) “ Origin of the Ocean” Anmol Publisher, Delhi.*

*7. Mcuveen (1992) “Fundamentals of Weather and Climate” Prentice Hall New Hrsey.*

*8. Kendrew (1961): “Climate of the continents” Longman, London. New York.*

*9. Thorn-bury, W.D. (1969) “Principles of Geomorphology” John Willy & Sons, New*

*York.*

*10.Christopherson, R.W. (2000) “Geo-Systems” USA, Prentice-Hall, Inc.*

*11. Monkhouse, F.J. (1996) “Principles of Physical Geography” London Hodder &*

*Stoughton.*

*12.De Blij, H.J. and Muller, P.O. (1996) “Principles of Physical Geography of the Global*

*Environment” USA, John Wiley and Sons Inc.*

*13.Taylor, J. (1993) “ Integral Physical Geography” London Longman.*

*14.Small, R.J. (1989) “Geomorphology and Hydrology” London, Longman.*

*15.Thompson, R.D. et. Al (1986) “Process in Physical Geography” London, Longman.*

*16.Miller, E.W. (1985) “ Physical Geography” Columbus, Charles E. Merrill.*

*17.King, CAM (1980) “Physical Geography” Oxford, Basil Blackwell.*

*18.Srahlar, A.N. , Strahlar, A.H. (2004) “Physical Environment New York” John Wiley.*

*19.Christopherson, R.W. (2000) “Geo-Systems” USA, Prentice –Hall, Inc.*

*20.Well & Well and N. (1998) “Atmosphere and Oceans” London, Longman.*

*21.Taylor, J. (1993) “Integral Physical Geography” London, Longman.*

*22.Mcliveen, J.F.R. (1991) “Fundamentals of Weather and Climate London” Chapman*

*& Hall.*

*23.Thompson, R.D. et. Al (1986) “Process in Physical Geography” London, Longman.*

*24.Miller, E.W. (1985) “Physical Geography” Columbus, Charles E. Merrill.*

*25.King CAM (1980) “ Physical Geography” Oxford, Basil Blackwell.*