

**ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD**  
**Faculty of Social Sciences**  
*(Department of Pakistan Studies)*

**WARNING**

- 1. PLAGIARISM OR HIRING OF GHOST WRITER(S) FOR SOLVING THE ASSIGNMENT(S) WILL DEBAR THE STUDENT FROM AWARD OF DEGREE/CERTIFICATE, IF FOUND AT ANY STAGE.**
- 2. SUBMITTING ASSIGNMENTS BORROWED OR STOLEN FROM OTHER(S) AS ONE'S OWN WILL BE PENALIZED AS DEFINED IN "AIOU PLAGIARISM POLICY".**

**Course: Geography of Pakistan–I (4655)**  
**Level: M.Sc.**

**Semester: Autumn, 2013**  
**Total Marks: 100**  
**Pass Marks: 40**

*Note: Answer should be preferably in English and based upon the prescribed reading material. Consult course outline for guidance. Attempt all questions.*

**ASSIGNMENT No. 1**  
**(Units: 1–5)**

- Q. 1 Discuss physiography of Pakistan with special focus on Balochistan Plateau and its economic importance. **(20)**
- Q. 2 Write a note on the role of three major rivers i.e. Indus, Jhelum and Chenab in fulfilling the water requirements of Pakistan. Highlight the impediments in the way of proper utilization of water resources of these rivers. **(20)**
- Q. 3 What are the climatic factors of Pakistan? Discuss in detail with special reference to the irregular patterns of rainfall in Pakistan. **(20)**
- Q. 4 Elaborate the vegetation cover in Pakistan. Suggest measures for the efficient economic utilization of vegetation of Pakistan. **(20)**
- Q. 5 What is the classification of soil in Pakistan? Highlight the factors which boost the fertility of soil focusing upon Pakistan. **(20)**

## **ASSIGNMENT No. 2**

**(Units: 5–9)**

**Total Marks: 100**

- Q. 1 Experts believe that Pakistan's economy has been transformed from agriculture to manufacturing. Given this fact and the fact that agriculture is already a neglected sector, what do you see the future of agriculture in Pakistan? Discuss in detail. **(20)**
- Q. 2 What is meant by food security? Discuss the role of wheat in countering the threat of food insecurity in Pakistan. **(20)**
- Q. 3 Milk has surpassed other allied sectors in contributing to agriculture output in Pakistan. In the face of this fact, analyze the prospects of dairy farms/industry in Pakistan. **(20)**
- Q. 4 Discuss in detail the metallic minerals in Pakistan. What are the major obstacles in the way of efficient exploitation of minerals in Pakistan? Discuss along with the solutions of those obstacles. **(20)**
- Q. 5 Write notes on the following: **(20)**
- i) Inland fisheries in Pakistan.
  - ii) 'Saline agriculture' and its benefits for Pakistan.

**COURSE OUTLINE**

**GEOGRAPHY OF PAKISTAN (Part-I)**

**COURSE CODE 4655**

**Course Coordinator**

*Malik Akhtar Hussain*

## 1. INTRODUCTION TO THE COURSE

The course **Geography of Pakistan** is composed of two courses. Each course is of three credit hours. See below the credit hours detail of the courses;

S. No.	Course Title	Code No	Credit Hours
1	Geography of Pakistan Part-I	4655	03
2	Geography of Pakistan Part-II	4656	03

Geography of Pakistan Part-I (code 4655) has been developed under a broad heading known as 'The Natural Environment'. The natural environment covers the topics of physiography, hydrology, climate, vegetation, soil, agriculture and mineral resources of Pakistan.

Part-I of the course is designed to introduce you about the area, land, location, dimensions, neighbours, weather, flora, fauna, soil, temperature, air pressure, seasons, cyclones, rainfall and natural contents of their homeland. You will also know about forest types, its distribution, forest products and deforestation problem of Pakistan. This course also evaluates water resources and agricultural system of the country. Following are the brief details of the topics:

**Physiography:** in physiography you will study three major features-Mountain, Plateaus and Plains. Mountains lie in the north and west. Pothwar plateau of limited dimension lies at the foot of northern hills. The rest of the country is a vast plain stretching south up to the sea.

**Hydrology:** major features of Pakistan's hydrology are rivers, lakes and canals. The country is drained by Himalayan Rivers among them Indus is the major river. Indus river rising in the Tibetan region in the vicinity of Lake Manasarwar. It flows first south-east to north-west and then from north to south and drains its waters into the Arabian Sea. River Kabul, Jhelum, Chenab, Ravi and Stlej are its tributaries.

**Climate:** Depending on the topography, there is an extreme variation in the temperature of Pakistan. The country is essentially arid except for the southern slopes of the Himalayas and the sub-mountainous tract where the annual rainfall varies between 760 and 1270 mm. This area has humid sub-Tropical climate. In the extreme north highland climate prevails. Pakistan has three seasons: winter (November to March) is warm and cooled by sea breezes on the coast; summer (April to July) has extreme temperatures and the monsoon season (July to September) has the highest rainfall on the hills.

**Vegetation:** The vegetation of Pakistan varies with elevation, soil type, and rainfall. Forests are largely confined to the mountain ranges in the north, where coniferous alpine and subalpine trees such as spruce, pine, and deodar cedar grow. The southern ranges of the Himalayas, which are of lower elevation, receive heavy rainfall and have dense forests of deodar, pine, poplar, and willow trees. The more arid Sulaiman and Salt mountain ranges are sparsely forested with a type of mulberry called shisham, a broad-leaved, deciduous tree. Dry-temperate vegetation, such as coarse grasses, scrub plants, and dwarf palm, predominates in the valleys of the North-West Frontier Province and the Baluchistan Plateau. The arid western hills are dotted with juniper, tamarisk (salt cedar), and pistachio trees. Dry-tropical scrub and thorn trees are the predominant vegetation in the Indus River plain. Known as rakh, this vegetation is native to the region and found in the Indus floodplain, require six weeks of monsoon flooding to sustain them during the

dry months. Irrigated tree plantations are found in Punjab and Sindh Mangrove forests in the coastal wetlands are an integral part of the marine food chain.

**Soil:** Pakistan's soils are classified as (i) Indus basin soils, (ii) mountain soils, and (iii) sandy desert soils. However, the very modes of soil formation give rise to their diversification even within small areas. These soils vary in texture, chemical composition, colour, and organic content from place to place.

(i) The Indus basin soils are mostly thick alluvium deposited by rivers. Soils in the vicinity of river courses are the most recent and vary in texture from sand to silt loam and silty clay loams. They have a low organic content and are collectively known as the khaddar soils. Away from the river, toward the middle of the doabs, older alluvial soils (called bangar) are widely distributed. These soils are medium to fine in texture, have low organic content, and are highly productive under conditions of irrigation and fertilization.

(ii) Mountain soils are both residual (i.e., formed in a stationary position) and transported. Shallow residual soils have developed along the slopes and in the broken hill country. Those soils generally are strongly calcareous and have low organic content, but under sub humid conditions their organic content increases.

(iii) Sandy desert soils cover the Cholistan part of Sindh Sagar Doab and western Baluchistan. They include both shifting sandy soils and clayey floodplain soils. These include moderately calcareous and eolian (wind-borne) soils

**Agriculture:** Agriculture constitutes the largest sector of our economy. Majority of the population, directly or indirectly dependents on agriculture. It contributes about 24 percent of Gross Domestic Product (GDP) and accounts for half of employed labour force and is the largest source of foreign exchange earnings. It feeds whole rural and urban population.

Pakistan's principal natural resources are arable land and water. About 25% of Pakistan's total land area is under cultivation and is watered by one of the largest irrigation systems in the world. Pakistan irrigates three times more acres than Russia. Pakistan is one of the world's largest producers and suppliers of the Chickpea, Apricot, Cotton, Sugarcane, Milk, Onion, Date Palm, Mango, Tangerines, mandarin orange, Clementine, Rice, wheat and Oranges. Pakistan ranks fifth in the Muslim world and twentieth worldwide in farm output. It is the world's fifth in the Muslim world and twentieth worldwide in farm output. It is the world's fifth largest milk producer. However, in recent years, due to persistent hikes in the prices of essential commodities like pulses, onions, potatoes, chillies and tomatoes these crops have also gained in economic importance.

**Mineral Resources:** Pakistan is endowed with significant mineral resources and emerging as a very promising area for exploration of mineral deposits. Based on available information, country's more than 6,00,000 sq.kms of outcrop area demonstrates varied geological potential for metallic/non-metallic mineral deposits. Surveys conducted in the recent past have confirmed the great potential of Pakistan in the metallic minerals like copper, gold, silver, platinum, chromites, iron, lead and zinc.

As regards industrial minerals there is a vast potential of multi-coloured granite, marble and other dimensional stones of high quality for export purposes. The major production is of coal, rock salt, and other industrial and construction minerals. The five principal minerals namely limestone, coal, gypsum, sulphur, crude oil and natural gas.

## 2. OBJECTIVES OF THE COURSE

The course should enable you:

- To have broad knowledge about the location of Pakistan

- To have a clear idea of immediate neighbours of Pakistan.
- To describe the physical features of Pakistan.
- To explain the strategic importance of Pakistan.
- To highlight the geographical environment of the country.
- To analyze different climatic zones of Pakistan.
- To identify the water resources of Pakistan.
- To point out the significance of mineral resources of the country.
- To explain the problems faced by the agricultural of Pakistan.
- To discuss the processes those are essential for economic development of the country.

### 3. COURSE OUTLINE

<b>Unit-1:</b>	Physiography
<b>Unit-2:</b>	Hydrology
<b>Unit-3:</b>	Climate
<b>Unit-4:</b>	Vegetation
<b>Unit-5:</b>	Soil
<b>Unit-6:</b>	Agriculture-(1) General
<b>Unit-7:</b>	Agriculture-(2) Productions
<b>Unit-8:</b>	Agriculture-(3) Stock, Poultry, Fish
<b>Unit-9:</b>	Mineral Resources

### 4. STRUCTURE OF THE COURSE

1. Geography of Pakistan Part-I is of 03 credit hours course, having nine study units (1-9) as stated above. For example, unit No. 1 relates to the physiography of Pakistan, so you are required to study topics and themes related to it in the books recommended by the Department.
2. A unit is a study of 12-16 hours or course work for two weeks. Since the course work of one unit will include studying suggested readings and recommended books. Hence length of the units is unequal, its upon you to arrange a time table for your study to complete the work within the allocated time.
3. For this course, 'Fortnightly Tutorials' are arranged in University's Regional Study Centres. They provided facilities to meet with one another for mutual help and individual discussion with the 'Tutor'. These tutorials are not formal lectures given in any formal university, rather these are meant for group and individual discussion with the tutor to facilitate you to undertake part of your learning together. So, before going to attend a tutorial prepare yourself to discuss course material with your class fellows and the tutor.
4. The Department of Pakistan Studies has recommended a book for this course Khalid Nazir Ahmad, (2010), Pakistan A Study of Geographical Environment Economy & Human Resources, Azeem Academy, Lahore, Pakistan.

### 5. HOW TO ATTEND A TUTORIAL

Before attending a tutorial you are required to prepare yourself in the following manner to get a maximum benefit of it. The first tutorial meeting is almost introductory, for which you are required to adopt the following steps.

**Step-1:** Go through outline of the course, which includes;

- i) Introduction
- ii) Objectives
- iii) Course outline
- iv) Structure of the course

- v) Assessment
- vi) Recommended books
- vii) Suggested readings

**Step-2:** Read carefully your course introduction, contents and go through it again and again to have a better understanding of the course contents. It will give you an overview of the whole structure. Make notes of those points which you could not fully understand or wish to discuss with your course tutor.

In tutorials 2-9 you will be able to complete your course work containing 09 study units. University has arranged these tutorials in a way that you will get an opportunity to discuss one unit in one tutorial.

**Note:** Two tutorials i.e., 2<sup>nd</sup> and 6<sup>th</sup> are mandatory for the students during the semester (see tutorial scheduled).

## 6. ASSESSMENT

For each course the registered student will be assessed as follow:

- Assignments (continuous assessment) See details as give below;
- Final Examination (three hours written examination will take place at the end of the semester).

The conditions to qualify each component are given below:

- i) A minimum of 40% in each assignment
- ii) A minimum of 40% of the final examination.
- iii) An aggregate of 40% of both the components i.e., assignments and final examination.
- iv) To take final examination the student has to pass the assignment component.

The grades will be determined as following:

<b>D</b>	40%	--	49%
<b>C</b>	50%	--	59%
<b>B</b>	60%	--	69%
<b>A</b>	70%	--	79%
<b>A+</b>	80% & above		

### Assignments:

- Assignments are those written exercises, which you are required to complete at your own home or place of work after having studied different parts of the prescribed reading material within the scheduled period of study. (See the assignments scheduled). For this course you will receive 02 assignments, which we expect you to complete within the scheduled period.
- For the course Geography of Pakistan Part-I, you will have to do two assignments, a set of these assignments is being sent to you in this mailing package.
- This is a compulsory course work and its successful completion will make you eligible to take final examination at the end of the semester.
- To complete your work successfully, you are provided with tutorial support, so that you can discuss your academic problems in tutorial meetings.
- After completing the assignment you will send it to the tutor, whose name is notified to you for assessment and necessary guidance. Your tutor will return it after marking and providing academic guidance and supervision.
- To qualify each assignment, you have to obtain a minimum of 50% marks.

**Note:** The students are informed about the names of tutors and study centers in the beginning of the semester, if you do not receive such information, please contact your Regional Office.

**Workshops:**

- The workshop of post-graduate course will be held at the end of each semester at following Regional Campuses:
  1. Islamabad
  2. Lahore
  3. Peshawar
  4. Karachi
- It is compulsory to attend the workshop. A student is not declared pass until he/she has attended the workshop satisfactorily.
- The duration of the workshop for each 03 credit hours course is 03 days only.

**Recommended books:**

1. Khalid Nazir Ahmad, (2010), Pakistan A Study of Geographical Environment Economy & Human Resources, Azeem Academy, Lahore, Pakistan.
2. B. L. C. Johnson, PAKISTAN, rep. (2000), NBP, Islamabad.

**Suggested Readings:**

- i) Khalid Nazir Ahmad, (2010), Pakistan A Study of Geographical Environment Economy & Human Resources, Azeem Academy, Lahore, Pakistan.
- ii) Khan, F. K. (1984), Pakistan: An Economic Geography, Sir Sayyad Academy Karachi.
- iii) Spate, O.H. K. & Learmonth, A.T.A. (1972), India & Pakistan Land, People and Economy, Methuen & Co Ltd London.
- iv) East, W. Gordon & Spate, O. H. K. (1961), The Changing Map of Asia, Methuen & Co Ltd London.
- v) Stamp, L.D. (1957), India, Pakistan, Cyclone (Sri Lanka), Methuen & Co Ltd London.
- vi) Dobby, E.H.G. (1962), Monsoon Asia, University of London Press, London.
- vii) Khan, M. H. (1981), The Underdevelopment and Agrarian Structure in Pakistan, Vanguard Publications, Ltd Lahore.
- viii) Akhtar, S.M. (1967), Pakistan—A Developing Economy, Vol. II, United Publishers Lahore.
- ix) Kurehy, K. U. (1978), A Geography of Pakistan, Oxford University Press Karachi.
- x) Johnson B.L.C (1981), South Asia: Selective Studies of the Essential of India, Pakistan, Bangladesh, Srilanka and Nepal, 2<sup>nd</sup> Edition, London: Heinemann.
- xi) Khalil-Ullah-Kureshy (1977), A Geography of Pakistan, 4<sup>th</sup> Edition London: Oxford University.
- xii) Qurasi, Helen S. (1975), A Junior Geography of Pakistan, Karachi, Oxford University Press.
- xiii) Spate, O.H.K. (1957), India and Pakistan: a general and regional geography with a chapter on Ceylon, by B.H. Farmer, London: Methuen.
- xiv) Israr-ud-Din (1998), Studies in Pakistan Geography, Peshawar: Department of Geography, Applied Geography, Urban and Regional Planning University of Peshawar, N.W.F.P., pp.352-915.
- xv) Fazle Karim Khan (1973), Pakistan: an Economic Geography, Second Edition, Sir Sayyad Academy, Karachi.
- xvi) Khalil-Ullah-Kureshy (1986), Geography of Pakistan, National Book Service Lahore.
- xvii) Ikran Azam, (1992), Geopolitics, Political Geography and Pakistan, Progressive Publications Lahore
- xviii) Economic Survey of Pakistan, Latest Edition.

xix) Population Census Organization Statistics Division, 1998 Census Report of Pakistan, Islamabad: Statistics Division, Govt. of Pakistan, 2001.