DEPARTMENT OF ECONOMICS UNIVERSITY OF THE PUNJAB LAHORE (PAKISTAN)

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PAKISTAN ECONOMIC and SOCIAL REVIEW

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Message from the Vice-Chancellor

The world is shrinking to the Global Village after the implementation of WTO. The economies of the world are getting more and more interdependence. The emerging scenario imposes formidable challenges for developing world on one side and it opens new window of opportunities on the other side. It is well-established fact that quality and quantity of human resources play a vital role in the development and competitiveness of an economy. Dearth of physical as well as human capital and technology is one of the major causes of high average cost of production and low productivity of labor and capital in developing countries like Pakistan. Human capital is considered to be the focal point of all development strategies.

The developing countries are lagging behind in knowledge and dissemination of knowledge. Only those countries that are competitive and able to adjust their economic structure to the fast changing environment are to be expected to reap the benefits of liberalization and globalization, while others could be unable to maintain their current pace of economic productivity and development. Quality human resource is a key factor to reap the fruits of openness and globalization. Universities have to play a major role in this respect.

Inefficient and under utilization of resources is another characteristic of developing world. Studying economics is very useful for efficient utilization and mobilization of resources.
Advancement of nations is very much linked to the extent of efficient and effective economic and political policies and state of the art infrastructure. The subject of economics has remained one of the top most and popular disciplines in this regard. The Department of Economics has well been meeting the above challenges since its initiation and has produced many eminent economists. I look forward in seeing students specializing in major areas of economics and playing a vital role in the development of the nation and of the world. The different programs offered by the Department of Economics will enhance opportunities for strengthening trained and skilled manpower for the country and the world.

I believe that every student has enough potential and the University’s aim is to see that this potential is realized and fulfilled. A committed learner centered approach to education is our major objective. If you choose the University of the Punjab as your place of study your time will be simulating and rewarding. Your understanding of the subject, reasoning, originality and creativity will develop in the environment of this institution and your personality will become well rounded.

I welcome all the new entrants and wish them all a great success.
Welcome from the Chairman

Welcome to the Department of Economics which has been offering quality education in economics to graduate students for a long time. No doubt, the Department of Economics attracts top quality students from different parts of the country for graduate studies in Economics. The main objective of the Department of Economics is to provide an outstanding learning environment for talented students from different backgrounds. With the help of improved teaching aids, infrastructure and qualified faculty, the Department of Economics has produced graduates who have been playing a significant role in the development process of our economy since independence.

The subject of Economics has become increasingly important in the face of fast moving technology and increasing complexities in business and industry. In a world where problems are increasingly multifaceted, the Department of Economics helps give students the critical skills to compete in today’s global economy. The teaching and learning at the Department of Economics take place in an environment where students benefit from interaction with teachers who are always ready to help the students.

The Department of Economics offers four postgraduate degree programs, i.e. M.Sc. Economics, MB Econ, M. Phil and Ph.D. and a Postgraduate Diploma in Applied Economics (PGDAE). These programs are designed to meet the changing and growing needs of our country and also help students to get admissions in foreign competitive universities for higher studies and competing for different job opportunities in various fields. I pray to Allah (SWT) your stay at Department of Economics be productive and beneficial for the whole nation.
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UNIVERSITY OF THE PUNJAB

INTRODUCTION
The University of the Punjab is not only the oldest University of Pakistan but also the largest one in the country located in the historical and culturally rich city of Lahore. The University has played a leading role in higher education and research in the country. The University strives to provide a conducive environment for the pursuit of academic activities. On account of its quality degree programs, competitive faculty, pleasant environment and low tuition fees, the University remains the institution of first choice for the admission seeking students.

At present various on-campus teaching and research programs of the University are organized in over 70 institutes, departments, and constituent colleges or centers, which run more than one hundred and twenty degree, diploma and certificate programs. Research leading to a Ph.D. degree is an integral part of the academic programs in many disciplines. New academic programs have been introduced recently according to the current requirements. This has gradually expanded the academic activity of the University.

The University continues to retain its original teaching as well as examining functions. In addition to the on-campus teaching and research activities, the University regulates the academic activities of over 361 affiliated colleges and institutes, imparting undergraduate, post-graduate and professional education.

Various university activities including admissions and examinations, meetings of the statutory bodies, sports and co-curricular activities are held according to a predetermined schedule, which is announced in the form of an academic calendar annually.

BRIEF HISTORY
The University of the Punjab was formally established with the convening of the first meeting of its Senate on October 14, 1882, at Shimla. It was the fourth University to be established by the British colonial authorities in the Indian Subcontinent. The first three universities were established by the British rulers at their strongholds in Bombay, Madras and Calcutta. The University of the Punjab came into existence as a result of a long drawn struggle of the people of Punjab after the War of Independence in 1857. Contrary to the three previously established universities, which were only examining institutions, the University of the Punjab was both a teaching as well as an examining body right from the beginning.

The contribution of Dr. G. W. Leitner, an enlightened Hungarian and a naturalized Britisher, was instrumental in the establishment of this University. He became its first Registrar. Prof. A. C. Woolner, who remained Vice-Chancellor of this University during 1928-1936, played a key role in its development during the initial decades of this century. His statue still stands in front of the Allama Iqbal Campus of the University.

Until independence in 1947, the University of the Punjab fulfilled the educational needs of a vast region of the subcontinent. The partition of the subcontinent somewhat reduced the
geographical limits of the jurisdiction of the University. However, for many years after independence it still ranged over vast areas including Punjab, NWFP, Balochistan and Azad Jammu and Kashmir. New universities were set up later in the country to share the responsibility of imparting higher education with the University of the Punjab.

Initially the University conducted all public examinations including Matriculation, Intermediate, Degree, Post-graduate and various diplomas. Later rapid increase in the number of students led to the setting up of the Boards of Intermediate and Secondary Education to take over the responsibility for conducting Secondary and Intermediate examinations. Thus, the University could concentrate more on degree and post-graduate teaching and research.

The growth of the University has continued during recent decades. Since the Allama Iqbal Campus (Old Campus) could not meet the growing needs of the University, the construction of the Quaid-e-Azam Campus (New Campus) was started in 1960. Since then academic, administrative, residential blocks and other facilities have been added to the Quaid-e-Azam Campus which is now the nucleus of University activities, where more than seventy departments/centres are located.
INTRODUCTION

The Department of Economics has been one of the oldest departments of the Faculty of Arts of the University of the Punjab, Lahore, Pakistan. Presently, the Department of Economics is a part of Faculty of Economics and Management Sciences. The foundation of the Department of Economics was laid down in 1919. The Department offers full time programs of course work and research supervision of M. Sc., MB Econ, M. Phil., Ph. D. degrees and Postgraduate Diploma in Applied Economics (PGDAE). The study programs for these degrees have been structured in response to advances in the field and demanding needs of job requirements. The degree programs are based upon combination of course work, research papers, thesis and comprehensive examinations. All the programs of the Department aim at ensuring dissemination of comprehensive knowledge of economic theory underlying modern economic analysis and application of economic theory by problem solving approach. The students are required to take compulsory courses, optional courses in the areas of specialization and write research papers/thesis. To meet the requirements of optional courses, students are allowed to take courses in other relevant disciplines being taught in different departments of the University. These courses may be taken with the approval of the Chairman. To develop independent analytical thinking and research ability, a number of advanced courses are required to be taken by the students, consisting upon applied economics, workshops and seminars. The students also benefit from regular lectures and seminars arranged by the Department. These lectures are arranged under the umbrella of distinguished lecture program, under which eminent scholars are invited to deliver lectures and conduct workshops/seminars.

As the subject of Economics has significantly flourished and continuously gained importance, the Department of Economics also expanded and flourished. Today over 700 students are benefiting from different programs of the Department. The subject of economics has gained central position in the new international developments like globalization, institutional development, sustained economic growth and emergence of World Trade Organization (WTO).

The economic policies of any country help in enhancing human welfare. The economists play vital role in formulation and implementation of economic policies. Universities play their role to provide excellent training for this purpose. It is important to keep up with the pace of new developments. Therefore, to incorporate new literature in the training courses and degree program, new programs are introduced, new courses are added, outdated courses are dropped and curriculums are updated. The development of economics has well kept up with the pace of new developments in the subject. Besides, system of teaching also needs to be improved. All over the world, semester system has emerged as dominant system to disseminate knowledge and education. The subject of economics has evolved as the most essential social science. All major universities at national and international level are offering M. Sc. degree in Economics, with major focus on quantitative and applied economics. Thus, keeping in view
the emergence of new trends in businesses and governance, new curriculum for M.Sc. Economics has been developed, and adopted by the University from the session 2005-06. The present curriculum also contains teaching and evaluation methodology so that students are well trained and equipped with latest knowledge and skills to cope with the upcoming challenges.

OBJECTIVES
The primary aim of the Department is to produce manpower for the developing economy of Pakistan. With this broad goal in view the following specific objectives have been laid down:

1. To prepare students for managerial career in government, commercial and industrial enterprises.
2. To prepare students for career in research and training institutions.
3. To undertake research on basic issues in public and private enterprise.
4. To develop expertise on limited scale among the students by imparting knowledge in specialized fields.
MASTER OF PHILOSOPHY IN ECONOMICS
(M. Phil. Economics)

M. PHIL. MORNING PROGRAM

M. Phil. (M. Phil. leading to Ph.D.1) in Economics is a two years degree program consisting of four semesters. In the first two semesters, 24 credit hours course work and in third and fourth semesters 6 credit hours research work on a topic selected in consultation with the assigned supervisor is carried out.

Eligibility

The basic requirements for admission2 are given below:

First division/CGPA ≥ 2.50 in M.A./M.Sc. Economics, B.Sc. (Hons.) 4 years, MBEcon or its equivalent in Economics from a recognized University (at least 16 years of education; 130 credit hours) as per Higher Education Commission (HEC) rules.

The applicant shall be judged on the basis of the following criteria for admission:

- (a) Academic qualifications (as per break up given below) – 40 Marks
- (b) Publications in HEC approved journals (1 Mark per publication) – 05 Marks
- (c) Professional experience in relevant field (1 Mark for each year for job in the relevant field as per Departmental preference) – 05 Marks
- (d) Written/Entry test (comprehension of the subject, General aptitude for research) – 40 Marks
- (e) Interview – 10 Marks

Minimum marks for qualifying the written test and interview separately – 50%.

Admission criteria are the same for Morning and Weekend Self-Supporting programs. Same courses are offered for both programs.

Important! Qualification from institutions other than the University of the Punjab will be equalized by the Equivalence Committee of the University of the Punjab, Lahore. Migration Certificate (NOC), in original, and Equivalence Certificate are required at the time of admission.

1 On completion of M. Phil. course work student may apply for Ph.D. admission. In this case the departmental DPC may recommend the student for admission on the basis of interview only. However, student must secure ‘B’ Grade, overall, in M. Phil. course work for eligibility for the Ph.D. program. All other requirements will be the same, as per University rules.

2 Subject to change without any notice.
Break up of 40 Marks for Academic Qualifications

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<th>45%</th>
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The following courses will be offered (as per facilities available):

**Compulsory Courses**
- Econ-700 Advanced Microeconomics
- Econ-710 Advanced Macroeconomics
- Econ-720 Theory and Application of Econometrics
- Econ-730 Economic Issues in Pakistan Economy

**Optional Courses**
All optional courses are of three credits each.
- Econ-702 Economics of Business and Finance
- Econ-703 Topics in Urban Economics
- Econ-704 Topics in Labour Economics
- Econ-705 Optimization Techniques
- Econ-711 Economic Growth Models
- Econ-713 Topics in Monetary Economics
- Econ-714 Issues in Islamic Economics
Econ-721  Advanced Econometric Techniques and Forecasting
Econ-731  Topics in Development Economics
Econ-732  Topics in Human Resources Development and Management
Econ-733  Project Analysis and Investment Decision Making
Econ-740  Topics in Public Sector Economics
Econ-750  Economics of Environment and Natural Resources
Econ-751  Production Analysis
Econ-752  Topics in Agricultural Economics
Econ-760  Topics in International Economics: Trade and Finance
Econ-790  WTO, Globalization and Economic Integration
Econ-792  Population Dynamics
Econ-793  Institutional and Behavioural Economics
Econ-794  Independent Study

M. PHIL. WEEKEND SELF-SUPPORTING PROGRAM

The same rules that apply to M. Phil. Economics (Morning) Program will be applicable to M. Phil. Economics Weekend Self-Supporting Program except for the following:

1. The classes of M. Phil. Weekend Self-Supporting Program will be held on Saturdays and Sundays.
2. Hostel facility is not available for the students of M. Phil. Weekend Self-Supporting Program.
3. No medical facility is available as these are non-resident students.
DOCTOR OF PHILOSOPHY IN ECONOMICS (Ph.D.)

The maximum permissible period for the completion of Ph.D. will be 5 years. The period shall be counted from the date of admission to the Ph.D. program or conversion of M. Phil. to Ph.D. program (commencement of semester for 18 credit hours course work).

The minimum period of completion of Ph.D. program shall be 3 years (one year 18 credit hours course work for Ph.D., comprehensive examination, synopsis; two years research work). After 5 years, the scholar shall cease to be the student of the University and shall not generally be eligible for re-admission.

A Ph.D. student shall be required to submit synopsis within six months of completing course work and before commencing the research work.

A Ph.D. student will give a seminar relevant to his/her field of research at his/her convenience within a year of submission of synopsis to the Department of Economics for the approval of various statutory bodies such as DPCC/Advanced Studies and Research Board.

ELIGIBILITY

The requirements for admission are:

(i) MS/M. Phil. or equivalent degree in Economics from a HEC recognized University with CGPA ≥ 3.0 or first division.

(ii) Only those candidates will be considered who have qualified GRE subject (International) after acquisition of 18 years education.

An applicant shall be judged on the basis of the following criteria for admission:

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<td>Marks –</td>
<td>Marks 6</td>
<td>Marks 7</td>
<td>Marks 8</td>
</tr>
<tr>
<td>B.A./B.Sc./BS (Hons.) 4 Years</td>
<td>CGPA</td>
<td>2.5</td>
<td>3.0</td>
<td>3.4</td>
<td>≥ 3.8</td>
</tr>
<tr>
<td></td>
<td>Marks 10</td>
<td>Marks 12</td>
<td>Marks 14</td>
<td>Marks 16</td>
<td></td>
</tr>
<tr>
<td>M.A./M.Sc. (Semester)</td>
<td>Marks 5</td>
<td>Marks 6</td>
<td>Marks 7</td>
<td>Marks 8</td>
<td></td>
</tr>
<tr>
<td>MS/M. Phil. (18 Years)</td>
<td>Marks –</td>
<td>Marks 6</td>
<td>Marks 7</td>
<td>Marks 8</td>
<td></td>
</tr>
</tbody>
</table>

3Subject to change without any notice.
Note: Qualification from institutions other than the University of the Punjab will be equalized by the Equivalence Committee of the University of the Punjab, Lahore.

The Ph.D. program emphasizes full time course work/research. Part-time course work or research is not permissible. Study leave is mandatory for in-service students. For facilitating University’s own staff, workload of a teacher/officer admitted to Ph.D. program will be reduced to half.

COURSE WORK REQUIREMENTS

The student holding M.A./M.Sc. degree must complete M. Phil. courses. All Ph.D. students holding M. Phil degree will have to take a course work of 18 credit hours. All courses will be of three credits each. The courses will be offered in the first and second semesters of Ph.D. program.

The following courses will be offered (as per facilities available):

Compulsory Courses
Econ-800 Seminar in Advanced Microeconomics (Compulsory)
Econ-810 Seminar in Advanced Macroeconomics (Compulsory)

Optional Courses
Econ-820 Seminar in Applied Economics and Econometrics
Econ-830 Seminar in International Economics
Econ-840 Seminar in Development Economics
Econ-841 Seminar in Public Finance
Econ-851 Seminar in Economic Thought
Econ-861 Seminar in Globalization and Economic Integration
Econ-871 Seminar in Advanced Monetary Economics
Econ-881 Seminar in Labour Economics
Econ-891 Seminar in Industrial Economics
Econ-892 Seminar in Islamic Economics
Econ-893 Independent Study (on approval of instructor)
MASTER OF SCIENCE IN ECONOMICS
(M.Sc. Economics)

AIMS, OBJECTIVES AND LEARNING OUTCOMES
Specific aims of the M. Sc. Economics Degree are given below:

(i) Development of sound theoretical knowledge of the subject.
(ii) Application of economic theories and enhancing problem solving ability.
(iii) Coverage of new areas of specialization, as per market needs.
(iv) Preparation for advanced studies leading to M. Phil. and Ph.D.
(v) Training to produce quality teachers, researchers and policy makers.
(vi) Dissemination of comprehensive knowledge focused at applied and quantitative economics.
(vii) Equip the students with postgraduate level knowledge and skill comparable to the top standards at national institutions.

ADMISSION CRITERIA
Admission will be made on the basis of the criteria and of preference given in the Admission Regulations of the University of the Punjab. Eligibility criteria for admission in M.Sc. Economics are as given below:

Eligibility
- B.A./B.Sc. at least second division with a minimum of second division marks in Economics as an elective subject. OR
- B. Com. at least second division with a minimum of second division marks in Economics papers.

Order of Preference: Admission against all seats will be made according to the following order of preference:

First  B.A./B.Sc./B. Com.  First Annual Examination 2014 and Second Annual Examination 2013
Second B.A./B.Sc./B. Com.  First Annual Examination 2013
Third  B.A./B.Sc./B. Com.  First/Second Annual Examination 2012

Basic Criteria: One fourth of total marks obtained in Matric plus one fifth of total marks obtained in Intermediate plus total marks in B.A./B.Sc./B. Com. plus 20 marks for Hafiz-e-Quran to be included where applicable. Admission criteria are the same for morning and afternoon (Replica) programs. Same courses are offered for both programs.
Distribution of Seats (Merit)

- For B.A./B.Sc. Graduates 55
- For B.Com. Graduates 5
- For candidates with PGDAE (PU) 9

Note: Fifty percent seats are reserved for applicants having graduated from colleges affiliated with the University of the Punjab, Lahore.

(a) The applicants on extra curriculum seats must fulfill the basic criteria of admission of the Department of Economics.

(b) The applicants with O level and A level must produce the equivalence certificate from the appropriate institution with their application.

MERIT DETERMINATION

For B.A./B.Sc./B. Com. Basic criteria plus marks in Economics out of 200 in B.A./B.Sc./B. Com. plus one-fourth of marks in Statistics or Mathematics (elective or optional), whichever is higher. Those applicants who have studied Mathematics and Statistics as a 100 marks (combined) subject in B. Com. will also have one-fourth of their marks in these subjects added to their merit.

For PGDAE Holders (Seats). Basic criteria plus total marks obtained in PGDAE out of 1000.

STRUCTURE OF COURSES

The new curriculum consists of contents of compulsory and optional courses, teaching and evaluation methodology. The number of courses has been enhanced keeping in view the changes in market demand for economists. In the new curriculum not only the contents of the courses have been updated but also new emerging economic issues and latest reading material has also been added. While preparing courses, special attention has been paid to enhance quantitative ability and application of knowledge for solving economic problems. It is expected that the curriculum will, hopefully, meet national and international standards and challenges.

The students have been provided a wider choice to choose from over forty courses. The students will be required to take 48 compulsory and 18 optional credit hours; consisting of a variety of courses under semester system. The compulsory courses have been revised and increased in number to cope with the new market demand. International Trade Theory course has been made compulsory, with special focus on WTO and other recent developments. It was neglected in the past which now-a-days is highly important because of new wave of globalization, liberalization and other emerging changes in the world. Besides, computer application, applied economics and econometrics have also been made compulsory. The burden of courses has been divided on equitable basis, upon two years consisting of four semesters.

The areas of specialization have also been increased to provide training in all major and important areas. The most demanding and new areas for specialization have been introduced,
which provide applied knowledge for new emerging jobs at national and international level. Now students can specialize in over 20 areas. For specialization, students have to take at least two courses in each area of specialization. The students can also opt for specialization in economics and finance. The students must specialize in two areas; for which they also have to pass comprehensive examination.

The contents of the core areas have been divided into two courses. The first course provides basic knowledge and trains students to handle advance courses. The aim is to prepare students for advanced studies. Thus, students having an ability but failure to get a chance for grooming will get a second chance and time to make up their deficiencies and cope with the advanced material, after completing first semester.

Special attention has been paid while preparing contents and chalking out teaching methodology focused to discourage shortcut methods of study to just obtain degree without gaining sufficient knowledge of the subject. Special focus of applied courses is to provide practical training so that students are well trained and they can compete in the open market. There are four courses, which are applied in nature and require research work. It distinguishes M.Sc. degree from M.A. in Economics offered in different institutions. Keeping in view the above, teaching methodology has been proposed which may be adopted in each course; depending upon the nature of courses and facilities available in the Department. To ensure quality education, all modern electronic and other relevant facilities are provided in the Department. Besides, for practical training and knowledge, study trips/tours to the industrial sector, stock market, policy formulation and implementation institutions/departments and research organizations is a part of the curriculum. Such tours will be arranged by the Department during the conduct of relevant courses.

**COMPULSORY AND OPTIONAL COURSES**

The core compulsory and optional courses are given below:

**Compulsory Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econ-500</td>
<td>Microeconomic Theory</td>
<td>4</td>
</tr>
<tr>
<td>Econ-600</td>
<td>Microeconomic Analysis (Pre-requisite, Econ-500)</td>
<td>4</td>
</tr>
<tr>
<td>Econ-601</td>
<td>General Equilibrium and Welfare Economics (Pre-requisite, Econ-500)</td>
<td>3</td>
</tr>
<tr>
<td>Econ-510</td>
<td>Macroeconomic Theory</td>
<td>4</td>
</tr>
<tr>
<td>Econ-610</td>
<td>Macroeconomic Analysis (Pre-requisite, Econ-510)</td>
<td>4</td>
</tr>
<tr>
<td>Econ-505</td>
<td>Islamic Economics</td>
<td>3</td>
</tr>
<tr>
<td>Econ-520</td>
<td>Mathematical Economics-I</td>
<td>3</td>
</tr>
<tr>
<td>Econ-521</td>
<td>Statistics for Economists</td>
<td>3</td>
</tr>
<tr>
<td>Econ-530</td>
<td>Development Economics: Theory and Application</td>
<td>3</td>
</tr>
<tr>
<td>Econ-540</td>
<td>International Trade Theory</td>
<td>4</td>
</tr>
</tbody>
</table>
Econ-550  Econometrics: Theory and Application-I  4
Econ-615  Research Methodology and Computer Application  4
Econ-690  Seminar in Applied Economics and Term Paper  4
Econ-695  Comprehensive Examination  

**Optional Courses**

**Macroeconomics**
Econ-511  Monetary Theory and Policy  3
Econ-611  Dynamic Macroeconomics  3

**Industrial and Labour Economics**
Econ-501  Managerial Economics  3
Econ-502  Industrial Organization  3
Econ-503  Industrial Economics and Game Theory  3
Econ-525  Labour Economics  3

**Quantitative Economics**
Econ-620  Mathematical Economics-II  3
Econ-650  Econometrics: Theory and Application-II  3

**Development Economics**
Econ-531  Sustainable Economic Development  3
Econ-532  Population and Economic Development  3
Econ-630  Economic Development Policy: Issues and Current Debate  3
Econ-631  Human Resource Development and Management  3

**International Economics**
Econ-640  International Finance  3
Econ-641  WTO and International Trade  3

**Public Sector Economics**
Econ-512  Public Sector Economics  3
Econ-552  Investment and Project Appraisal  3

**Agriculture and Resource Economics**
Econ-580  Agricultural Economics  3
Econ-680  Production Economics  3

**Financial Economics**
Econ-554  Corporate Finance  3
Econ-555  Money, Banking and Finance  3
Economic Thought and Comparative Economic Systems
Econ-574  History of Economic Thought  3
Econ-576  Comparative Economic System  3

Other Courses
Econ-570  Environmental Economics  3
Econ-571  Political Economy and Global Order  3
Econ-572  Regional Economics  3
Econ-573  Economic Principles and Techniques of Marketing  3
Econ-590  Internship in Economic Application  3
Econ-592  Independent Study  3
Econ-691  M.Sc. Thesis (In lieu of two optional courses)  6

OFFERING OF COURSES IN EACH SEMESTER
As per availability of faculty, the following courses will be offered in each semester:

Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econ-500*</td>
<td>Microeconomic Theory</td>
<td>4</td>
</tr>
<tr>
<td>Econ-510*</td>
<td>Macroeconomic Theory</td>
<td>4</td>
</tr>
<tr>
<td>Econ-520*</td>
<td>Mathematical Economics-I</td>
<td>3</td>
</tr>
<tr>
<td>Econ-521*</td>
<td>Statistics for Economists</td>
<td>3</td>
</tr>
<tr>
<td>Econ-505*</td>
<td>Islamic Economics</td>
<td>3</td>
</tr>
<tr>
<td>Sub Total</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econ-550*</td>
<td>Econometrics: Theory and Application-I</td>
<td>4</td>
</tr>
<tr>
<td>Econ-615*</td>
<td>Research Methodology and Computer Application</td>
<td>4</td>
</tr>
<tr>
<td>Econ-530*</td>
<td>Development Economics: Theory and Application ⁴</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Two optional Courses</td>
<td>6</td>
</tr>
<tr>
<td>Sub Total</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

⁴If “Development Economics: Theory and Application” course is offered in Semester I, then “Islamic Economics” will be offered in Semester II and vice versa.
Semester III

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econ-600*</td>
<td>Microeconomic Analysis</td>
<td>4</td>
</tr>
<tr>
<td>Econ-610*</td>
<td>Macroeconomic Analysis</td>
<td>4</td>
</tr>
<tr>
<td>Econ-540*</td>
<td>International Trade Theory</td>
<td>4</td>
</tr>
<tr>
<td>Two Optional Courses</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Sub Total 18

Semester IV

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econ-601*</td>
<td>General Equilibrium and Welfare Economics</td>
<td>4</td>
</tr>
<tr>
<td>Econ-690*</td>
<td>Seminar in Applied Economics and Term Paper</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Two optional courses or M. Sc. Thesis</td>
<td>6</td>
</tr>
<tr>
<td>Econ-695*</td>
<td>Comprehensive Examination</td>
<td>Pass/Fail</td>
</tr>
</tbody>
</table>

Sub Total 14

Grand Total 66

*Compulsory courses

TWO OPTIONAL COURSES OR THESIS (6 Credits)

M.Sc. thesis will be of 6 credits in lieu of two optional courses. Evaluation of thesis will be done by a Committee consisting of Chairman of the Department of Economics, thesis Supervisor/Advisor and external examiner, appointed by the Dean. The student must defend his/her thesis. Students and teachers may attend the defence, with the permission of the Chair. In viva voce examination, questions may be asked relevant to the thesis and other courses pertaining to economic theory, current national and international economic issues.

TEACHING METHODOLOGY

The courses have been designed keeping in view background of students entering into the M.Sc. Economics program. The new students are given a chance to take refresher courses of the subject matter and to provide them some time to improve their academic deficiencies. The courses offered in the first semester are foundation courses. It will enable them to handle advanced material. Thus, the courses in the first semester are meant to prepare students for advanced studies. These courses will be taught keeping in view the level and background of the students. Therefore, teachers may introduce mathematical and other advanced techniques to teach advanced courses. The medium of instructions will be English. There will be a need
to use electronic devices for effective delivery of material for certain courses. In addition to above, it is recommended that there must be at least one seminar in each semester. Some of these seminars may be delivered by a team of students. Students must be given two assignments each month to make sure that they have covered the reading material. The instructor may not deliver lecture on the same topic, if he/she thinks that the seminar has covered the literature at the required level. However, it may be followed up by homework assignments, which must be focused upon problem solving, estimation of models and review of literature; as per relevance of the course. It is strongly recommended that, if possible, during the coursework at least two/three seminars must be arranged on current/important topics, which may be delivered by eminent experts/economists. The seminars may be followed by homework, which may reflect whether students have absorbed the material; for example, it may consist of a summary of the lecture and its critical review etc. Planning for the seminars must be done in the beginning of the course and announced within the first two weeks of the session.

Students are expected to observe high standards of ethics and moral values. Tutorial classes are held for this purpose and counseling is provided so that students can cope with their problems. The aim of tutorial classes is to improve the personality and moral values of the students. It is also focused to improve the personality of the students, general knowledge and career.

The tutorial classes will be mandatory; bi-weekly or at least once in a month. In the tutorial classes, students must be given a chance to share their academic and other problems. Other discussions may include ethical, moral, national, international and social welfare orientation activities. The focus must be on development of personality of the students and patriotism.

ASSESSMENT STRATEGY

To assess whether students have gained and absorbed sufficient knowledge of the subject, it is important to evolve appropriate strategy and techniques to test the students. The student must maintain minimum grade point average as per University rules. The following strategy has been evolved to provide guidelines for evaluation:

(i) A clear mechanism for evaluation is announced and provided in writing to the students at the beginning of the course/semester, i.e. along with course outlines which is provided in the first week of the beginning of the course.

(ii) To ensure full coverage of the reading material, periodical homework/assignments are assigned and duly evaluated. These assignments may be given proper weightage in the final internal evaluation/awarding marks.

(iii) Two types of seminars and workshops shall be held during the courses. The seminars will be arranged for each course by the Department:

(a) by experts, other than the teacher concerned. It must be followed by homework assignments.
(b) by a group of students or individuals to train them for teaching and reproducing the material absorbed.

DURATION OF THE PROGRAM

(i) Total duration of the program will be of two academic years, i.e. four semesters; each semester consisting upon 18 weeks.

(ii) A student has to complete 66 credit hours to become eligible for M.Sc. degree. Besides 75% attendance in classes is mandatory, otherwise, student will not be allowed to sit in the terminal examination.

RE-SIT EXAMINATION

The students who cannot appear in examination because of valid excuse/reason as approved by the Chairman, Department of Economics, shall be allowed to appear in re-sit examination within one week after the examination subject to the payment of special examination free of Rs. 1,000 for each course. If the number of courses is more than 2 then a lump sum of Rs. 2,500 shall be paid as special examination fee to the Department.

PROBATION

The promotion of a student on probation will be allowed twice in all the programs. If a student in the first semester obtains GPA less than 2.00 and greater than or equal to 1.50 will be considered on probation but in the later semesters the student will be considered on probation if he/she scores CGPA less than 2.00 and greater than or equal to 1.70. In case student does not achieve minimum desired CGPA 2.00 in any semester after availing opportunity of two probations, he/she shall be dropped from the rolls of the Department and cannot be re-admitted in any case by the same department.

MIGRATION

Migration of a student may be allowed subject to the fulfillment of Migration Regulations of the University of the Punjab. The credits earned in the previous institution may be permitted to be transferred to the University of the Punjab subject to the condition of similarity/equivalence with the University courses. The students of the University of the Punjab are also allowed to migrate from one department to another department with the mutual consent of the heads of departments. The migration in all cases shall only be permissible if the student fulfills requirements of merit and availability of seats. The credits earned in the parent department of the student will be considered for exemption of similar/identical courses by the department to which student is admitted. The decision of the department will be final. The migration will not be allowed during the 1st year of any course of study. No credit hour of a course will be transferred if the grade is less than ‘C’.
EVALUATION SYSTEM

1. The teacher is responsible for the evaluation of work/performance of the students of his class and for the award of grades to them on the basis of such evaluation.

2. The number and nature of tests and assignments depends on the nature of course. However, in case of taught courses there will be at least one home assignment, sessional works and two tests (Mid Semester and Final Examination) in each course with the weightage as under:
   - A. Assignments 25%
   - B. Mid Semester 35%
   - C. Final Semester 40%

   To pass a course, student must obtain ‘D’ grade (50% marks) cumulative in mid-term and final semester examinations and in Assignment out of assigned marks.

3. There shall be no choice in questions in the Mid Semester and Final examination papers.

4. The scripts of each activity (A, B and C of 2 above) shall be shown to the students concerned by the teachers within one week, taken back immediately in accordance with the announced schedule along with the examination schedule.

5. The mid-term examination shall be after eight weeks of the commencement of the semester. The final examination shall be held at the end of the 17th week, i.e. during the 18th week.

6. In view of the weightage for various examinations the duration of the papers will be as follows:
   - (i) Mid Semester Examination One and half hour
   - (ii) Final Semester Examination Two hours

7. Examination should be held on consecutive days excluding holidays. The schedule of paper showing to the students shall be displayed along with the examination schedule by the teacher.

8. Home assignments shall be deposited with the teacher concerned as scheduled by the teacher.

9. The teacher concerned shall prepare three copies of the awards. He shall retain one copy with him and send one copy to the Chairman, Department of Economics. He shall also display a copy of the result on the Notice Board. The scripts of mid-term and final semester examinations and assignments will be kept for three months after the end of the semester.

10. The teacher-in-charge will report unfair means cases to the Chairman who shall place those before Departmental Examination Committee for necessary action under the rules. The Committee will decide unfair means cases as per university rules.
Any candidate detected in giving or receiving assistance, or found guilty of copying from any paper, book or note, or allowing any other candidate to copy his answer book, or using or attempting to use these or any other unfair means, shall be dropped from the program. The Chairman can visit and inspect any examination and take action for unfair means cases.

11. In case a candidate is unable to appear in part or whole of the Mid Semester or Final examinations of a semester on medical grounds, he may be allowed to appear in the Special Mid Semester or Final examination to be arranged by the Department;

Provided that he/she fulfills the condition of having attended at least 75% of classes held in a course.

12. In case of a valid reason a student may freeze his/her studies maximum for one year (two semesters) subject to the permission of Chairman, Department of Economics. However, freezing in 1st semester is not allowed. During the “freezing period” the applicant will lose his studentship status and shall not be entitled to avail any facility like hostel/medical/transport, which University extends to its regular students. The student will rejoin the same semester which he/she has frozen on the basis of genuine reason and will be entitled to the facilities curtailed for the freezing period.

GRADING SYSTEM (as per University Grading System, subject to change)

1. Letter grading should only be used for representing the individual courses and not for semester GPA or CGPA.

2. Equivalence in numerical grades, letter grades and grade points are:

<table>
<thead>
<tr>
<th>Percent Marks</th>
<th>Letter Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>85 and above</td>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>80-84</td>
<td>A–</td>
<td>3.70</td>
</tr>
<tr>
<td>75-79</td>
<td>B+</td>
<td>3.30</td>
</tr>
<tr>
<td>70-74</td>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>65-69</td>
<td>B–</td>
<td>2.70</td>
</tr>
<tr>
<td>61-64</td>
<td>C+</td>
<td>2.30</td>
</tr>
<tr>
<td>58-60</td>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>55-57</td>
<td>C–</td>
<td>1.70</td>
</tr>
<tr>
<td>50-54</td>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>Below 50</td>
<td>F</td>
<td>0.00</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>W</td>
<td></td>
</tr>
</tbody>
</table>

3. Maximum possible Grade Point Average is 4.0.

4. Minimum Cumulative Grade Point Average for obtaining 2 years M.A./M.Sc. degree is 2.00.
5. A fraction of mark in a course is to be counted as ‘1’ mark, e.g. 64.1 or 64.9 is to be shown as 65.

**RULES OF PROMOTION**

1. At the end of the each semester a student must obtain a minimum Grade Point Average (GPA) of 2.00 to be promoted to the next semester.

2. In case a student is able to obtain GPA of 1.70 or more but less than 2.00, except first semester where GPA of 1.50 or more but less than 2.00, he/she will be promoted to the next semester on probation (1\textsuperscript{st} probation). If the student does not achieve desired CGPA 2.00 but obtains CGPA greater than or equal to 1.70 will go to 2\textsuperscript{nd} (last) probation. The candidate, who fails to secure 1.50 GPA in the First Semester or 1.70 CGPA in the subsequent semester(s), shall stand automatically dropped from the rolls.

3. At the end of the each semester (from second semester to the second last semester), a student must obtain a minimum Cumulative Grade Point Average (CGPA) of 2.00 for promotion to the next semester. Every student will have the right to avail probation twice in the following semesters.

4. A student has to obtain CGPA 2.00 in the last semester of each program for the award of degree.

5. In the third semester, a student will be required to repeat those course(s) of first semester in which he/she had failed subject to the payment of examination fee of Rs. 5,000 per course.

6. In the fourth semester, a student will be required to repeat those course(s) of second semester in which he/she had failed subject to the payment of examination fee of Rs. 5,000 per course.

7. If a student gets D grade(s), he/she can repeat the course(s) when offered to improve his/her grade(s). The student who completes all courses and interested to improve D grade(s) he/she shall be allowed to improve D grade(s) within the allowable period (number of years) of two additional years (four semesters) subject to the payment of examination fee of Rs. 5,000 per course.

8. A student, who completes all the courses and has not been required to repeat any course(s), obtains CGPA less than 2.00 but not less than 1.90 at the end of the 4\textsuperscript{th} semester in case of 2 years M.A./M.Sc. may be allowed to repeat 12 credit hour courses (varying from 2 to 4 credit hours) in which he/she had obtained the lowest grades, in order to improve the CGPA so as to obtain the minimum of 2.00 CGPA failing which he/she shall not be awarded degree and removed from the rolls of the Department.

9. In case a student repeats the course(s) for the improvement of grade(s) which he/she has already taken, the better of the two grades of the course(s) will be counted for CGPA calculations.
REQUIREMENTS FOR AWARDING OF DEGREE

The students shall complete the following requirements for the award of degree:

1. A student must have a proper admission in the program of the Department and should have earned a minimum of 66 credit hours for M.Sc. Economics. In addition to compulsory courses, students must pass two courses each in two areas of specialization. Students may add/drop courses as per announced dates by the Department of Economics. A student must obtain 50% marks to pass a course.

2. If the student opts for M.Sc. thesis, he/she must:
   (i) Submit approved research proposal in due course of time. It must have been approved by the concerned quarters.
   (ii) Submit approved thesis (in lieu of two optional courses) within the time limit. Other university rules will apply.

3. A student must pass comprehensive examination at the end of fourth semester. Minimum Cumulative Grade Point Average (CGPA) for obtaining M.Sc. Economics degree is 2.00.

DEPARTMENTAL EXAMINATION COMMITTEE

As per University rules departmental examination committee is formulated.

Constitution of Committee. The Department has an Examination Committee comprising of the following:

- Chairman of the Department
- Two to three senior most faculty members
- The concerned teacher if needed.

The functions of the Committee are:

(a) Ensure content coverage of courses by comparing tests with the course outline and work plan provided by the teacher.
(b) Monitor classroom activities as laid down in the course outline.
(c) Examine all problems regarding uniformity before the declaration of results.
(d) Address and dispense student complaints.
(e) Address UMC cases and make decisions under the semester rules.

The decision of the Committee shall be final.

BRIEF INTRODUCTION OF COURSES

Detailed contents of courses are available in the Department. Students are advised to get a copy of these courses.
Microeconomic Theory
This course aims at providing comprehensive knowledge of consumer, firm, and market theory and their applications. In this course, the students are expected to develop deductive reasoning and comprehend classical methodology pertaining to models of consumer behavior, firms’ decision making, perfect and imperfect market structure, general equilibrium analysis, uncertainty, risk analysis, game theory, and welfare economics. Special importance is placed on developing problem solving skills to the issues related to microeconomics. It is expected that the course would enable its participants to comprehend major microeconomic models which will help in business decision making.

Prerequisite for this course is Principles of Microeconomics theory and intermediate level calculus.

Macroeconomic Theory
The main objective of this course is to familiarize students to the fundamental theories and basic models in macroeconomics. The course is covered in two parts. The first part consists of topics such as national income and its determination, consumption, savings and investments, demand and supply of money, and aggregate demand and supply. The topics in this part would be analyzed at an intermediate level. The second part of this course includes advanced level topics. The treatment to topics, such as exchange rates and open economy, long run economic growth, economic fluctuations, and macroeconomic policy debate involves the use of mathematical tools and models. Special emphasis is placed on scrutinizing the models developed in this course on the basis of real time macroeconomic data. The participants of this course would be expected to comprehend key debates over macroeconomic issues and policy-dilemmas faced by various economies.

Prerequisite for this course is Principles of Macroeconomics theory and intermediate level calculus.

Mathematical Economics
The aim of this course is to equip students with the basic mathematical tools that are useful as an approach to economic analysis. Participants of this course would approach the fundamental theories of micro-economics and macro-economics using mathematical models. In particular, students would learn the static, i.e. equilibrium analysis, comparative-static analysis, and static optimization problems. The participants, after the completion of this course, are expected to understand and analyze economic models and their multivariate relationship, encompassing the economics theories.

Prerequisite for this course is a basic knowledge of introductory-level algebra.

Statistics for Economists
The main objective of this course is to acquaint students with the basic techniques of statistical methods with strong emphasis on its application to economic theories and principles. The material covered in this course would enable students in not only testing the
predictions of economic theories at an elementary level, but it would also help develop the basic skills necessary to take advanced courses like econometrics and growth models. Major topics covered in this course are measures of central tendency, probability, sampling design, estimation techniques, analysis of variance, non-parametric statistics, and Bayesian analysis. It is expected that after the completion of this course, students would be comfortable in handling and analyzing data and use of estimation techniques.

*No prerequisite for this course is required. However, basic knowledge of statistics will be an added advantage.*

**Islamic Economics**

The main objective of this course is to acquaint students with the economic aspects of Islamic principles and their application to analyze contemporary economic problems. The course helps to build nexus between the Islamic principles and mainstream economic theories. The topics covered in this course range from microeconomic to macroeconomic concepts pertaining to fundamentals of Islamic thoughts. It focuses on, among others, the contributions in development economics of Abu Yousaf to debate on good governance and functioning of market system of Ibn-e-Khuldon. Major topics in this course are Islamic models of finance, banking systems, welfare and distribution of income, zakat and social justice, and current process of Islamization of economic system in Pakistan.

*Prerequisite for this course is basic knowledge of holy Qura’an, Hadith, Shariah and economic theory.*

**Development Economics: Theory and Application**

This is a course about the understanding of the economies popularly known as developing countries. In this course, students are introduced to the conceptual meaning of economic development while distinguishing it from economic growth and the common characteristics of developing countries. The course develops necessary abilities in the students to generalize and apply development economic theories to solve the most pressing problems of the developing world. It helps to understand structure and functioning of institutions, markets, and policies adopted in the developing countries to accelerate welfare of their citizens. The course covers theories of economic growth and models and their application pertaining to contemporary issues of the developing world, such as poverty, income distribution, unemployment, and macroeconomic destabilization. After the completion of this course, students are expected to contribute to the society with their opinions about the development problems from various forums of public and private organizations.

*A considerable knowledge of introductory-level macroeconomic and microeconomic theory is an advantage; otherwise no special prerequisite for this course is required.*
Econometrics: Theory and Application
This course aims at introducing students to the quantitative aspects of various econometric theories. This is achieved through providing the students with an understanding of basic econometric theory and models. In particular, the topics covered in this course are: the nature of regression analysis, single- and multi-variable regression analysis, assumptions of the classical regression model, econometric modeling, regression on dummy dependent variable, simultaneous equation models, and time series econometrics. Special emphasis is placed on the application side of this course. Participants would make use of statistical softwares to undertake regression analysis. Students after the completion of this course are expected to be comfortable in data analysis, apart from contributing to empirical research and analyzing projects.

Prerequisite for this course is intermediate-level knowledge of calculus, statistics, and economic theory.

International Trade Theory
This course is designed to familiarize students with international economics. It is divided into two parts. The first part covers the trade theory, and the other international finance. Emphasis in this course is on the rigorous treatment of traditional and current trade and exchange rate theories and models. Models of gains from trade, pattern of trade, international flow of factors of production, trade related competitive theories, liberalization reforms, balance of payments problems, determinants of exchange rate, and future markets are some of the topics covered in this course. Furthermore, implications of international flow of funds and debt crises are covered in depth. By providing training-built analytical ability, which is particular for policy formulation, this course would prepare students for jobs in both public and private sector organizations.

Prerequisite for this course is intermediate-level knowledge of economic theory and mathematics.

Human Resource Development and Management
The course covers important topics like development of human resources and their role in economic growth; comparative picture with other countries draws lessons which could be useful for the development of Pakistan. Besides, investment in human capital in Pakistan is analyzed in details. Important issues like migration and urban unemployment is covered in this course. Gender issues pertaining to female labour participation and status of woman, as development agent is addressed in details. Employment and unemployment pattern is analyzed under different models and definitions of unemployment. Historical pattern of employment and unemployment is taught in detail and forecast for the same will be analyzed. The course also covers current international economic developments and their impacts on human resource development; like globalization, WTO, labour migration, poverty & income distribution. New global vision on above cited topics is provided in this course.
WTO and International Trade

The students can take more than three courses to specialize in International Economics. This new course on WTO has been introduced, which covers trade related aspects in details. Beginning from the emergence of GATT and the birth of WTO is analyzed in historical perspective; major trading rules pertaining to WTO are covered. An important aspect of this course is that implication of WTO rules are taught not only pertaining to developing countries and Pakistan but these rules are analyzed in global perspective. Important issues like competitiveness, Net food importer, BOP support, trade and environment, subsidies and state trading, electronic commerce and welfare impacts of free trade are taught in this course. It is an important and new course which is rarely taught elsewhere.

Research Methodology and Computer Application

This course aims at preparing students to strengthen their research abilities. The contents of this course are designed to facilitate research. Apart from learning research techniques and developing such necessary skills, the participants of this course would also develop scientific and rational thinking to produce new knowledge. Students will be taught to build and estimate econometric models. Besides, application of economic theory is taught in such a way so that student can test and empirically verify economic theories and models.

Prerequisite for this course is intermediate-level knowledge of economic theory, statistics, and econometrics along with some degree of writing and computer skills.

General Equilibrium and Welfare Economics


Seminar in Applied Economics and Term Paper

It is a special applied course, which covers different aspects of economic theory and its application. The course is offered in the last semester. In this course, estimation of econometric models and applied economic research is taught. For this purpose, students are required to apply the knowledge and theory to produce a research paper. Completion of this course provides confidence among the students to embark upon research on important national and international economic issues.
Thesis
The structure of courses for M.Sc. Economics is designed in such a way that a graduate student is fully trained for teaching, research and jobs related to national and international organizations. M.Sc. thesis is offered to a limited number of students who have potential to produce publishable research work. Students are encouraged to take M.Sc. thesis. The M.Sc. thesis students must earn high CGPA in their course work. Besides, good writing skill is a pre-requisite to take thesis.

OPTIONAL COURSES AND SPECIALIZATION
Major objective of these courses is to provide training in nearly all those areas of economics which are of significant importance as per market demand. All the courses cover state-of-the-art material in the respective areas. A wide choice of selection comprising sixteen courses and more than ten areas of specialization is offered. Students can choose optional courses according to their career ambitions. They may select a topic of their interest for their thesis and take a course in the same area to build a strong background in a particular area. Students can also choose two optional courses in such a way as to combine them with relevant compulsory courses and end up specializing in two areas. A student is required to specialize in minimum of two areas.

MASTER OF SCIENCE IN ECONOMICS (Replica)
The same rules that apply to M.Sc. Economics (Morning) program will be applicable to M.Sc. Economics (Replica) program except for the following:
1. There is no preference for year of passing. Two marks will be deducted from the marks obtained out of 100 marks for each late year to a maximum of two years.
2. There is no age limit for admission.
3. Hostel facility is not available for the students of M.Sc. Economics (Replica).
4. No medical facility is available as these are non-resident students.
INTRODUCTION
There is an ever-increasing demand in the country for people who possess sound knowledge of economic theory on the one hand and of business science on the other, so that they can solve the problems of business enterprises in the economy. This demand has further intensified, especially in the presence of current wake of denationalization and privatization of public sector enterprises. To cater this fast growing demand, Department of Economics, University of the Punjab, has responded by offering a specialized and structured degree program of Master of Business Economics (MBEcon).

OBJECTIVES
● This program is aimed at producing entrepreneurial class that will help in promoting industrial growth of the economy.
● The participants of the program are expected to undertake research in one of the research areas including Economics, Management, Finance, Marketing and Banking.
● The participants of the program would be trained to work as Professional Economists, Managers, Financial Analysts, Bankers and Business Executives.
● The MBEcon degree holders are expected to compete with holders of MBA/MPA/M.A. (Economics)/M.Sc. (Statistics)/M.Com. degrees in both private and public sectors at national and international level.

ADMISSION CRITERIA
Criteria for Master of Business Economics (two years self-supporting afternoon program) is as under:

Number of Seats

<table>
<thead>
<tr>
<th>Eligibility</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>For B.A. / B.Sc. / B. Com.</td>
<td>60</td>
</tr>
<tr>
<td>For PGDAE holders (Offered by the Department of Economics)</td>
<td>09</td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
</tr>
</tbody>
</table>

Eligibility
The applicant must have B.A. / B.Sc. / B.Com. degree with a minimum of second division marks in Economics as an elective subject.

Merit Determination
Basic Criteria. For merit determination the marks will be aggregated based on the following criteria:
- 25% of total marks obtained in Matric
- 20% of total marks obtained in Intermediate
- total marks obtained in B.A./B.Sc./B. Com. (out of 800)
- 20 marks of Hafiz-e-Quran

**Additional Criteria.** Basic Criteria plus Marks in Economics out of 200 in B.A./B.Sc./B. Com. plus one-fourth of marks in Statistics or Mathematics (whichever is higher) in B.A./B.Sc./B. Com. out of 200 marks. Those applicants who have studied Mathematics and/or Statistics as an optional subject in B.A./B.Sc. or as a 100 marks subject in B. Com. will also have one-fourth of their marks in these subjects added to their merit.

For all those graduates who have passed their examination under Semester System their marks will be multiplied by 0.85.

**For PGDAE holders.** Basic Criteria plus total marks obtained in PGDAE out of 1000.

**Order of Preference**

Admission against all seats will be made according to the following order of preference.

<table>
<thead>
<tr>
<th>First</th>
<th>B.A./B.Sc./B. Com.</th>
<th>First Annual Examination 2014 and Second Annual Examination 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second</td>
<td>B.A./B.Sc./B. Com.</td>
<td>First Annual Examination 2013</td>
</tr>
<tr>
<td>Third</td>
<td>B.A./B.Sc./B. Com.</td>
<td>First/Second Annual Examination 2012</td>
</tr>
</tbody>
</table>

**RULES OF PROMOTION**

Same as for M.Sc. Economics.

**SCHEME OF STUDIES**

The MBEcon degree is divided into four semesters which will extend to two academic years. The proposed duration of each semester is 16 weeks. In each semester five courses of 3 to 4 credit hours will be offered. Following is a brief description of courses to be offered in four semesters:

**Semester I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEcon-501</td>
<td>Microeconomics</td>
<td>4</td>
</tr>
<tr>
<td>BEcon-503</td>
<td>Statistics for Business and Economics</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-504</td>
<td>Mathematics for Business and Economics</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-506</td>
<td>Fundamentals of Management</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-508</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>
### Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEcon-502</td>
<td>Macroeconomics</td>
<td>4</td>
</tr>
<tr>
<td>BEcon-507</td>
<td>Fundamentals of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-509</td>
<td>Management Information System</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-510</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-540</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

### Semester III

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEcon-601</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-602</td>
<td>International Economics</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-603</td>
<td>Business Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-604</td>
<td>Business Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-605</td>
<td>Investment Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

### Semester IV

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEcon-606</td>
<td>Advanced Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-608</td>
<td>Research Project</td>
<td>4</td>
</tr>
<tr>
<td>BEcon-652</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-658</td>
<td>Mercantile and Taxation Law</td>
<td>3</td>
</tr>
<tr>
<td>Option I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Option II</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Optional Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEcon-525</td>
<td>Labour Economics</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-530</td>
<td>Development Economics</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-570</td>
<td>Environmental Economics</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-580</td>
<td>Agricultural Economics</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-607</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-640</td>
<td>Business Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-641</td>
<td>Business Communication and Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-642</td>
<td>Islamic Code of Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-645</td>
<td>Economics of Transportation</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-650</td>
<td>Budgeting and Forecasting</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-654</td>
<td>Monetary Economics</td>
<td>3</td>
</tr>
<tr>
<td>BEcon-656</td>
<td>Public Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

### Internship Requirement

After completing the coursework requirements for MBEcon, a student will complete at least two-month internship with a national or international organization.
POSTGRADUATE DIPLOMA IN 
APPLIED ECONOMICS (Evening)

INTRODUCTION
Postgraduate Diploma in Applied Economics (PGDAE) was initiated in 1996 by the Department of Economics. It is a rigorous program in Applied Economics. Besides core courses, it also includes a course on computer applications for economists and a research oriented and thought provoking term paper. An addition of the course on Applied Econometrics and Research Methodology has been introduced to enhance the quantitative skills of the students. Hence, it serves as a comprehensive introduction to the modern aspects of Applied Economics. It is equally important for government officials, civil services examinations, businessmen, small traders, bankers, general public, and above all for students of business, management and accounting to acquire analytical and strategic thinking.

OBJECTIVES
● To develop an ability of strategic and analytical thinking among its students.
● To train an exclusive group of people who can understand the basic concepts of economics and can apply their knowledge to solve problems.
● To provide the students an opportunity to sharpen their skills to enhance their general understanding and functioning of the economy and help them in their current/prospective careers.
● To help its students in the preparation of CSS, PCS, Banking and Finance Service Commission and Diploma in Banking Examination.
● To cater the growing needs of the domestic market.

ADVANTAGES OF DIPLOMA IN APPLIED ECONOMICS
The foremost advantage of PGDAE is the exceptional chance that provides to its students to study the challenging subject of Economics in a very conducive and competitive environment. It is useful for those who could not continue their studies after graduation and now want to do M. Sc. Economics and MBEcon. It is also very useful for candidates doing MBA, CA, ACMA from elsewhere as well as those who want to excel in competitive examinations.

PGDAE is not a degree program so it should not be compared with other full time degree programs. However, department has proposed some additional benefits for Diploma holders in the form of special seats in M.Sc. Economics morning and replica programs, as well as, in MBEcon program. At present the diploma holders of PGDAE have nine special seats in each of the above-mentioned program.
ELIGIBILITY AND ADMISSION CRITERIA
The basic pre-requisite for admission is a Bachelors Degree from any Pakistani or Foreign university/college; recognized by the Higher Education Commission. Admission will be based solely on merit. Merit will be determined on the basis of previous academic record of the candidates. There is no age limit for admission.

Basic Criteria
25% of total marks obtained in Matric plus 20% of total marks obtained in Intermediate plus total marks obtained in B.A./ B.Sc./B. Com. or equivalent (out of 800) plus 20 marks of Hafiz-e-Quran (if applicable).

Merit Determination
Basic criteria plus 20% of marks in Economics out of 200 in B.A./B.Sc./B. Com. or equivalent. Two marks will be deducted from the marks obtained out of 100 marks for each late year to a maximum of two years.

SCHEME OF STUDIES
PGDAE is divided into two semesters that will extend to a whole academic year. First Semester will start in the beginning of October and will complete by the end of January. The Second Semester will start in the mid of February and end in June. Final Comprehensive Examination shall be held approximately two weeks after the completion of the second semester.

In each semester four courses will be offered; each having 3 credit hours. Following is a brief description of courses to be offered in two semesters.

Semester I

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Applied Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Applied Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Statistics with Computer Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

Semester II

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Economic Development</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>International Trade</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Applied Econometrics and Research Methodology</td>
<td>3</td>
</tr>
</tbody>
</table>
EXAMINATION SYSTEM
During the course of study the candidates will be examined by the teacher through quizzes, Assignments and Term Examinations. The term examination will include mid-term and final-term examinations for each course.

The maximum marks for each course are 100. The above mentioned system will apply to all courses in two semesters. At the end of the session the Department of Economics will arrange a comprehensive examination containing 200 marks. So in aggregate there will be 1000 marks for the program.

EXAMINATION REGULATIONS
1. English shall be the medium of instructions as well as for examinations.
2. For each quiz, assignment and term examination the sole condition is that the candidate must be enrolled with the Department of Economics. However, for a comprehensive examination in addition to the above, the candidate must also fulfill the following conditions:
   (a) He/She has attended at least 75% lectures in each course.
   (b) He/She has secured required CGPA.
3. In case of failing in a course, the student will have to repeat the course, attend classes in the next semester, when the course is offered, and secure required marks.
4. In case of failing in the comprehensive examination, the student may be allowed to reappear in the examination second time. The re-test for comprehensive will be held in one month’s time. Failing in the second chance, the students must make up their deficiencies in the second year. If student fails to make up such deficiencies even second time, he/she will not be issued the Diploma.
5. The grading system will be the same as for other programs, like M.Sc. and MBEcon. The same CGPA and Rules for Promotion will be followed.
FACULTY PROFILE

Dr. RAFIQUE AHMAD (Professor Emeritus)
Ex-Vice-Chancellor, University of the Punjab, Lahore and Islamia University, Bahawalpur

Dr. Rafique Ahmad did his B.A. from Manchester and D. Phil. from Oxford. He was Professor and Chairman, Department of Economics, University of the Punjab, for many years. He served the same university as Dean, Faculty of Arts (1974-77) and Pro-Vice-Chancellor (1977-81). He was recipient of Nuffield Foundation Fellowship from 1970 to 1972. He has been actively associated with numerous government organizations and committees as Advisor or Consultant on matters connected with policy formulation, e.g. Ministry of Finance and Advisory Panel, Planning Commission, Economists and Bankers Experts Group, Council of Islamic Ideology, Budget Review Committee etc. Prof. Ahmad is President of Pakistan Economic Association and is also member of the Board of Governors/Executive Committee of the Pakistan Institute of Development Economics (Islamabad) and the CSCD Marga Institute (Colombo). He is also Editor of the Pakistan Economic and Social Review (Lahore). Professor Ahmad has been author or co-author of a large number of research articles on Economics and Islamic Economics Studies and government reports on important policy issues.

Dr. HAFAEZ UR REHMAN (Professor and Chairman)

Dr. Hafeez ur Rehman has been associated with the Department of Economics, University of the Punjab, Lahore since 1984. He obtained his M.A. (Economics) from University of the Punjab, Lahore in 1982. He did his M.Ed. from the Institute of Education and Research (IER), University of the Punjab, in 1989. After serving University of the Punjab for 12 years, he left for USA for higher studies. He got another Master degree in Economics from Ohio University (USA) and received Ph.D. in Economics from University of Wisconsin-Milwaukee (USA). He has teaching experience of more than 30 years in Pakistan as well as in the United States. He also taught Economics at Civil Services Academy, National College of Management, NIPA and MPDD. He is HEC approved supervisor for Ph.D. He participated in various national and international training courses and attended various national and international conferences/seminars. His areas of interest are Quantitative Analysis, International Trade and Finance. He has contributed over 50 research papers in journals of national and international repute. He is also serving as Managing Editor of Pakistan Economic and Social Review (HEC recognized research journal of the Department of Economics).
Dr. Tahir Mahmood did his M.Sc. and M. Phil. Economics from Quaid-i-Azam University, Islamabad. He completed his Ph.D. in Economics from Pakistan Institute of Development Economics (PIDE), Islamabad. In his dissertation “Debt sustainability and dynamics in Pakistan: Theory and evidence”, he addressed the debt sustainability issue by developing a theoretical framework to derive debt sustainability condition for the economy of Pakistan. He has teaching experience of 24 years at his credit. Dr. Tahir Mahmood supervised 8 theses at Master and M. Phil. level. His 17 research papers have been published in journals of international repute. He is working as reviewer/evaluator for journals such as Pakistan Economic and Social Review, Journal of Business and Economics and Research Bulletin. He is computer literate with vast knowledge of working in Econometric Packages like E-Views and Microfit. He is performing the duties of coordinator for Ph.D., M. Phil. and MBEcon programs. His areas of interest are Microeconomic Theory, Quantitative Economics and Econometrics.

Dr. Hafiz Khalil Ahmad received his master’s degree in Economics (First-Class-First) from the University of the Punjab, Lahore, in 1988. He is serving the Department of Economics on regular basis since 8 March 1989. He obtained PGD in Computer Science from University Grants Commission (now HEC), Islamabad. He received his M. Phil. in Economics from Quaid-i-Azam University, Islamabad, in 1996 and Ph.D. in Economics from the University of the Punjab, Lahore, in 2009. His Ph.D. dissertation titled “Sources of Growth and Total Factor Productivity: A Case Study of Pakistan” is a pioneering study in the Pakistan context. In 2012, he did his postdoctoral research on HEC fellowship from National University of Singapore (NUS). During his career, he has taught a vide variety of courses including Microeconomics, Macroeconomics, Islamic Economics, Econometrics, International Trade, Monetary Economics and General Equilibrium & Welfare Economics. He has authored 3 books and 22 research papers in HEC recognized local and foreign journals. Main areas of his interest are Islamic Economics, Macroeconomics, Economic Growth and International Economics.

Mrs. Rubina Javed did her Master in Economics from Government College, Lahore, and M.Sc. in Economics from Western Michigan University (USA). She has 22 years teaching experience at postgraduate level. She has two research papers at her credit. Her areas of interest are macroeconomic analysis, public policy and economic dynamics. She has also attended several international conferences and seminars. Presently she is on leave to pursue Ph.D. degree.
Dr. MUMTAZ ANWAR CHAUDHARY (Assistant Professor)

Dr. Mumtaz Anwar Chaudhary holds a double Master in Economics, one from the International Islamic University, Islamabad and the other from the University of Leeds (UK). He did his Ph.D. in Economics from University of Hamburg (Germany). Dr. Chaudhry has a good blend of teaching and research experience. He published widely in national and internationally reputed journals like Review of Development Economics. He has international exposure of Europe, North America and Middle East, where he presented papers in international conferences. Dr. Chaudhry is currently research fellow at Hamburg Institute of International Economics (HWWI) along his present position at this Department of Economics. Areas of his interest include International Political Economy and Development Policy.

Mrs. KULSOOM ZULFIQAR (Assistant Professor) On Leave

Mrs. Kulsoom Zulfiqar holds a First Class Master degree in Economics from the University of the Punjab, Lahore. She also holds an M. Phil. degree from the University of the Punjab, Lahore. She has 17 years of teaching experience at postgraduate level. Her main areas of interest are macroeconomics, statistics for economists, human resource management, marketing and international economics. Presently, she is a Ph.D. scholar at University of the Punjab and working on her dissertation. Nowadays she is on study leave to visit USA.

Dr. MUHAMMAD AZMAT HAYAT (Assistant Professor)

Dr. Muhammad Azmat Hayat holds a Ph.D. degree in Economics from University of Science and Technology of Lille (France). Prior to joining the University of the Punjab, he served at the State Bank of Pakistan (SBP). He was awarded Department Commitment Award (two times) and Organizational Competence Award (one time) for his outstanding performance at SBP. Dr. Hayat has presented his research work in many international conferences in Europe and Russia. He has published articles in internationally reputed journals like European Journal of Political Economy. His teaching and research interests include Applied Econometrics, Monetary Economics, Macroeconomics and Quantitative Techniques. He is serving as Assistant Managing Editor of Pakistan Economic and Social Review (HEC recognized research journal of the Department of Economics). He is also serving as Student Advisor of the Department.
Mr. A. D. SAEED (Assistant Professor on Contract)

Mr. Allah Ditta Saeed did his Master in Economics from Bahauddin Zakariya University, Multan. He holds M.Phil. degree from the University of the Punjab, Lahore. He has 18 years teaching experience at postgraduate level at Department of Economics, F.C. College University, Lahore, and 8 years teaching experience at Department of Economics, University of the Punjab, Lahore. His main areas of interest are microeconomic theory, quantitative economics, managerial economics, development economics and econometrics.

Mr. ABID RAZA KHAN (Lecturer) On Study Leave

Mr. Abid Raza Khan holds MBEcon degree from the University of the Punjab, Lahore. He also did M.Sc. Computer Science from Lahore University of Management Sciences. He served the industrial sector for more than three years. Mr. Khan joined the Department of Economics in 2005. His areas of interest are Business Economics, Managerial Economics, Taxation Law and Macroeconomics. Presently he is pursuing his Ph.D. in USA.

Ms. MARIA FAIQ JAVAID (Lecturer)

Ms. Maria Faiq Javaid got her Masters degree from the University of the Punjab, Lahore. She also did M.Phil in Economics from the University of the Punjab with distinction. Before joining the Department of Economics she has served the education sector and has more than 4 years experience of teaching at postgraduate level. She has attended many national and international workshops and seminars. Her areas of interest are Macroeconomics, Development Economics, Econometrics, Economics of Public Sector and Monetary Economics. She is also serving as Coordinator for M.Sc. Economics (Replica) Self-Supporting Program. Presently, she is a Ph.D. scholar at the University of the Punjab.

Mrs. FAREENA NOOR MALHI (Lecturer)

Mrs. Fareena Noor Malhi has done her 4-years B.Sc. (Hons.) from Lahore University of Management Sciences from where she graduated with distinction and was placed on the Dean’s Honor List. Later on she pursued with her MS Economics from the same institution with her research focusing on trade. Her teaching career started in 2010 and she joined the Department of Economics, University of the Punjab, in 2012. She has the honour of being selected for Fulbright Scholarship for doctorate level studies from USA. Her main interests encompass Macroeconomics, Econometrics and Managerial Economics.
Mr. ATIF KHAN JADOON (Lecturer)

Mr. Atif Khan Jadoon got his M.Sc. (Economics) degree in pioneer batch from the University of Punjab, Lahore. He also did his M. Phil. in Economics from the same institution. He has served in banking sector for almost two years. He has also served the Virtual University of Pakistan for two and half year. Finally, he joined the Department of Economics in 2012. His areas of interest are Microeconomics, Mathematical Economics, Development Economics and Major Issues in Pakistan Economy. He is pursuing his Ph.D. from the Department of Economics, University of Punjab. He is also serving as a Coordinator for Postgraduate Diploma in Applied Economics (PGDAE) program.

Mr. MUSHTAQ HASSAN (Lecturer on Contract)

Mr. Mushtaq Hassan got his Master’s degree in Business Administration (MBA) from Hailey College of Banking and Finance, University of the Punjab, Lahore. He taught few courses as visiting faculty member for about two years before he joined the Department of Economics as a Lecturer (on contract basis). His areas of interest are Financial Management, Investment Analysis, Advanced Financial Management, and Portfolio Management. He is also Incharge of Computer Labs of the Department of Economics.

Ms. Ambreen Sarwar (Lecturer on Contract)

Ms. Ambreen Sarwar holds a Master’s degree in Economics from Lahore University of Management Sciences (LUMS), Lahore. Prior to her appointment at the University of the Punjab, she had been working with LUMS as a Teaching Assistant for Mathematical Applications in Economics, Statistics and Data Analysis, Principles of Macroeconomics and Agriculture and Food Policy. Her areas of interest include Microeconomics, Applied Microeconomics, Mathematical Economics and Development Economics.
**FEE STRUCTURE***

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<th>Programme</th>
<th>First Semester</th>
<th>Second Semester</th>
<th>3rd + 4th Semester</th>
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<td>M. Phil. Economics (Morning)</td>
<td>Rs. 20,680</td>
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<tr>
<td>Postgraduate Diploma in Applied Economics</td>
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<td>(PGDAE)</td>
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Registration fee, if not already registered with the University of the Punjab, @ Rs. 2,500. Migration Certificate (NOC), in original and Equivalence Certificate are required at the time of admission.

*Subject to change without any notice.*
WELCOME PARTY
Seminar “Don’t ask poor to make sacrifices”