



# Newsletter

NWFP UNIVERSITY OF ENGINEERING & TECHNOLOGY, PESHAWAR

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Mardan Campus



Bannu Campus



Abbottabad Campus

## Vice Chancellor's Message

Beginning of Fall Semester is always exciting, and full of hope. Not only are we rid of the stifling hot weather – made all the more unbearable by long power-outages, we also start our academic calendar, and enroll a fresh batch of would-be engineers.



A very warm welcome to the new entrants. You have chosen well, and we are proud to have you with us. Student life is full of hope and excitement, and we shall endeavor to make these the best years of your life. However, you are now in a new environment in which students from different institutions, different backgrounds, different cultural and economic strata will be sharing your space.

In such a multi-cultural mix, it is imperative to accept others who may appear different, speak another language or dress differently. We are an equal opportunity university, and do not recognize any group less –or–more–than others.

For some time now, Pakistan has been in the grip of mind numbing violence, shaking the very foundations of our state. As sons of the soil, I beseech you all to help keep the campus environment safe, and leave the philosophical discussion of “who”, “why” and “cause” of militancy for later, when the threat has subsided.

Finally, we are in a financial crunch. Our grants from HEC have been drastically slashed. I request the entire family of UET that includes students, faculty and administrative staff, to once again stand by us, and help us tide these difficult times by supporting belt-tightening measures that we might be forced to take.

Good luck and God bless you all.

Engr. Syed Imtiaz Hussain Gilani

## UET LAUNCHES CAMPUS MANAGEMENT SOLUTION

UET, Peshawar, formally launched Campus Management Solution (CMS), on 19 July, 2008 to efficiently deal with student management issues. The project was completed with the financial support of HEC. Executive Director HEC, Dr. Sohail Naqvi was the chief guest on the occasion.

Vice chancellor Engr. Syed Imtiaz H. Gilani in his address, said that UET is a pioneer in the country to have the CMS system. He appreciated the efforts of the project team, and support of HEC in this regard.

Dr. Sohail Naqvi said that CMS will be very useful for students, and information will be readily available to them. He announced that HEC plans to introduce similar systems all over the country. Our youth have tremendous potential, and we ought to invest in them for a better future, he added. Project Manager, Ms. Shehla Kiran, said that the system will provide comprehensive solutions to manage campus related information for students and faculty members. It will provide information about admissions, curriculum management, course inquiries, class time-tables, and academic calendars etc.

Project Director, Mr. Sarwar Khan and Amer Gilani also spoke on the occasion. The ceremony was attended by a large number of faculty and administrative staff.

Later on, Dr. Sohail Naqvi visited various ongoing development projects in UET Peshawar with the support of HEC. He showed his satisfaction over the pace and quality of the work done.



Dr. Sohail Naqvi, presenting shield to Shehla Kiran, Director CMS



Speakers addressing the audience at CMS launching

## MEETING OF VICE CHANCELLORS OF PUBLIC SECTOR UNIVERSITIES, NWFP

A meeting of all vice chancellors of public sector universities of NWFP was held under the convenership of the vice chancellor, UET.

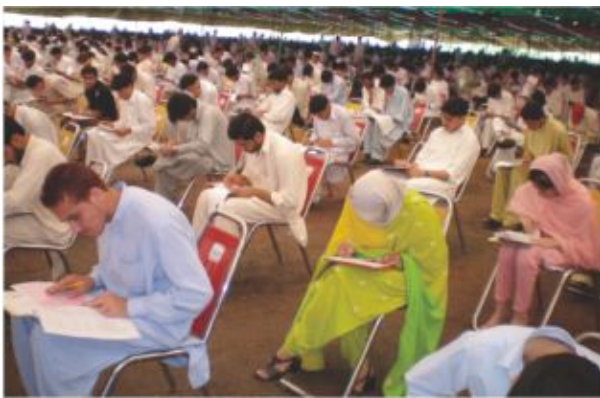
It was a one point agenda, in which all universities have been subjected to extreme financial crisis due to unprecedented and un-bearable budgetary cuts on the recurring grants. The fourth quarter releases for 2007-2008 to all universities have been slashed by two thirds. The major chunk of the recurring expenses goes towards payment of salaries (about 70%), which has become impossible for the public sector universities to bear. Additionally, the adverse effects of inflation, salary/pension increase by 20%, and utilities have struck the universities a grievous blow, which may cause some to collapse altogether. In addition, many universities have completed projects, submitted PC-IV, but it is the universities that are still footing the operational expenses,

encumbering universities with budgetary deficits. With all this, the fast track trajectory on which universities had started to move will come to a grinding halt, and all the investments so far incurred in Higher Education Sector will be frittered away.

Along with this, the vice chancellors felt with great concern that Public Sector Development Program (PSDP) allocations are not based on equity and fairness. The issue is exacerbated by the fact that the HEC funding has been capped at last years (2007-2008) levels, whereas the number of universities has increased substantially, causing a net cut to each university, and no additional funding for newly established universities. While old universities have been badly mauled by this financial crisis, the very survival of new universities is at stake.

The vice chancellors decided to seek an audience with the Governor and Chief Minister, to apprise them of the gravity of the situation, and to take up the issue with the HEC and federal government for prompt resolution.

## ENTRY TEST 2008



Candidates during entry test

Around 7298 candidates appeared in NWFP UET's Entry Test for undergraduate engineering programme (pre-engineering and computer sciences) for the academic session 2008-09. Candidates hailing from NWFP, FATA and Afghan Refugees appeared in the test.

The test was conducted simultaneously at Col. Sher Khan Stadium (Peshawar), where 5507 male candidates and 159 female candidates appeared, at Abbottabad Center, where 935 male and 83 female candidates appeared, while at Bannu Center 603 male and 11 female candidates appeared.



Staff of Directorate of Admissions, with Vice Chancellor

The vice chancellor expressed his satisfaction over the arrangement for the Entry Test. He said that UET provided every facility to our potential students. The University will also arrange orientation week for the new entrants before start of classes.

Mr. Amjad Shahid Afridi, Secretary NWFP Higher Education Department, Dr. Abdur Rauf Jamil, ETEA Director, Dr. Fazl-e-Ahmad, Principal Khyber Medical College, Peshawar, Subject Specialist and staff from Peshawar Police were also present.

The Directorate of Admissions NWFP UET, including Prof. Dr. Khan Gul Jadoon, the convener Admissions and Rubina Tahir, Deputy Director Admissions, managed the admission process.

## UET WINS ACU AWARD, 2007

The Directorate of Media and Publications, NWFP UET, Peshawar, has won the prestigious Association of Commonwealth Universities, (ACU) Public Relations, Marketing and Communication Network Awards, 2007.



Ms. Shamaila Farooq getting ACU Award

Director, Media and Publications, Ms. Shamaila Farooq, received the award from Dr John Kirkland, Deputy Secretary General Development, ACU, at the award giving ceremony held from 14 to 16 July, at the 2nd Global Conference in Durban, South Africa. The theme of the conference was "Building a profile: Key relationships for the communication professionals", and was attended by 120 delegates from 29 countries including Australia, Kenya, Nigeria, the United Kingdom, Canada, South Africa, India, and Pakistan. The conference was hosted by Kwa Zulu Natal University. The Vice-Chancellor, Professor Malegapuru Makgoba inaugurated the conference. Ms. Shamaila made a presentation on University's media strategy for one of its mega event "International Earthquake Rehabilitation Conference" held on 28<sup>th</sup> November, 2005 in Islamabad.

Ms. Shamaila has recently joined the PR Marketing and Communications Network steering committee as member from Asian region. She will be involved in assessing and scoring the entries in the next award competition, planning the program, recommending and recruiting key speakers from Pakistani universities, as well as chairing conference sessions.



Ms. Shamaila Farooq with Asian Group at ACU Conference



## FIRST AID TRAINING COURSE FOR FINAL YEAR STUDENTS

"Mining engineering graduates will readily get jobs after graduation as there are numerous job opportunities available in the market. More demanding places are tunneling projects, marble and cement industry in the Northern areas". This was stated by Prof. Dr. Khan Gul Jadoon, Chairman, Department of Mining Engineering, in a certificate distribution ceremony to award final year graduates on first-aid training course held in collaboration with Red Crescent Society, NWFP.

The vice chancellor urged faculty to make it mandatory that students get first hand training in the department. On a comment, he remarked that the duration could be extended with practical training in the field, so that students fully grasp both the conceptual and practical parts. Later on, he gave away certificates to the participants. All the faculty and administrative officials were present on the occasion.



Vice Chancellor distributing certificates to the participants

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## STUDENTS OF AGRICULTURAL ENGINEERING EXCEL IN PROJECT COMPETITION

Students of Department of Agricultural Engineering have been awarded a cash prize of Rs. 30,000/- by National University of Science and Technology (NUST) in a national level competition for final year Mechanical Engineering student's project, "Design and development of sugar cane planter for small and medium land holders of Pakistan". The project was

supervised by Prof. Dr. Zahid Mahmood, Chairman, Department of Agricultural Engineering and got first position. These students have also been awarded first position cash prize of Rs. 10,000/- by the Directorate of Science and Technology (DoST) NWFP, in 1st Regional General Public Science and Technology Model Competition (Central Region).

## FACULTY DEVELOPMENT PROGRAM

- Engr. Naveed Ahmad, Lecturer, Department of Civil Engineering, participated in the workshop "Earthquake Vulnerability Reduction and Preparedness Program by UNDP" as a resource person and provided a brief training on the topic of "Technical Aspects of Seismic Risk Assessment of Physical Infrastructures" on 29-30th August, 2008.

Naveed is currently a doctoral student of ROSE School in earthquake engineering. ROSE School in Italy is one of the world top schools for post graduate studies, research and training in earthquake engineering and engineering seismology. He has the honor of being the first student at ROSE School from Pakistan, and has recently been awarded a Ph.D scholarship. He is awarded with Erasmus Mundus Position for master in earthquake engineering and engineering seismology (MEEES) by European Union (EU) for 2006-2008 session.

- Research work of Engr. Muhammad Younas, Assistant Professor, Department of Chemical Engineering, currently pursuing Ph.D at European Membrane Institute CNRS, University Montpellier2, France, has been accepted in "International Congress on Membranes and Membrane Processes (ICOM 2008) held on July 12-18, 2008, at Honolulu, Hawaii, USA. The topic of poster was "Transient mass transfer model of membrane based solvent extraction in hollow fiber contactor: extraction of aroma compounds."



Part of this work has already been published in proceeding of international conference on "Engineering with Membrane (EWM 2008)" held on 24-28 May 2008 at Algarve (Faro) Portugal, while detailed research article has been published in a high impact factor journal, "Journal of Membrane Science".



- Engr. Khurram, Lecturer, Department of Agricultural Engineering, has successfully completed his M.Sc in Soil and Water Engineering. His research topic was "Investigation of the Contamination of Groundwater by Nitrogenous Fertilizer using Lysimeter". He was supervised by Prof. Dr. Taj Ali Khan.
- Faculty members of Department of Mechanical Engineering, Engr. Qaisar Gul, Engr. Arshad Mehmood, and Engr. Karim Akhtar, have joined George Washington University, USA. While Engr. Bilal Ahmed, Lecturer Engr. Usman Ghani, Asst Prof. Muhammad Shakoor, have joined Loughborough university, UK for MS. leading to Ph.D under Faculty Development Program.
- Engr. Ehtishamullah Khan, Associate Professor, Department of Mining Engineering is proceeding to UK for Masters in Gems & Gemology, sponsored by HEC under the project "Establishment of Gemstones Development Cell (GDC)".
- Dr. Waqar Shah, Associate Professor, Department of Electrical Engineering, participated in a five day industrial tour to Hannover Messe, Germany from 21-25 April 2008. The tour was sponsored by Higher Education Commission (HEC).

### RESEARCH PAPERS ACCEPTED/PUBLISHED

Three research papers based on final year project work of students of Department of Electrical Engineering have been accepted for publication in the World Comp USA, an International conference event organized by the Massachusetts Institute of Technology (MIT). All three projects were supervised by Dr. Mohammad Inayatullah Babar, Chairman, Department of Computer Science and Information Technology. These include:

- "Improving Congestion control process in 3G mobile networks using intelligent agent" Conference: ICWN' 08. The 2008 International Conference on Wireless Networks, World Comp 2008. Authors: Dr. Mohammad Inayatullah Babar, Mirza Shahanaoaz Latif and Zeeshan Ali.
- "Low Scale Deployment of RFIDs for Library Asset Tracking System" Conference: International Conference on Communications in Computing (CIC), World Comp 2008. Authors: Dr. Mohammad Inayatullah Babar, Khalid Daud, Atif Hameed and Mohammad Ali.
- "Improving Speaker Independent Speech Recognition Process using Speech Recognition Engine" Conference: MLMTA'08 - The 2008 International Conference on Machine Learning; Models, Technologies and Applications, World Comp 2008 Authors: Dr. Mohammad Inayatullah Babar, Sheheryar, Shah Rukh Saleem, Saad Pervez Durrani and M. Irfan Khan.
- A research paper of Engr. Naseer Ahmad Khan, Lecturer, Department of Chemical Engineering on "Biodiesel production from corn oil by transesterification process" has been accepted for the International Conference on Advancements in Process Engineering (ICAPE 2008), organized by Pakistan Institute of Engineering and Applied Science, Islamabad.
- Dr. Gul Muhammad Khan, Assistant Professor, Department of Electrical Engineering, presented a paper titled "Developing neural structure of two agents that play checkers using cartesian genetic programming" at the International Conference on Genetic and Evolutionary Computation at USA, July 12-16, 2008.
- Dr. Waqar Shah, Assistant Professor, Department of Electrical Engineering, presented a paper titled "Effect of Increasing Number of Gaussian on Text-Independent GMM-Based Voice Recognition System", at 4th International Conference on Information and Communication Technology and System (ICRS 2008).
- A research paper "Multi-objective PSSs Design for Damping Intera-area Oscillations in Multi-Machines Power System using Hierarchical Micro GA", authored by Dr. Waqar Shah has been accepted to be published in the NWFP UET Engineering Research Journal.
- Prof. Dr. Azzam-ul-Asar, Professor Electrical Engineering, presented a paper titled "Application of data mining technique in the identification of key weather parameters affecting load patterns" at the World Congress in Computer Science, Computer Engineering and Applied Engineering Las Vegas, Nevada, USA, July 14-17, 2008. The paper was co-authored by Engr. Amjad Ullah Khattak. He also presented a paper "Traffic Response Signal Timing Plan Generation based on Neural Networks" at the 4th Annual IEEE Conference on Automation Science and Engineering (IEEE CASE 2008), Washington DC. USA, August 23-26, 2008. The paper was co-authored by Engr. Syed Riaz-ul-Hassnain.
- A research paper authored by Dr. Mohammad Tufail, Assistant Professor in the Department of Civil Engineering was recently published in the ASCE Journal of Environmental Engineering. The paper titled " Artificial Intelligence-Based Inductive Models for Prediction and Classification of Fecal Coliform in Surface Waters" was published in the Septemeber issue of the Journal (Volume 134, Issue 9, pp. 703 811) and can be viewed on-line.



## USE OF SEISMIC HAZARD ANALYSIS IN ENGINEERING DESIGN

Department of Civil Engineering, in collaboration with USAID and HEC, conducted a two-day international workshop via video conference on “Use of Seismic Hazard Analysis (SHA) in Engineering Design”, at HEC, Islamabad on 24-25 August, 2008.

The chief guest, Prof. Dr. Mansoor Khan, Dean Faculty of Engineering, in his opening remarks said the workshop would be a hallmark in introducing engineers to the latest development in SHA, and how it can be employed in Pakistan. Getting to know the latest technology will help build capacity to implement and customize advanced seismic hazard characterization tools for professionals, he said.

Dr. Irshad Ahmad, Professor civil engineering department, and workshop organizer, discussed the effects of local soil on ground motions at surface level. He urged the need to analyze soil types to understand different frequencies of motion that earthquakes create.

Dr. Youssef Hashash, professor civil engineering, University of Illinois, USA, said Performing (SHA) of

land is essential for structural engineers before designing and building infrastructures. SHA provides a rational and scientific approach to characterize seismic hazards and inputs for ground motion parameters, for safe and proper engineering designs.

Prof. Hashash said that modern infrastructures are not strong enough against earthquakes. This is the reason why structural damage, caused by poorly planned infrastructures, result in huge human and economical loss. Referring to the point, he said that the level of wide-spread damage that occurred in Balakot in 2005 earthquake in Pakistan, was similar to the one this year in Sichuan, China. He stressed the need to perform a SHA before construction to prevent against such losses. The workshop was a part of training series of Pak-US joint cooperation in earthquake related research.

Another speaker from University of Illinois, Prof Scott Olson, spoke through video conference, on the general concepts of plate tectonics and seismology, and tectonic setting of Indian subcontinent.



Dr. Irshad Ahmad and Dr. Youssef Hashash, delivering lectures at workshop

## ACCREDITATION OF ENGINEERING PROGRAMS

A one-day seminar on “Accreditation of Engineering Programs”, jointly organized by UET and Pakistan Engineering Council (PEC), was held on July 15, 2008. Vice Chancellor was the chief guest, while ASME students, Department of Mechanical Engineering, UET helped in organizing the seminar.

In his opening remarks, the vice chancellor highlighted various achievements and activities related to research and development in the university. He lauded the role of PEC in improving the quality and standards of learning and research facilities in universities. After return of our scholars, pursuing their higher studies abroad, we will be able to have well-qualified faculty, he said.

He highlighted that public sector universities have a different financial structure than private ones, and this variance in financial goals must be kept in mind in appraisals.

Engr. Lt. Gen (R), Syed Shujaat Hussain, Convener, PEC Engineering Accreditation & QEC while speaking on accreditation and its need, said that the

students are our end product and we must produce the best product, so that when they enter practical life, they face no problems in performing their role. In this regard, HEC is also supporting universities to enhance their faculty, laboratories and infrastructure.

He said that we have to formulate our strategies according to the new era, as the old system of learning has expired and has no value in today's world. We need to enhance our faculty strength according to world standards, where minimum qualification for teaching a BSc level is MS or MSc. Furthermore, we need to help students from backward areas by arranging special coaching classes and training, so they are also able to compete effectively. To meet these challenges, he said, universities and PEC must properly coordinate and correspond with each other.

Dr. Mahmood H. Butt, VC, Allama Iqbal Open University, Islamabad, presented a detailed overview on the adaptation and acceptance of “Manual of Accreditation (Engineering)”. He





Speakers addressing on process of Accreditation of Engineering Programs

highlighted various steps of the manual including criteria of weightings, accreditation proformas, and need of accreditation.

Engr. Prof. Dr. Fazal Ahmad Khalid, Pro-Rector, GIKI, Topi Swabi also stressed on the need for adopting and understanding the PEC manuals so as to cope with conditions and accreditation processes.

In the concluding remarks, Maj. Gen. (Retd) Mehboob-ul-Muzaffar, Registrar, PEC Islamabad said that such seminars are necessary for good interaction and understanding of universities regarding PEC visits for accreditations so that they are able to properly handle situations in a proper manner.

## EFFECTIVE TEACHING AND RESEARCH METHODS

Ar. Dr. Shakeel Qureshi, Associate Professor, National College of Arts, Lahore conducted a workshop with the Faculty of Architecture Department at Abbottabad Campus on August 29, 2008. The objective of workshop was to explore the effective teaching/ learning methods to make students more creative and inculcate in them solution-finding approach.



Dr. Shakeel Qureshi, delivering lecture to the students

The workshop was designed in four segments directing the faculty to revisit their teaching course objective and define their teaching approach in correlation with the set objective of the course to be taught. Discussing the pedagogy, Dr. Qureshi engaged all participants to describe their relevant teaching programs, followed by a self reflection on the existing program, illustrating its weaknesses and strengths. He said that with the clarity of the objective, the teacher should play the role of facilitator in the classroom, steering students to maximize their potentials and focus should be made on developing critical thinking, inquisitive minds and building self confidence.

The workshop was based on interactive activities regarding teaching codes, and designing contents designing specific to the course objective.

Ar. Dr. Shakeel Qureshi conducted next session with the final year students. "Research is a scientific mode

of inquiry in which we collect, analyze and conclude the data systematically", explained by Dr. Qureshi. He further elaborated the sequence of various components encompassing research including conceptualization of research, preparing research proposal, designing research approach, conducting research, analyzing/ concluding the data, and preparing a report. He also threw light on various aspects of technical report writing and international writing codes.

## SOUTH ASIAN NETWORK OPERATORS GROUP-12

Dr. Muhammad Inayatullah Babar, Chairman Department of Computer Science and Information Technology, and Mr. Mukhtiar Ahmad, Assistant Network Manager, Information Service Center, participated in The South Asian Network Operators Group (SANOG) workshop and conference held in Katmandu, Nepal from August 5-15, 2008

Dr. Mohammad Inayatullah Babar was invited as a keynote speaker and expert from South Asian Region for SANOG Conference, while Mr. Mukhtiar Ahmad was awarded fellowship to participate from Pakistan in the workshop. SANOG is a prestigious event for researchers and practitioners, working in the area of Communication Networks to discuss various issues. Conference theme included topics like IPv6 and VOIP integration and Mobile Networks- Next Generation.



Dr. Inayatullah Babar and Mukhtiar Ahmad with participants of SANOG



**DR. GUL MUHAMMAD KHAN RETURNS**

Dr. Gul Muhammad Khan did his B.Sc Engineering from Department of Electrical Engineering, NWFP UET Peshawar with distinction. He was appointed as lecturer in September, 2004 in the department.



In September, 2005 he left for higher studies, and completed his Ph.D in a record time of two years and nine months. His Ph.D title was "Evolution of neuro - inspired developmental programs capable of learning". Dr. Gul is the first scholar, who has joined his alma mater after successful completion of Ph.D, sponsored under the Faculty Development Program of NWFP UET Peshawar. In his Ph.D he has developed a novel model of biological brain, and tested it on a number of applications for its intelligent behaviour. So far he has published four technical papers. Two of his publications have been accepted in Brazil and Australia. Presently he is involved in teaching and research at his department.

Dr. Gul is the member of the program committee of international conference on simulated evolution and learning in Australia. He has been offered a post doctorate to continue his research by University of York, UK.

**NESPAK DISCUSSES GEO-TECHNICAL INVESTIGATION OF JALOZAI CAMPUS**

Mr. Habib-ur-Rehman, General Manager NESPAK and Project Manager, Jalozai Campus discussed the geo-technical investigation of Jalozai Campus in a meeting held with vice chancellor. The vice chancellor directed the team to expedite the process, and rationalize the number of bores to minimize cost, so that tender documents could be finalized for hiring contractors.

The meeting was attended by civil engineering experts Prof. Dr. Akhtar Naeem, Dr. Irshad Ahmad and project team including Muhammad Siddique, Director of Works and other senior faculty and administrative members of University.

**NEWS BRIEFS**

- University budget of Rs. 551.343 million for 2008-09, was placed before Finance & Planning Committee and the Syndicate. The Syndicate finally approved the budget in its 78th meeting held on 5th July, 2008.
- Utilization reports for financial year 2007-08, both for the university and Scientific Instrumentation Center (SIC), were sent to HEC with releases of 1st instalment of recurring grant for the current year. First instalment of grant Rs. 58.526 million for the university and Rs. 1.298 million for SIC was released by HEC.
- Construction of over head tank of 5,000 gallons at the cost of Rs. 46,30,000 has been completed at Bannu Campus.

**FACULTY RESEARCH PROJECT**

Dr. Khan Gul Jadoon, Chairman, Department of Mining Engineering presented a research paper "incidence of Pneumoconiosis and related occupational respiratory diseases among coal mines workers of NWFP, Pakistan" at 2008 international symposium on Safety Science and Technology (ISSST) held in Beijing, organized by Beijing Institute of Technology, China from 24-27 September, 2008. This paper was the part of Faculty Research Project, approved by HEC. The paper highlighted the findings of a study initiated to investigate into incidence of pneumoconiosis and related respiratory diseases among coal mine workers of NWFP. The field data was collected during the first year of study from Cherat and Dara Adam Khel areas of NWFP, Pakistan.

A representative sample of 180 workers was selected for initial medical screening. The result of data indicated that a large proportion of workers (above 60%) employed in mines suffers symptoms of pneumoconiosis and related diseases like silicosis. The results of medical examination of the selected sample revealed that more than 60 % of workers suffered from early symptoms of pneumoconiosis and about 10% were found with symptoms of advanced conditions of respiratory disease. The scale of presence of symptoms related to pneumoconiosis and silicosis is quite alarming suggesting beginning of immediate medical measures.

**With Compliments**

Directorate of Media and Publications  
NWFP University of Engineering & Technology Peshawar

Photographs by: M. Zafar, Design by: Aurangzeb

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