**Table of Contents**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Name of Program** | **Page No.** |
| **1.** | National Research Program for Universities (NRPU) | **2 to 3** |
| **2.** | Grant to Organize Seminar, Conference & Training Workshop | **4 to 5** |
| **3.** | Travel Grant for Pakistani Researchers | **6 to 7** |
| **4.** | Pakistan Program for Collaborative Research (PPCR) | **8** |
| **5.** | Access to Scientific Instrumentation Program (ASIP) | **9** |
| **6.** | Higher Education Knowledge Exchange & Entrepreneurship | **10 to 11** |
| **7.** | Patent Filling | **12 to13** |
| **8.** | Establishment of ‘Offices of Research, Innovation and Commercialization (ORIC) | **14** |
| **9.** | HEC Outstanding Research Awards | **15 to16** |
| **10.** | Policy on Business Incubation Centers and Services Framework | **17 to 18** |

1. **National Research Program for Universities (NRPU)**

**(www.hec.gov.pk/nrpu)**

* 1. **Objectives of the Program**
* To meet current challenges/ requirements of researchers working in local Universities/ Degree Awarding Institutes (DAIs) of Pakistan.
* To promote research & development activities in local Universities/ DAIs of Pakistan in all disciplines.
* To promote scientific research in areas relevant to national needs.
  1. **Eligible Institutions**
* All public sector universities/DAIs, Centers of Excellence, Area Study Centers, Pakistan Study Centers.
* Private universities/ DAIs eligible for public funding ([www.hec.gov.pk/elegibleHEIs](http://www.hec.gov.pk/elegibleHEIs))
  1. **Procedure to Apply or Submit the Proposal**
* Four (04) sets of hard copies along with soft copy of duly filled application forms must be submitted to Office of Research Innovation and Commercialization (ORIC) / Research Office/Office of the Registrar in the respective university of the PI.
  1. **Mandatory Documents**:

Following documents are mandatory to be attached with application forms at time of submission of research proposal:

* Turnitin report of the proposal.
* A clearance from Institutional Bioethics Committee (IBC) of university/DAI.
* A brief of the impact of research.
* An industry support letter.
* A letter of consent from collaborating partner/agency expressing willingness to collaborate.
* One page summary of each project of PI already executed/ ongoing/ submitted for consideration to any funding agency.
* Original invoices / quotations for permanent equipment costing over Rs.0.1 million.
* Detailed tentative schedule program of all local visits under project (if study involves field survey/field work) with rates, calculations, total and justification (annual plan).
* Project activities on Gantt chart.
  1. **Review Process:**

Research grants are awarded on competitive merit for high-level and promising scientific research projects to be carried out in Pakistan by university teachers.

* HEC has designated focal points in all disciplines / sub disciplines. They are the top experts in their fields.
* Focal points (FP) are nominated/selected for a period of 3 years on the recommendations of Executive Director/Chairman, HEC.
* Focal points (FP) do initial screening of the projects sent to them by HEC.
* FP(s) can reject the project at their level or send it back to HEC for revision by PI, if a project is not suitable for funding.
* Focal points gets research proposal evaluated by at least three experts.
* Comments of focal points/ reviewers are considered as final decision on following pattern:
* There may be two review rounds, i.e. Round-I & Round II.
* In both rounds either it is first or second; decision to award project is made on the basis of Two positive/negative reports out of three.
* There are following recommendation options for reviewers:

1. **Round-I**

* Research proposal accepted in current form (positive).
* Research proposal accepted with minor revision, need not to re-review again (conditional positive).
* Referred back with Major revision, need to re-review again (may be positive or negative in round-II)
* Research proposal rejected (decline).

1. **Round-II**

* Research proposal accepted in current form (positive).
* Research proposal accepted with minor revision, need not to re-review again (conditional positive).
* Research proposal rejected (negative).
* Accepted with Minor Revision Need Not to Re-review Again- will be considered as conditional accepted if PI provides a certificate duly countersigned by the HOD/chairman of his parent department stating that suggestions/comments of reviewer(s) has been incorporated in the revised research proposal in letter and spirit.
  1. **Award of project/Agreement:**
* Upon approval of the grant, HEC issues award letter indicating the approved amount against each components. The amount must be spent on specified heads.
* An agreement on stamp paper will be signed between HEC, the Principal Investigator and the concerned host institution, i.e. Vice Chancellor, Rector etc.
  1. **Annual Reports and Release of Funds:**
* PI is required to submit a short annual report along with audited funds utilization report of the project within fifteen days of the completion of each year.
* The release of the subsequent year award is tied up with the satisfactory recommendations/approval of the Annual Progress Report by the experts.

1. **GRANT TO ORGANIZE SEMINAR, CONFERENCE AND TRAINING WORKSHOP**

([www.hec.gov.pk/grants-activities](http://www.hec.gov.pk/grants-activities))

* 1. **Eligible Institutions**

**Proposals for hosting seminars, conferences, symposia and workshops in any discipline from the following institutions**:

* All public sector universities/DAIs, Centers of Excellence, Area Study Centers, Pakistan Study Centers.
* Private universities/ DAIs eligible for public funding ([www.hec.gov.pk/elegibleHEIs](http://www.hec.gov.pk/elegibleHEIs)).
* Complete application form along with supporting documents should reach HEC, via surface mail, at least 6 weeks prior to the event date. Late or incomplete applications are not processed.
  1. **What’s required with Application?**
* A list of foreign invited speakers along with their CVs.
* A list of local/national invited speakers along with their CVs.
* Abstract of the papers to be presented in the proposed seminar, conference and symposium will be required with the application form for both national and international.
* HEC will sponsor only those foreign/national invited speakers whose complete details will be provided.
* HEC will provide travel and accommodation facilities to maximum 05 foreign invited speakers.
* HEC will provide travel and accommodation facilities to maximum 10 national invited speakers.
* In case there is any change in the list of foreign or national invited speakers after the approval of the grant, HEC should be informed immediately and the changed list along with CVs and abstracts of paper is to be endorsed by HEC prior to the event.
* Organizers will pay travel and accommodation of any invited speaker if he/she is not duly approved by the HEC.
* A list of organizing committee will be required. A diversified committee comprising of the professionals on the subject matter from different institutions is highly encouraged.
* A detailed list of stationery and publication items will be required. HEC provides funds for consumable items of stationery.
* A brief CV (2-3 pages) of the focal person organizing the event will be required. The relevance of academic and scientific contribution of the focal person to the subject matter of the event is very important. The committee approving the subject grant gives due weightage to this aspect.
* Brochure of the event containing aims, objectives and themes etc. will be required along with the application form.
* Appropriate registration fee from the participants of the event is mandatory. The number of participants and the income from registration must be indicated in the application form.
* A copy of the program of the event indicating the sessions and speakers.
  1. **Reimbursement Claim of Seminar/Conferences and Training Workshop**

* Upon approval of the grant, HEC issues sanction letter indicating the approved amount against each components. The amount must be spent on specified heads.
* For approved cases, the sanctioned amount is reimbursed after the event and upon filing the reimbursement claim consisting of original receipts of payments.
* Statement of expenditure will be duly audited by the University Auditor and endorsed by the principal organizer and head of the institution.
* Grant will be approved for specific event and cannot be utilized for any other event or purpose.
* The reimbursement claims should be filed within two months after the event, failing which the grant is considered withdrawn automatically.
* Grant will be released in favor of the head of institution (Vice Chancellor, Rector, President or Director). Anyhow, the focal person will be responsible for its proper utilization as per approved components.
* HEC expects the universities to put some seed money for preparatory work of the event. Universities facilitate the focal persons by providing the amount in advance against the sanction letters to incur the expenditure of the event.

1. **Travel Grant for Pakistani Researchers**

([www.hec.gov.pk/travel-grants](http://www.hec.gov.pk/travel-grants))

* 1. **Who Can Apply**
* **For Presentation of paper in national and international conferences, seminars and symposia**

**Faculty Members, Non-teaching University Staff,** Ph.D. Scholars

* **For Ph.D. studies abroad**

All citizens of Pakistan. Registration in a Ph.D. program at any HEC recognized foreign university.

* **For postdoc studies abroad (minimum duration 09 months)**

Faculty members of public sector universities/DAIs. Selection/nomination against an approved program of the HEC/ Government of Pakistan or an offer/acceptance by an International Agency.

* **Visits under cultural exchange program**

Faculty Members of public sector Universities/DAIs. Nomination by the Government of Pakistan against any facility under Cultural Exchange Program.

* 1. **How to Apply**: Following two forms are available;
* Travel Grant Application Form for Paper Presentation (in seminar, conference and symposium)
* Travel Grant Application Form for Pursuing Higher Studies Abroad (Ph.D. and Postdoc studies abroad.
  1. **Supporting Documents Required:** Following document are required:
     1. **For oral presentation of paper**

1. Letter of Acceptance/Invitation or email from the organizer in which the mode of presentation (oral/poster) has been clearly mentioned
2. Documentary evidence indicating that your abstract/paper has been accepted based upon peer-review by the technical committee of the event.
3. Documentary evidence indicating that abstract / paper would be published in Book of Abstracts/ Proceedings/Journals for the conference etc.
4. Copy of conference brochure containing aims, objectives and themes, charges of registration and accommodation etc.
5. Full-text paper (both hard and soft copies).
6. NOC from the principal author (in case the applicant is co-author).
7. CV of the applicant along with the list of recent publications (2-3 pages)
   * 1. **Additional documents required for poster presentation:**
8. List of applicant’s publications indicating Impact Factor Score (IFS).
9. The requisite IFS are 20 in Engineering and Agriculture disciplines, and 30 in Science disciplines.
   * 1. **Additional documents required in case of Ph.D. or M.Phil. Leading to Ph.D. scholars:**
10. Scholarship award letter/registration letter from the university in which applicant is enrolled.
11. Copy of Result Card of GAT (General)/GRE International (Subject)/GAT (Subject).
    * 1. **Additional documents required in case of non-teaching staff of university/DAI;**
12. Copy of job certificate indicating applicant’s designation, department, job description and date of appointment/posting along with Copy of MS/M.Phil. Degree
    * 1. **For Travel Grant to Scholars Proceeding Abroad**

**For Ph.D. studies abroad**

1. Copy of unconditional admission letter from the foreign University.
2. Copy of award letter for scholarship or financial assistance or affidavit about self-finance.
3. Copy of highest degree duly attested by HEC.
4. Applicant’s brief CV (2-3 pages).
5. Surety bond on Stamp Paper of Rs. 100/- from two guarantors duly attested by the Oath Commissioner/First Class Magistrate (Specimen at [Annex-C](http://www.hec.gov.pk/InsideHEC/Divisions/RND/ConferencesandMeetings/TGTMSMPHILPHD/Documents/Annex-C%20Specimen%20of%20Surety%20bond.docx)).

**For postdoc studies abroad (for at least 09 months)**

1. Letter of placement in an accredited foreign university.
2. Synopsis / Brief description of applicant’s research proposal.
   1. **Other Related Information**
3. The application for the travel grant must be received at HEC at least 6 weeks (42 days) before the conference/seminar/workshop.
4. University faculty members and Ph.D. scholars can avail a maximum of one (01) travel grant within a fiscal year.
5. Upon approval of the grant, HEC will issue award letter indicating the approved amount against each components. The amount must be spent on specified heads.
6. For approved cases, the sanctioned amount will be reimbursed to the university/institution upon return / attending the event and upon filing the audited expenditure statement duly signed by the applicant, university auditor and head of institution (vice chancellor, rector etc.).
7. The reimbursement claim should be filed preferably within two months after the event.
8. The university may acquire used air ticket/e-ticket bearing cost of the ticket, Original boarding pass counterfoil, Original receipt for payment of registration fee of the event bearing the grantee’s name and the actual amount.Original receipt of payment for accommodation bearing the grantee’s name, duration of stay and the actual amount.
9. **Pakistan Program for Collaborative Research (PPCR)**

Pakistan program for collaborative research was launched in 2009. The core aim of the program is to initiate and consolidate international collaborations.

1. Program is open to all fields of research.
2. Visits can last between one to four weeks. While for Sabbaticals it is from 3 to 6 months.
3. Program allows university faculty working in Pakistan to go abroad.
4. Program allows researchers from technological advanced countries to come/visit Pakistan.
5. Preference is given to faculty members visiting foreign institutions that have recognized excellence in the relevant research area.
6. To achieve this aim, short research activity between the host institution and the visiting fellow should be carried out during the stay.
7. Comparative analysis of Old and New Policy of the Program is given below;

|  |  |
| --- | --- |
| ***Old Policy*** | ***New Policy*** |
| The policy supported the following 4 activities;   1. Preparation of joint research proposals to be submitted for funding bodies. There must be previous communication with the applicant on the matter. 2. Training for lab techniques in Pakistan for postgraduate students. 3. Curriculum review by the Pakistani universities and/or HEC. 4. Academic consultancy to review of processes and procedures in the universities and/or HEC. | Three new activities has been included as given in serial # 5, 6 & 7.   1. Preparation of joint research proposals to be submitted for funding bodies. There must be previous communication with the applicant on the matter. 2. Training for lab techniques in Pakistan for postgraduate students. 3. Curriculum review by the Pakistani universities and/or HEC. 4. Academic consultancy to review of processes and procedures in the universities and/or HEC. 5. Submission of papers to peer-reviewed scientific journals (co-authored by the visiting fellow and the host). 6. Scientific or academic sabbatical in Pakistani universities. 7. Support international collaborative projects initiated under HEC MOU with foreign countries. |
| Funding Criteria:   1. 80 % of funds are released in advance of an activity 2. One round trip economy class airfare 3. Living allowance @ US$ 1200 for 4 weeks | Funding Criteria:   1. Funds will be reimbursed after submission of joint scientific report. 2. One round trip economy class airfare 3. Living allowance @ US$ 2000 for 4 weeks 4. Visa application fee and health insurance. |
| The old policy didn’t have the approval of Commission | The policy is included as agenda item of Commission’s meeting for approval. |

1. **Access to Scientific Instrumentation Program (ASIP)**

High cost of acquiring and maintaining modern equipment result in non-availability of hi-tech research equipment in the universities that is a major impediment in the development of scientific research in Pakistani universities. To enable the scientific community and to have access to sophisticated equipment, HEC has initiated ASIP that shares scientific instrumentation facilities amongst the researcher of different universities/DAIs.

1. Program will also work as source of funding to those institutions which make their instruments available for the researchers of other universities/DAIs.
2. The facility is offered to postgraduate students (MS/M.Phil/Ph.D. and equivalent) enrolled with HEC recognized public sector universities and admitted as per HEC admission criteria.
   1. **Objectives of this program are:**
3. Provide spectroscopic, analytical, chromatographic and other services to researchers working in different public sector universities on actual cost basis, which will be paid by the HEC.
4. Through this program the institutions with instrumentation facilities will get financial resources to optimally utilize their instruments.
5. The scientists of Pakistan will have access to available facilities within the country, which will promote research collaboration and save foreign exchange, which is otherwise, required.
   1. **Policy Guidelines:**

|  |  |  |
| --- | --- | --- |
| **Sr.** | **Item** | **Revised Policy/Procedure** |
| 1 | **Application Procedure** | Applicant will apply to HEC. If case is approved by HEC, applicant may avail the services of service provider. After having received invoices from service providers of approved cases, payment would be released by the HEC to the service provider. |
| 2 | **Management Committee** | Applications will be reviewed by the management committee to decide necessity of analysis and how many number of samples to be analyzed from service provider. |
| 3 | **Approval of Dean/ORIC Head** | Applications Form submitted to HEC by applicant would be routed through proper channel via HoD/Dean/ORIC by furnishing an undertaking stating that facility requested to be availed is not present in parent university. |
| 4 | **Information about rates/ charges to be paid to service provider** | Information regarding number of samples to be analyzed, their rates and total charges that have to pay to service providers must have to provide to HEC in advance. |
| 5 | **Information about synopsis approval** | HEC will only pay if synopsis is approved by the competent forum, applicant will have to provide this information in application form. |
| 6 | **Summary of research work** | One page summary of research work will be provided along with application. |
| 7 | **Proper formats of all related documents, i.e. acceptance voucher/invoice etc.** | Proper formats of all related documents will be provided by the management committee and these will be uploaded on HEC website. Payment will be made to the service provider upon the satisfaction of the applicants about the results. |
| 8 | **Facilities and rates of services available at different universities** | HEC is in process of collecting information about facilities available at different universities along with their rates. Same information will be uploaded on HEC website. |

1. **Higher Education Knowledge Exchange & Entrepreneurship**

Knowledge exchange refers to the role that universities can play in stimulating and contributing to innovation in social and economic growth. In addition this role is to compliment and enhance core missions of teaching and research. Policy categorizes knowledge exchange activities into the following groups:

1. Facilitating knowledge / research exploitation and process.
2. Skills and human capital development.
3. Knowledge sharing / diffusion.
4. Supporting the community / public engagement.
5. Enterprise education and entrepreneurship.
6. Exploiting the university’s physical assets.

**Some examples of knowledge exchange:**

**Knowledge / research exploitation and process**

1. Licensed research
2. Patenting (including advice on IP and patenting)
3. Spin out company
4. University formed / run consultancy
5. Research consortia
6. Collaborative research / research awards
7. Contract research
8. Business development e.g. Corporate Social Responsibility (CSR) support; Value Addition (of services or to products)
9. Application of research in existing external partner (often tech – product based)
10. Knowledge Transfer Partnerships (KTPs)
11. Sitting on advisory boards

**And activities that facilitate this including:**

1. Contracts / legal support
2. Corporate relations building
3. Press / communication activities relating to KEx
4. Provision of investment or seed funds
5. Providing advice on IP / patent
6. External fund raising for research

**Skills and human capital development**

1. Continuous Professional Development (CPD) and short courses
2. Business people guest-lecturing and / or co-developing curricula
3. Life long learning: internships (virtual / real) etc.
4. Careers services
5. Work placements (may include KTPs if for services development)
6. Project experience

**Knowledge sharing and diffusion**

1. Alumni networks creating individual connections in business, public or third sector
2. Knowledge Transfer Networks (KTNs: real / virtual)
3. Staff exchanges
4. Academic-external organisation networks

**Supporting the community / public engagement**

1. Outreach work
2. Volunteering
3. Awareness-raising e.g. through public events such as open lectures; performance arts; exhibitions; school visits etc
4. Regeneration and development programmes
5. Community strengthening
6. Involving the public in research

**Social enterprise / entrepreneurship**

1. Enterprise clubs (student / faculty)
2. Enterprise educator training
3. Graduate start-ups: social or private enterprise
4. Enterprise training

**Exploiting the university’s physical assets**

1. Lab rental, resource sharing
2. Technology/ Science parks
3. Incubators
4. Facilities or equipment leasing

**Some types of knowledge exchange impact one partner more than the other**

**Possible partners**

The university’s partners might be from the business, public (government, departments, regional agencies) or third sector (third sector includes charities, not-for-profit organizations, development agencies, communities and others).

1. **Patent Filling**

A patent is an exclusive right granted by a country to an inventor. This helps the inventor to exclude others from making, using or selling his or her invention in that country during the life of the patent.

Securing an international patent serves two purposes; first, it allows the inventor, his/her institution and his/her country to benefit economically from his/her efforts and secondly, mankind benefits from it, when a useful application or a product results from the invention. Scientists worldwide make significant contributions to economic growth through such inventions and replication of this practice.

Keeping in view the importance of patent filing HEC in July 2006 developed a program through which research ideas, or whatever is ready to describe potential invention is evaluated for patentability. In case an invention is determined to be patentable the inventor is encouraged to file for an international patent. Patent fee of US$5000 per patent is born by HEC.

Many researchers / inventors / scientists have uploaded their inventions/ideas for getting patents which are being evaluated by the experts to determine their patentability. So far 68 patents have been filed in USPTO out of which fifteen have been granted/issued.

**Proposal:**

Currently the subject program is being carried out as per earlier devised policy which hasn’t been approved by the HEC Commission. The policy is being revised to make this program more effective and transparent. Comparative analysis of revised and old policy is given below.

|  |
| --- |
| **Policy /Procedure** |
| 1. The scientist researchers from universities/ Institutions and R&D organizations of Pakistan are eligible to apply for the funding of their patentable research / invention. 2. The university/institute/R&D organization concerned will send their recommendation/ approval letter, of the head of Institute/organization to support the patent filing. 3. The recommendation letter should clearly establish and certify the market for the invention. The market survey/feasibility report needs to be enclosed as an evidence/ proof. 4. On the basis of recommendations and market survey the “Committee of Experts”, constituted with the approval of Executive Director, HEC, will decide whether the patent should be filed provisionally or otherwise. 5. All patents will be filed provisionally and the concerned Institution /organization/ Inventor will search for the business/ industrial partner ready to take this patent for further development. 6. Filing of patent in countries other than USA will also be encouraged, however the patent will be filed through ORIC office of the university or the office concerned of R&D organizations and HEC will reimburse the patent fee after approval of the Committee of Experts. 7. For reimbursement of patent fee (in case the patent is directly filed) will be based on availability of the market and an estimated timeline for commercialization of the patent. 8. The maximum amount to be paid/reimbursed for patent fee will be US$5000 9. The reimbursement of patent fee will depend upon approval of the Committee. 10. The granted patent will have the name of institution/organization along with all the inventors. 11. The PI and institute/ organization concerned will be bound to report the progress of his/her registered patent and its contribution towards economy and mankind. 12. It will be the responsibility of university/institute/R&D organization concerned to commercialize the patent and report to HEC. |

1. **Establishment of ‘Offices of Research, Innovation and Commercialization (ORIC)**

New technologies have grown more sophisticated initiating the emergence of more high-tech industries. Hence universities have become more important players in the processes of invention, innovation, and commercialization.

Bringing innovations to market has not been the main historical role of university-based researchers. The university researchers quite appropriately concentrate on basic science. Hence ultimate aim of scientific research is being shifted to improve the human/community and economic conditions of our country.

* 1. **Vision**

The office's vision is to enable and help academic institutions develop an effective technology/ knowledge transfer and transformation system. This will enable the transition of Pakistan’s Economy to a knowledge-based economy dependent upon innovation and entrepreneurship.

* 1. **Objective**

Enable research centric environment to ensure development, extension and commercialization of research resulting in the driving force behind research and economic development in Pakistan.

The Office of Research Innovation and Commercialization is aimed to link research and commercialization from the University (or universities) with emerging and existing firms across Pakistan and around the world. ORIC work closely with researchers, chancellors and campus Incubators & future S&T Parks. The office also serves as a conduit to local, regional and federal partners to ensure that research results aid the growth of Pakistan’s economy and support community.

Each ORIC develop its mechanism for research commercialization and establish a Business/Technology Incubator to work closely for innovation and entrepreneurship.

* 1. **ORIC Role**
     1. Research Development and operation
     2. Innovation
     3. Research Commercialization/entrepreneurship

1. **HEC Outstanding Research Awards**

The Project “HEC Outstanding Research Awards Series” was launched in 2007 under PSDP with the aim to recognize the innovative initiatives of Pakistani researchers and to encourage research to benefit economy and community. This promote a competitive research culture in higher education and R&D institutions.

After successful completion of 3 awards series under PSDP the Project completed its life in 2013, however the 4th awards were executed in line with PC-1 of the closed project. Keeping in view the importance of the program HEC wish to continue the Project as recurring program.

In order to format and continue the Program from HEC recurring budget, a draft policy has been documented on the basis of review/ feedback of the Committee of experts and Management Committee of the Program.

**Comparative analysis of PC-1 and Program Policy is given below**

|  |
| --- |
| **Policy Guidelines** |
| a) Number of disciplines has been increased to 8 as given below:   1. Basic & Applied Sciences 2. Biological Sciences 3. **Agricultural Sciences** 4. Engineering & Technology (Pure) 5. **Computer Sciences/Engineering** 6. Social Sciences 7. Management Sciences 8. Humanities |
| b) Total number of awards has been increased to 59 under five categories. |
| Only awarded patents are considered for Best Innovation Award. |
| Supervisory role would be played by the Management Committee comprising HEC, Adviser R&D, and 14 other eminent educationists in the fields, nominated by the Chairman/ED HEC |
| A scrutiny committee comprising at least 2 eminent educationists nominated by the E.D. will scrutinize the applications. |

**Category wise breakup of awards**

|  |  |  |
| --- | --- | --- |
| **Award Categories** | **Amount** | **Number of Awards** |
| * Best Research Paper\* * Best Young Research Scholar * Best Innovator * Best Book * Life Time Academic Achievement | 70000/ per award  150000/ per award  200000/ per award  300000/ per award  500000/ per award | 34  8  1  8  8  Total **59** |

\*Cash Award for Best Research Paper will be distributed equally among all authors of the paper except foreign nationals

**Discipline wise breakup of number of awards**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SN** | **Disciplines** | **Best Research Paper** | **Best Young Research Scholar** | **Best Innovator** | **Best Book** | **Lifetime Academic Achievement** |
| 1 | Basic & Applied Sciences | 5 | 1 | 1 | 1 | 1 |
| 2 | Biological Sciences | 5 | 1 | 1 | 1 |
| 3 | Agricultural Sciences | 5 | 1 | 1 | 1 |
| 4 | Pure Engineering | 5 | 1 | 1 | 1 |
| 5 | Computer Science/Eng. | 5 | 1 | 1 | 1 |
| 6 | Social Sciences | 5\* | 1 | 1 | 1 |
| 7 | Management Sciences | 2 | 1 | 1 | 1 |
| 8 | Arts/Humanities/  Languages | 2 | 1 | 1 | 1 |
| **Total** | | **34** | **8** | **1** | **8** | **8** |

1. **Policy on Business Incubation Centers and Services Framework**

HEC have taken an initiative to establish Business Incubation Centers at selected universities for promotion of entrepreneurship. Setting up of Business Incubation Centers at universities across Pakistan is aimed at promotion of entrepreneurship, facilitating Technology Transfer and encouraging relevant research that can culminate into start-ups. Seventeen Business Incubation Centers have been established so far at Public Sector Universities, Where above one hundred startup companies have been incubated where they are being provided with the necessary office facilities, mentorship opportunities and networking to help them become mature enough before stepping out in competitive economic environment. Every year up to five universities are being supported by HEC for establishment of these center in form of providing two years setup cost, salaries of staff hired for running this center and provision of capacity building opportunities.

* 1. **Proposed BIC Governance Structure**

1. Business Incubation Center will be run by professional staff having back ground of entrepreneurship and management of startups.
2. It will operate autonomously being governed by a Supervisory Committee/Consortium which will consist of the Vice Chancellor of the University (as Head of the Committee) Director Incubator and Representative of relevant Industry and HEC.
3. The Vice Chancellor will assume overall responsibility of incubator and will send reports to the funding agency (HEC).
   1. **Role of Director BIC**
4. Role of Director BIC is critical in success of any Business Incubation Center.
5. Ideal candidate for Director BIC position will have three key attributes:
   1. First is a proven track record of entrepreneurship either as a start-up entrepreneur, or working in an environment supporting entrepreneurs.
   2. Second, strong ties with the local government, business entrepreneur, university and social communities.
   3. Finally, strong financial modeling skills.
6. Successful candidates will have relevant degree with 8 years of relevant experience related to entrepreneurship or management of similar projects.
7. Selection of Incubate Companies
8. Selection can either be made through choosing top performers in a Business Plan Competition or
9. By regular process of application and scrutiny by the Selection committee. Selection Committee will include:
10. Vice Chancellor of Concerned university
11. Director Incubator
12. Faculty Member from the relevant field
13. Rep. of Industry/Chamber of commerce
14. Rep. of HEC
    1. **Graduation or Exit Criteria**

The incubate company will be graduated out of the incubator once it meets the following criteria

1. Incubate has spent 18 months at the incubator and the project hasn’t completed yet. An additional 2-6 months could be given by the incubator management if they feel that the project can be completed by then. In case of further extension requests, beyond 24 months, made by Incubate, the case will be processed by BIC administration for the approval of Vice Chancellor/Director being the competent authority to allow extension on merit if deem appropriate.
2. Incubate has now more than 10 employees and enough revenues to move to other location or has already established a second office for expansion purposes.
3. Incubate has successfully developed the prototype and has found an investor or Venture Capitalist to either buy it or take it to the production stage
4. If incubate fails to meet the quarterly targets twice in a calendar year
5. If the review committee decides that the project is no longer viable
6. If incubate violates the tenancy agreement.
   1. **How to set up a Business Incubation Center by HEC**

The standard operating procedure for setting up a Business Incubation Center is:

1. Selection of universities on basis of extensive research in the area of business and S & T and equal regional distribution across Pakistan
2. Discussion with stakeholders/university concerned for the pre-requisites
3. Approval of agreement and policy framework for university concerned
4. Staff hiring criteria/advertisement of staff and subsequent hiring or posting of staff
5. Training of the newly inducted/appointed BIC staff (need identification, Identification of resource person, training module, provision of training)
6. Development of Key performance indicators for monitoring of the performance of BIC
7. Induction of Incubate Companies at BIC through advertisement or Business Plan Competition at Campus
8. Release of funds based on progress Report