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INTRODUCTION
As technologies have grown more sophisticated and emerging industries have become more high-tech, universities have become more important players in the processes of invention, innovation, and commercialization.

To be sure, bringing innovations to market has not been the main historical role of university-based researchers. Instead, university researchers quite appropriately concentrate on basic science. But the ultimate aim of scientific research, after all, is to improve the human condition and so aiding the transfer and commercialization of discoveries serves the interests of the inventor and society. “Since the Industrial Revolution, the growth of economies around the world has been driven largely by the pursuit of scientific understanding, the application of engineering solutions, and continual technological innovation” (National Academy of Sciences and National Academy of Engineering 2006). Ideally, university structures should support all aspects of this process, from invention to innovation, as well as commercialization. Hence office research Innovation & Commercialization is responsible for facilitating and supporting the discovery and innovation process on their respective campuses.

As universities become more entrepreneurial and look toward technology transfer into non-traditional fields, there is a need for alternative conceptualizations of technology transfer that are more accurate and realistic than the traditional linear model and that are generalizable to the nuances of the university to which they are applied.

In order to achieve the medium and long term goals of Pakistan’s Economic Policy, it is important for Pakistan’s Higher Education Institutions to recognize that they have to create a new breed of Pakistani educated class which is fit to throw up the future Captains of Business & Industry. It is always the business community, which is the Centre forward of the economy.

In past years we haven’t created nurseries of entrepreneurship where we could grow businessmen of stature; this, in spite of our national achievements of creating medical schools, military academies, engineering universities and a host of other technical and educational laurels. Whatever we did so far, led to creating a class of job seekers.

It needs to be brought into focus that the education sector needs to play its vital part in addressing the need for mass employment. This can only be achieved through large scale industrialization, encouragement of SME enterprises, and a vibrant service sector.

Our educational policy needs to cater to the value addition of:

- Local labour
- Local Raw Materials
- Local Skills
- Local Clusters

The new breed of business persons would have capability for value addition owing to its qualities of enterprise, analysis, education and market orientation.

To achieve these objectives, it is important to channelize university research for
- Solving Local Problems
- Identify and en-cash global opportunities
- Reverse Engineering for Wealth Creation

HEC created, in 2010, the ORICs in HEIs to ensure the impact of research and to sow seeds of entrepreneurship among university graduates, who would desist from entering the job market and, instead, become employers.

Each university also needs to cater to the following needs of their surrounding areas when planning for research:

- Local labour
- Local Raw Materials
- Local Skills
- Local Clusters
- Local Opportunities

MISSION

“Transforming Pakistani universities to drive high impact innovation, applied research and entrepreneurship”

VISION

“Making Pakistani universities a powerhouse of high growth innovation”

The office's vision is to enable and lead Pakistan's transformation to a knowledge-based economy dependent upon innovation and entrepreneurship.

OBJECTIVES

Grow our research and economic development efforts and output as to improve our industry competitiveness using university innovations and becoming the driving force behind research and economic development for Pakistan.

RESPONSIBILITIES OF ORIC

The Office of Research Innovation and Commercialization are being establish to link research and commercialization from the University with emerging and existing firms across Pakistan and around the world. As an umbrella Work closely with the researchers, chancellors and on campus Incubators & S&T Park, the
office also serves as a conduit to local, regional and federal partners to ensure research results aid the growth of Pakistan’s economy.

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

**ORIC ROLE**

ORIC consist upon three important wings

a. Research Development and operation  
b. Innovation  
c. Research Commercialization/entrepreneurship

It is expected that ORIC Management, in each university would work on commercialization of research and helping startups to incubate, grow, create new jobs, products, services, markets, carry out innovation and bring in funding. They will be expected to:

I. Secure research funding to boost research  
II. Secure funds for contractual research to create university industry linkage for impact oriented research  
III. Generate Revenues from Research commercialization/ Technology Transfer  
IV. Secure Investments for Incubates  
V. Create Jobs and Internships
ORIC activities will revolve around the following research cycle to ensure research impact on economy and society.

The mechanism for conducive environment and to give strong platform is developed by merging different bodies working in an institute. The director ORIC will be member of all university’s boards and forums to ensure his presence in all meetings for strong coordination.

The board of advance studies and research or office of sponsored research will support wing one, research development and operation. While wing 3 will consist upon a Business or Technology Incubators. These
incubators will support research commercialization and will provide a platform for university industry research linkage.

Incubators will be established with HEC support in the institutions where ORIC has shown satisfactory performance, based upon the Score Card, in last two years.

SERVICES OFFERED

- Fund raising for research
- Provide information to faculty about various available research grants
- Link faculty with relevant industry
- Help and guide on patent filing and licensing
- Interface between faculty and the commercial sector
- Work with patent counsel to assess patentability/licensing
- Evaluate markets for commercialization of inventions
- Identify potential licensees
- Negotiate terms of licenses
- Assist with negotiating problematic sponsored research agreements
- Help faculty start companies

INTELLECTUAL PROPERTY ADMINISTRATION

- Funding for patent applications
- In-house preparation and filing of provisional patent applications
- Market analyses of university intellectual property
- Data management
- Policy analysis development
- Administrative support

THE DEVELOPMENT OF OUTSOURCE DATA BASE BY THE UNIVERSITY

Preparation/development of data base of research donors/funding agencies, industrial links, and mentors will be the responsibility of the ORIC.

1. ORIC Visibility within University
   - Noticeboard Posters
• Once-a-semester email (newsletter) to all registered students
• Introductory Seminar with all Faculties
• Wall of Fame for Star Startups
• Mandatory “Detailed” Industrial Visits for Faculty Members
• One designated Faculty Member in each Dept as ORIC Liaison Member to work on ORIC Steering Committee of University.
• Active Engagement with Youth Entrepreneurship Clubs of various University Faculties.
• Annual University Exhibition Of University based Research & Commercialization Activities, leading to start-ups or commercialization.
• Prepare a “Wall of Fame” at a prominent place in the University, in order to recognize entrepreneurial success and encourage entrepreneurship in the HEI concerned.

2. Outreach & Marketing

• Membership & registration with major Entrepreneurial support organizations
• Annual Startup Directory (HEC Platform combined for all ORIC’s)
• Newsletter
• A Standardized ORIC website address with some compulsory sections (Impact, Commercialization, No. of Startups launched)
• Active Social Media Presence (Facebook etc.)
• Innovation Portal of HEC (where ORIC’s will showcase their innovative startups to attract investor funding).

3. Formation of YES Clubs

• The Youth Entrepreneurial Society (YES) Clubs are a proven model creating awareness, motivation & engagement among university students.
• The activities include Business Plan & Business Model competitions, Storytelling sessions and Entrepreneurial activities, expos & exhibitions
• The Model can run with minimum level of supervision, as these are organized around student efforts and involvement.

4. ORICS Participation in National Competitions

• Email from ISC Coordinator to ORIC’s
• ORIC’s circulate info to incubation, co-working & faculties
• Some weightage should be added to ORIC’s evaluation for participation
5. **IPR Information Center**

- Training of ORIC staff in IPR
- Basic IPR Guidelines, filing information & Contact information on ORIC Website (with a request for information form)
- IPR Seminars to Final Year students in all faculties
- Assistance to students, researchers & faculty in filing patents and registering trademarks & copyrights

**ADMINISTRATIVE STRUCTURE**

The prerequisites administrative structure of ORIC includes 04 Managers and 05 supporting staff. Detail of the same is given below:

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<th>Sr. No.</th>
<th>Designation</th>
<th>Status</th>
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<tbody>
<tr>
<td>1</td>
<td>Director ORIC</td>
<td>Full Time</td>
</tr>
<tr>
<td>2</td>
<td>Manager Research Operations &amp; Development</td>
<td>Full Time</td>
</tr>
<tr>
<td>3</td>
<td>Manager of University-Industrial Linkages and Technology Transfer</td>
<td>Full Time</td>
</tr>
<tr>
<td>4</td>
<td>Manager Intellectual Property / Legal Services</td>
<td>Full/Part Time</td>
</tr>
<tr>
<td>5</td>
<td>Publication/Communication Specialist</td>
<td>Full/Part Time</td>
</tr>
<tr>
<td>6</td>
<td>Accountant</td>
<td>Full/Part Time</td>
</tr>
<tr>
<td>7</td>
<td>Administrative Assistant</td>
<td>Full Time</td>
</tr>
<tr>
<td>8</td>
<td>Administrative Assistant</td>
<td>Full Time</td>
</tr>
<tr>
<td>9</td>
<td>Administrative Assistant</td>
<td>Full Time</td>
</tr>
<tr>
<td>10</td>
<td>Research Associate</td>
<td>Full Time</td>
</tr>
</tbody>
</table>

**JOB DESCRIPTION OF ORIC DIRECTOR and MANAGERS**

1. Director (full time)
Manage and enhance the research activities of the university, develop Research policies and priorities, work for fund raising for research, mobilize faculty, business community and industry for research commercialization and serve as an effective advocate for research with the university and to its broader community of stakeholders and supporters.

The ideal person should have an entrepreneurial mindset and 10 years’ relevant experience. Secondly, must have strong ties with the local government, business/industry, entrepreneur, university and social communities. Finally, proven leadership experience in managing and growing non-profit organizations. He will also implement the strategy and business development plan required to execute program initiatives to enhance the progress of the ORIC. The position also manages the operational aspects of the ORIC. He will work in close liaison with the board of advance studies and research / office of sponsored research, Business/technology Incubators and University Science & Technology Park (if any).

- Monetize royalty streams from licenses
- Draft and monitor department budget
- Oversee IP webpage, in conjunction with the web committee
- Work with Development Office to promote Institute IP success stories. Utilize success stories to leverage commercialization efforts.
- Collaborate with the Principal Liaison for Technical Marketing and Licensing on the commercialization of the Institute’s IP in coordination with manager industrial linkage.
- Other duties as assigned.

2. Manager of Research Operations & Development (full time)

The Research Office supports the externally and internally sponsored projects of the institution by providing pre- and post-award support to PIs and ensuring compliance with Temple and sponsor regulations. The person will work in close liaison with the board of advance studies and research or office of sponsored research.

- Develop, maintain, and communicate pre- and post-award administrative procedures for externally sponsored projects.
- Support faculty with grant proposal submissions in conjunction with Sponsored Projects Administration (budget development; award documentation; administrative portions of proposals; internal approvals; monitor issues around effort, cost share, space needs, and tuition remission)
- Support faculty regarding contracts, progress reports, NCEs, and other sponsor-related grant actions.
- Support faculty regarding post-award grant management, including projections, effort allocations and reporting, human resources, consultants, and close-outs.
- Coordinate internal and external reporting needs, including maintenance of HEI’s database.
- Develop and maintain the award process web pages.
• Work with the Director of Research Strategy to set goals and responsibilities within the research office and to monitor procedural efficiencies.

• The Manager of Research Development provides overall vision to the institute research portfolio. The focus of this position is to foster collaborations among research faculty across departments and colleges, and to support the mentorship of junior faculty. Develop programs and activities that will increase funding for research from all public and private sources, establish and maintain excellent relationships with donors and stakeholders, oversee proposal development and submission

• Identify a programmatic strategy for research that promotes multidisciplinary collaboration within the university.

• Develop a structure for mentorship of junior faculty.

• Facilitate collaborations among faculty through identifying overlapping research interests and providing opportunities to communicate.

• Provide information about the grant process to faculty including study section procedures, interpreting reviews, and identifying appropriate funding mechanisms.

• Develop and maintain research cores and infrastructure within the institute including web pages, internal grant review procedures, and statistical support.

• Communicate with Development at both university and college levels about research initiatives and strengths.

• The ideal person should have six years’ relevant experience working for research and track record of management of research projects, organization or research donor agencies

• Oversee all aspects of the operation and development of the ORIC including research administration.

• (Budgeting, auditing and accounting, human resources, management and maintenance of facilities and equipment, implementation of research contracts and human resources).

• Six years relevant experience as above is mandatory

3. Manager of University-Industrial Linkages and Technology Transfer (full time)

Promote the development of public-private partnerships in support of university research, link the university’s research community with the needs and priorities of the corporate sector, develop opportunities for applied research and explore opportunities for technology transfer and the commercialization of university research.

The ideal candidate will have three key attributes: First is a proven track record of entrepreneurship either as a start-up entrepreneur, or working in an environment supporting entrepreneurs. Second, strong ties with the local government, business, entrepreneur, university and social communities. Finally, proven leadership experience in managing and growing non-profit organizations. Six years’ experience with Business/industry is mandatory.
Technology Marketing and Industry Relations

- Create strong linkages with industry and link research to industry.
- Integrate when appropriate with local businesses, industry and community groups on the university.
- In coordination with manager media create marketing materials for technologies developed at the campus.
- Establish and maintain a website related to the project i.e. Technology Transfer activities and technologies available for licensure.
- Assist in the development and implementation of marketing strategies to identify prospective licensees or investors to advance the value of a technology, including leveraging technology portals available by 3rd party providers.
- Follow up with inventors on further development requirements/suggestions to improve their likelihood of obtaining patent protection and licensure.
- Compile and maintain a list of prospective technology licensees and research collaboration partners for technologies developed within the HEI.
- Initiate contact and communicate directly with prospective licensees regarding licensing opportunities.
- Report feedback from prospective licensees and industry partners on technology interest.

Technology Analysis:

- Review technologies from the various university/HEI’s research projects to assess their likelihood of having commercial value and patentable merit.
- Assess the marketability potential of a proposed technology and evaluate the cost/benefit of pursuing a proposed intellectual property strategy.

Technology Administration:

- Administer the policies and procedures that relate to intellectual property adopted by universities keeping liaison with industry/business.
- Assist with the event development and deployment of functions related to research showcasing on the campuses.
- Assist with the training of personnel interning within the Office of research Innovation and Commercialization (ORIC).
- Provide support for the University Intellectual Property Committee.

Miscellaneous:

* Assist with the awareness of faculty, staff and students on technology transfer and intellectual property

4. Manager Intellectual Property/ Legal Services (full/part time)

He will work and support the university research boards, ORIC and TIC/BIC and will be responsible for:
• Review and analyze all new invention disclosures.
• Identify and establish collaborations and/or licensing agreements associated with the Institute’s intellectual property.
• Identify potential synergies for University with non-profit research Institutes and academic licensing offices.
• Actively license university technology.
• Enhance culture of IP capture, including an ongoing evaluation of Institute research for IP potential.
• Track the success of university technology in the hands of licensees.
• Conduct collaborative research agreement review for PIs conducting research under a contract with outside institutions.
• Oversee any litigation that may arise related to Institute IP.
• Manage any infringement matters that may arise related to Institute IP.
• Monetize royalty streams from licenses.
• Oversee IP webpage, in conjunction with the web committee.
• Work with Development Office to promote Institute IP success stories. Utilize success stories to leverage commercialization efforts.
• Collaborate with the Principal Liaison for Technical Marketing and Licensing on the commercialization of the Institute’s IP in coordination with manager industrial linkage.

Other duties as assigned.

Education and Certification

Law graduate with specialization in IPR.

Experience and Knowledge

3-5 years of relevant experience is required.

Manager Business Incubator: (position full time apply where ORIC has an incubator for Business Development and spin outs)

Manager will develop an organizational plan and recruit the necessary resources to grow the operation. The ideal candidate will have three key attributes: First is a proven track record of entrepreneurship either as a start-up entrepreneur, or working in an environment supporting entrepreneurs. Second, strong ties with the local government, business, entrepreneur, university and social communities. Finally, proven leadership experience in managing and growing non-profit organizations. He will implement the strategy and business development plan required to execute program initiatives that will enhance the reputation of the Incubator. The position also manages the operational aspects of the Incubator Program and works with member companies in aiding them in achieving their goals and objectives. Successful candidates will have a MBA Degree or equivalent with six years relevant experience.

*incubator will have its separate frame work/TOR.
a) ORIC Steering Committee (Internal University Staff)
b) ORIC Corporate Advisory Committee (CAC) (Comprising Local Businessmen/Industry/Intelligentsia from the University’s Surrounding Ecosystem)

- Members from Industry, local intelligentsia from the University’s local eco-system.

**Responsibilities of CAC:**

- Create awareness of local business eco-system comprising
  - Local businesses
  - Local clusters/processes
  - Local Skills
  - Local Raw materials
  - Opportunities to link local business to global value-chains.
  - Opportunities for local tourism, where student and faculty could grow into a fore-runner of business by providing tour guides, interpreters, local historians to places of historic or touristic interest.

**SPACE REQUIREMENTS FOR ORIC**

Permanent/Temporary building which have following space/offices to run the activities:

- One meeting/conference room
- Reception area for Administrative assistant
- One private office for Director
- One office shared by Manager of research Operations & Development and Accountant
- One office for Manager of University-Industry Linkages and Research Associates
- One office shared publications and communications specialist and Administrative Assistant.

**LINK OF UNIVERSITIES ORIC, BUSINESS INCUBATORS AND RESEARCH PARKS:**

The University will have an ORIC and business incubators which may connect to the network of Research Park, each designed to help faculty, entrepreneurs and businesses collaborate to move innovative research to the marketplace.
UNIVERSITIES RESEARCH PARKS: (KEY RESPONSIBILITIES)

- Development of strategic marketing alliances with economic development allies regionally and country wide
- Project management, negotiation and execution of ground leases within University System
- Special focus on tech-oriented job creation and commercialization of university System technologies

*Business Incubator or technology incubator will have its separate staff & space requirement

ORIC MONITORING SYSTEM

To ensure quality the annual assessment of the ORIC office will be carried out on prescribed evaluation form/ Score Card developed for this purpose.

TARGETS/KPIS AND ORIC MANAGEMENT INCENTIVES

It is intended to make the faculty, and students, stakeholders in the rewards of economic growth. Both students and faculty will be incentivized to involve into meaningful research and development, with considerable local impact and commercialization prospects.

THE KPIS SUCCESS PARAMETERS:

The ORIC in each university is expected to lead the revolution to achieve the vision of making Pakistani universities a powerhouse of high growth innovation.

It is expected that ORIC Management, in each university would work on commercialization of research and helping startups to incubate, grow, create new jobs, products, services, markets, carry out innovation and bring in funding. They will be expected to:

a. Securing Funding for Contractual Research
b. Revenue Generation from Research Commercialization
c. Securing Investment for Incubator Companies
d. Internships to be created: 10
e. Jobs to be created: 30

THE INCENTIVES TO ACHIEVE KPIS (ORIC MANAGEMENT)

To achieve the KPIs, the incentives are targeting ORIC management, as well as students and faculty to involve into innovation and commercialization.

KPI: Securing Funding for Contractual Research
Successfully securing a funding and actual receipt/release of PKR Five Million from any public or private funding organization for carrying our R&D project or contractual research.

Securing Funding will offset Job/Internship Creation and Securing Investment Target. This means than if ORIC Management is able to secure and receive funding for an R&D project, and lesser number of jobs are created and lesser amount is secured as investment for Incubator Companies, it would still be treated as achievement of target.

**KPI: Revenue Generation from Research Commercialization**

If ORIC Management is able to generate any amount of revenue from research commercialization, the Management will be paid 10% of the total revenue received during six months period. This incentive is independent of other incentives.

**KPI: Create Internships and Jobs Through Startups**

Target - Internships to be created: 10; Jobs to be created: 30

**Oric Management Incentives**

The management will work on achieving six monthly targets/KPIs and would be incentivized to achieve the same as follows:

Create Incubator in the University premises, if not already created.

ORIC Management will help Incubator Companies to create 10 internships within six months. Internship means paid internship of minimum two months duration for a fresh graduate in business, engineering and/or sciences Bachelor’s degree or above. Internees will be paid a stipend of Rs. 8,000 to 10,000 per month by the start-up company.

ORIC Management will help Incubator Companies to create 30 jobs within six months. “Job” means a regular job for a graduate in business, engineering and/or sciences Bachelor’s degree or above. The job creation has to be supported by EOBI contribution documentation by the employer.

Creation of three more jobs, i.e., total 33 jobs, will offset the creation of Internships. This means that if ORIC companies have created total 33 jobs within six months and no Internships, it would be treated as achievement of full target.

The total number of jobs created will be based on figures of sixth, i.e., final month of evaluation. Internships can be created within any months during this six month’s period.

**KPI: Securing Investment For Incubator Companies**

*Target: PKR One Million*

**Oric Management Incentives**
ORIC Management will be incentivized for successfully securing an investment or funding of PKR One Million from angel investors, venture capitalists, industry partners and/or other sources for one or more Incubator Companies during six months period.

Securing Investment will offset the Job/Internship Creation target. This means that if ORIC Management is able to secure funding during the six months period and lesser number of jobs are created, it would still be treated as achievement of target.

Overall Performance
If management is able to meet 100% of above mentioned targets at the end of 6 months term, they would be paid one month’s full salary. In case of achievement of 80% of the targets, half of one month’s salary will be paid as incentive. In case of achievement of targets below 80%, no incentive will be provided.

It is proposed that HEC provides funds to the Universities for ORIC Management Incentive Scheme. Total yearly financial impact of this incentive will not be significant (estimations can be made).

There can be other regular KPIs for the ORIC Management like:

a. Ideas and technologies commercialized
b. Number of patents filed and monetized. (i.e. brought into commercial use or sold to third party for a sum of money).
c. Helping incubate companies from within university, to help prepare and amend Business Plans, provide legal, accounting, corporate, financial governance, taxation and regulatory (dealing with SECP, EOBI, Social Security, tax filing, etc.) support.
d. Enter into business contracts with university start-ups.

Since measurement and quantification of above KPIs is quite subjective, so these will not be calculated towards payment of management incentive, till such

A. Monitoring and Control (ORIC Management)

Currently, the monitoring and control metric of ORIC has the following breakdown.

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<tr>
<th>Sr.</th>
<th>Key Performance Indicator</th>
<th>Score Assigned</th>
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<tbody>
<tr>
<td>1.</td>
<td>Work Environment and Human Resources</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>Research Support</td>
<td>40</td>
</tr>
<tr>
<td>3.</td>
<td>Capacity Building</td>
<td>20</td>
</tr>
<tr>
<td>4.</td>
<td>Commercialization of Research</td>
<td>30</td>
</tr>
</tbody>
</table>

The metric needs to accommodate suggested KPIs. The KPIs may be adjusted as follows:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Key Performance Indicator</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Work Environment and Human Resources</td>
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</tbody>
</table>
### Research Support

<table>
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<tr>
<th>KPI: Securing Funding for Contractual Research</th>
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### Capacity Building

<table>
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<tr>
<th>Commercialization of Research</th>
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<tbody>
<tr>
<td>KPI: Revenue Generation from Research Commercialization</td>
</tr>
<tr>
<td>KPI: Securing Investment for Incubator Companies</td>
</tr>
<tr>
<td>Create internships and jobs through startups</td>
</tr>
<tr>
<td>Total 100</td>
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ORIC Manager must not have another responsibility.

50% of BS level final year projects at engineering school should be a need of the industry and/or society, back by funding of the project as the industry’s commitment to the need.

80% of MS level projects must come only from industry as a true project development industry wanted fund the development.

Our teacher should be responsible for the project outputs, along with the students working on it.

All FYPs must have an external “actual” industrial adviser i.e. someone who understand the actual viability potential of the development work and sows the seeds of its commercialization.

FYP marking must include 20 – 30% making from the industrial sector.

The weights may alter accordingly due to the suggested changes.

### B. Students’ Incentives

Entrepreneurship orientation and motivation should be started immediately after admission to Bachelors class. First semester should carry maximum of the content on entrepreneurship.

To incentivize students for their involvement in innovation, and thinking about entrepreneurship as a career, following incentives may be helpful:

- Students with strong business ideas/innovations will enable the KPI. Hence the incentives are targeted towards motivating the students. Student(s) with the most viable business idea will be supported for business plan competition. The best three ideas will be awarded up to PKR 100,000/-.  
- Students involved in the most viable business ideas will be awarded certificates from the institutional head as well HEC in recognition of the hard work done in regard to commercialization.  
- These students may also be nominated to attend seminars/workshops/conferences arranged by HEC, nationally as well as internationally, on preference basis.  
- ORIC- BIC will provide space to the startup for up to 1 year, or until they are ready to set up their business.  
- ORIC -BIC will provide the startups with necessary support to facilitate the commercialization process.
• Students will be facilitated to a break in studies, in order to pursue a start-up business.

C. Faculty Incentives
• Any faculty member engaged in contract research or industrial collaborative research or helped his/her students in launch of business will be awarded three basic salaries on successful completion of project.
• Faculty members involved in the most viable business ideas will be awarded certificates from the institutional head as well HEC in recognition of the hard work done in regard to commercialization. Business ideas of such faculty members may also be given preference while awarding the research grants sanctioned by HEC.
• These faculty members may also be nominated to attend seminars/workshops/conferences arranged by HEC, nationally as well as internationally, on preference basis.
• Successful commercialization of technology and/or successfully running a startup and/or mentoring a student startup will be considered in faculty promotion criteria as follows:

<table>
<thead>
<tr>
<th>Success Criteria*</th>
<th>Research Equivalent*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful Commercialization</td>
<td>5 Impact factor journal papers</td>
</tr>
<tr>
<td>Successful Startup</td>
<td>5 Impact factor journal papers</td>
</tr>
<tr>
<td>Successful Mentoring of a Startup</td>
<td>2 Impact factor journal papers</td>
</tr>
</tbody>
</table>

*success criteria and Research Equivalent is on agenda of NQAC upcoming meeting and will be implemented after approval/consent of NQAC.

Involvement of Rectors/V.Cs of HEIs in achieving National Economic Goals:
It is expected that the VC will be the driving force and the glue that binds together the efforts of various faculties, labs, local businessmen and ORIC Management to achieve the goal of “Transforming Pakistani universities to drive high impact innovation, applied research and entrepreneurship”.

ORIC FUNDING

The Office of Research Innovation and Commercialization is dedicated to commercialize university technologies - one of the biggest challenges to that mission is funding. To proactively combat the constant obstacle, the office will need to formulate different funding programs for faculty, students and innovations in all stages of the discovery process.

The Higher Education Commission provides initial research funding for faculty to do applied research in their specific area of work to leverage funds and enhance long-term quality and quantity.

The 15% overhead of all the HEC funded research projects will go to support ORIC functions all public sector and private sector universities approved for research funding will be eligible for this grant. While HEC will provide grant to public sector universities for establishment of ORIC in recurring budget under need grant for new initiatives. For establishment of any incubator under ORIC in public sector universities separate funds will be provided. The approval of establishment of incubation center will be based upon efficient role of ORIC, the university R&D strength and equal regional distribution.
Each ORIC will have its own bank account, operated by the Vice Chancellor + ORIC Manager + One Member of the ORIC Steering Committee.

All HEC funds / grants for ORIC will be transferred to ORIC bank account.

**INCUBATOR FUNDING**

In public sector universities/HEIs Incubators will be funded for initial two years under a separate frame work developed for Business incubation Centers which provides gap-funding for faculty members focused on development, testing, prototype construction, or market analysis of innovating technologies emerging from the campus, nurture young firms/ start-up, helping them to survive and grow during the critical start-up period when they are most vulnerable.

**Capacity Building of the ORIC Staff**

In order to achieve the stated target and objectives, we definitely need to have expertise and require to have trained HRs in ORICs. It is therefore, mandatory to equip the managers of ORICs with the necessary tools and techniques to not only administer the research activities of an HEI but also to contemplate the relevance of research being carried out in universities with the market needs and then to commercialize these research results.

**ORIC NOTIFICATION**

Upon Meeting all the above prerequisites, request for the notification of ORIC may be forwarded through Registrar of the concerned Institute/University on ORIC Assessment Performa with documentary evidence. ORIC assessment Performa is Placed as Annexure I.