



Vision of Benha University

To make Benha University as a leading example for the Egypt's universities in education, scientific research, social and university life, and reaching to international competition in some fields.

Mission of Benha University

Benha University would have a role in developing the community by providing an stimulating environment for education and scientific research as well as providing distinguished educational service by equal opportunities for students and increasing the partnership with the local and regional community in a flexible framework allowing to continous improvement and maintaining the values and ethics of community keeping up with the scientific and technology development.

Introduction

Benha University is one of the modern universities in Egypt, but it seeks hard to provide an intellectual environment supporting innovation, creativity and discovery. Such environment based mainly on community of scientists and researchers who participate in the research activities giving the hallmark of the scientific research of the University.

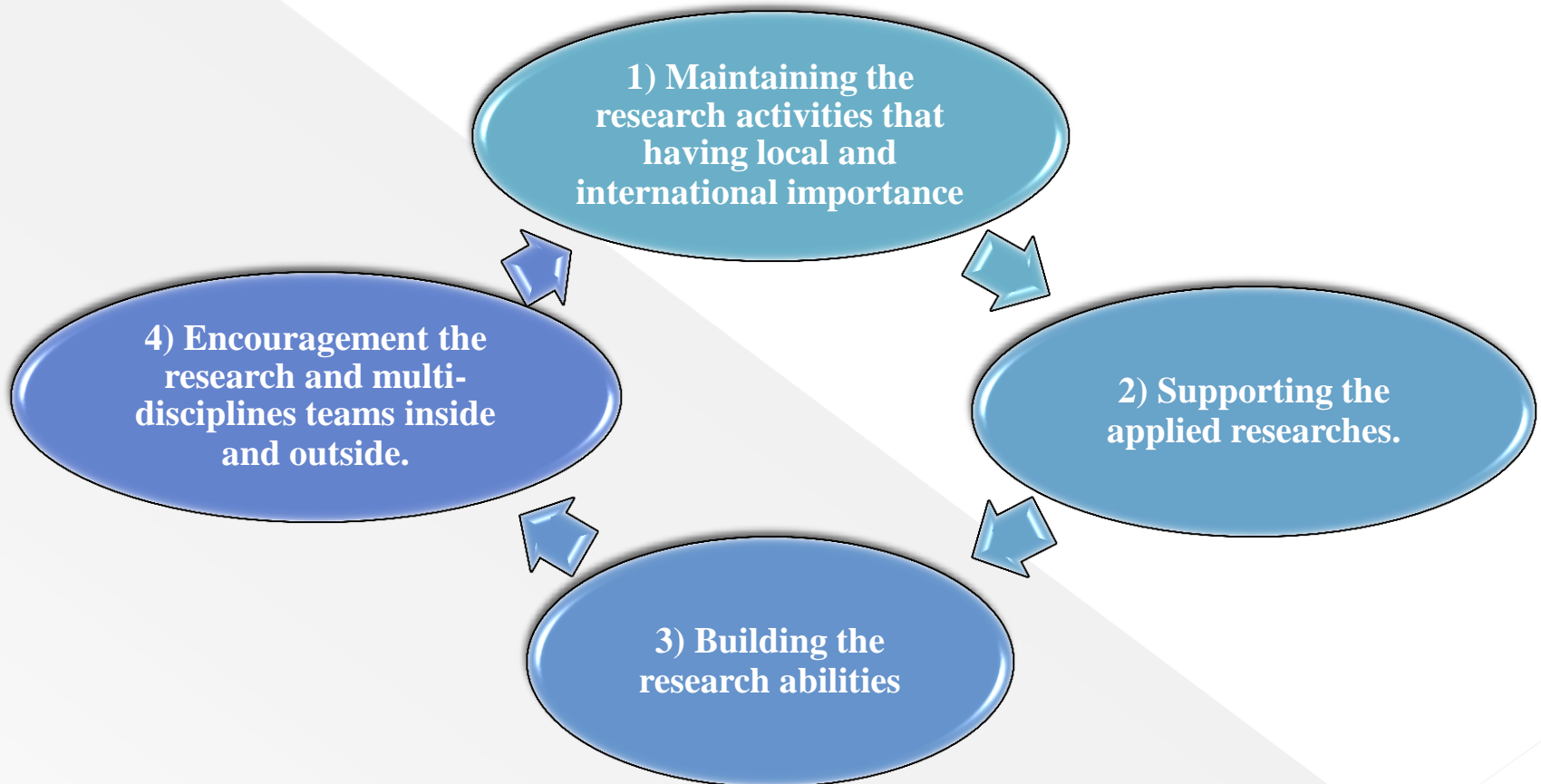
The ambitious vision of the University indicates that the University supports the improvement of the scientific research quality reaching to the international level and the research excellence because the distinguished researches are supporting the understanding, creating a new knowledge and applications, and publishing their results and applications in a wide area to pay the society.

The main aim of the research plan

The research plan achieves the mission of Benha University by providing a society of international recognized scientists that obligated by discovering, transferring the knowledge and serving the society throughout the leadership in the area of research and innovation. The research plan is connected with the strategy of the state and obligated by values and principals established in the academic institutes and the community. The main aim of the research plan of the University represents in supporting the efforts of social and economic development and resolving the national problems. The research plan has been formulated according to the state directions in this area with a priority given to the following elements:-

- 1) new and renewable energy fields**
- 2) resources, management and desalination of water**
- 3) medical science of kidney disease, liver and tumors**
- 4) science of biotechnology and Nanotechnology**
- 5) science of Agriculture and food resources**
- 6) technology of information, communication and remote sensing**

The strategic aims of the University research plan



Linking the research plan with the strategy of the University

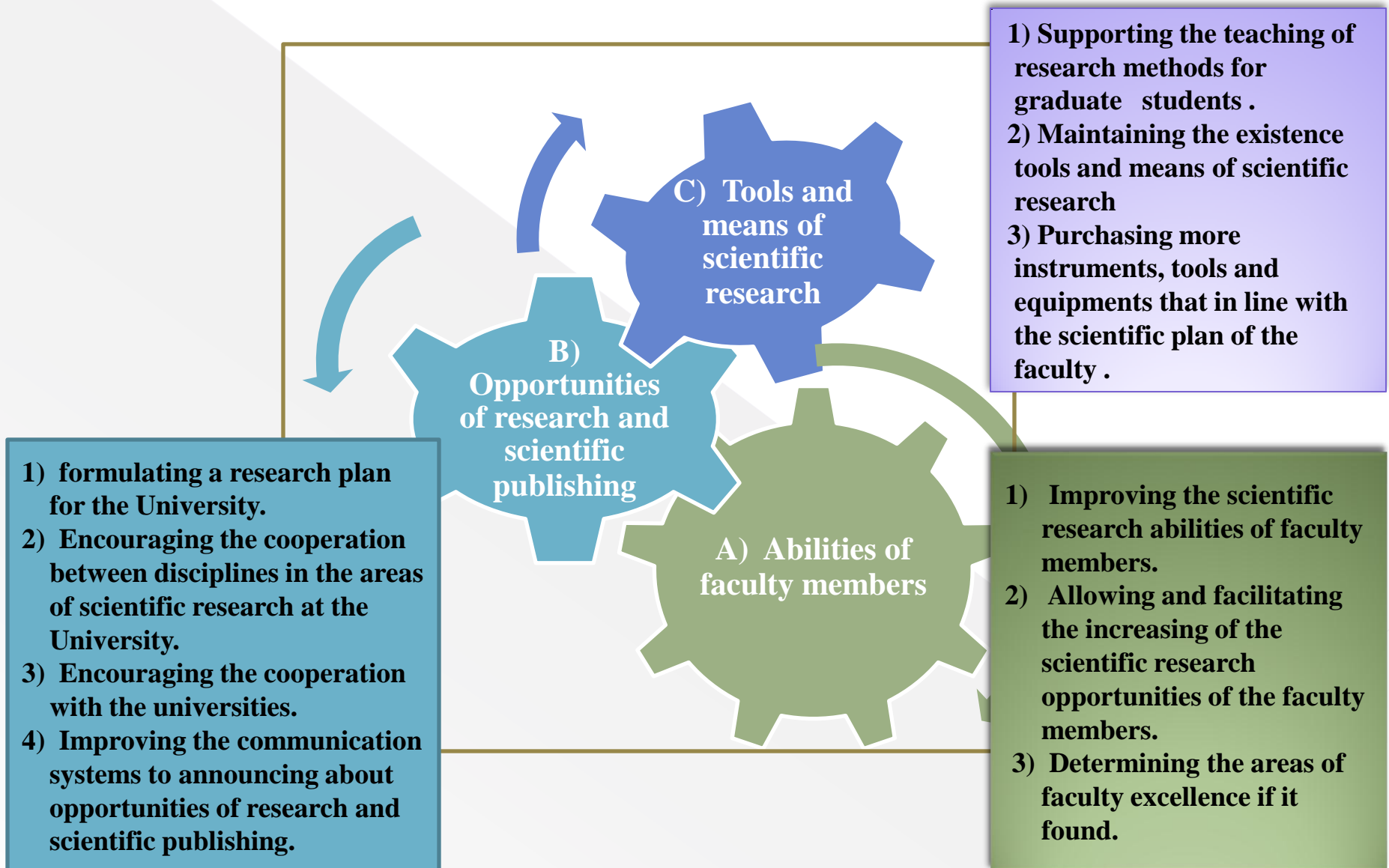
Quality of scientific research is the third dimension of the Strategic Plan for Benha. University 2011-2015, which is implemented through a set of strategic programs to promote the system of scientific research.

The plan includes a number of strategic objectives and activities that support: maintaining the current research activities, building the research abilities of the faculties and encouraging the increasing of the research and multi-disciplines teams inside and outside in addition to supporting the applied research.

The proposed budget for the third dimension of the Strategic Plan (Quality of Research) fifty (50) million Egyptian Pounds for the first scenario (the lowest), Scientific seventy-five (75) million Egyptian pounds for the second scenario (average) and one hundred (100) million Egyptian pounds for the third scenario (Ambition). This budget has been allocated to each activity as shown in the University Strategic Plan .

Third Dimension: Quality of the Scientific Research

Programs and strategic objectives



Objectives and activities of the programs

First: program (a)

The program	a) Abilities of faculty members		
The objectives	1) Improving the scientific research abilities of faculty members	2) Allowing and facilitating the increasing of the scientific research opportunities of the faculty members	3)Determining the areas of faculty excellence if it found
The activities of the objectives	1.1- training the faculty members a) general skills b)specialized skills	2.1- formulating a mechanism to provide grants in addition to internal and external missions	3.1- activating the research centers
	1.2- participating the faculty members in conferences	2.2- training on joining procedures and research projects writing	3.2- utilizing the abilities of faculty
	1.3- publishing in the international circles	2.3- incentives for researchers to promoting the excellence and financing the University by a research grants	
	1.4- providing the scientific circles at the accurate disciplines	2.4- participating in the scientific associations and its actions	
	1.5- issuing a scientific magazine and promoting the current magazines	2.5- scientific partnership with the research institutions inside and outside	
	1.6- Activating the exchange system of visiting professors with specialized international schools	2.6- utilizing the plan of the state to stimulate the scientific research	
		2.7- formulating a mechanism to allow the private and public sector financing the scientific research	

Second: program (b)

The program	B) Opportunities of research and scientific publishing			
The objectives	1) formulating a research plan for the University	2) Encouraging the cooperation between disciplines in the areas of scientific research at the University	3) Encouraging the cooperation with the universities	4) Improving the communication systems to announcing about opportunities of research and scientific publishing
The activities of the objectives	1.1- Database for scientific research	2.1- team-researches at the faculty	3.1- partnership in supervision of the missions and the scientific books writing	4.1- activating the electronic portal
	1.2- Determining the priorities of the research plan of the University focusing on the needs of the community	2.2- scientific projects joining with the faculties of the University administration	3.2- cooperation agreements	4.2- creating a unit for the outside connection serving the scientific research and activating it by an integrated electronic system
	1.3- formulating and activating the research plan of the University and its faculties	2.3- Annual meeting about the scientific research, "the reality and the future"	3.3- initiative of cooperation day with the Egypt's universities	4.3- formulating a guide
		2.4- organizing the scientific conferences and seminars		

Third: program (c)

The program	C) Tools and means of scientific research		
The objectives	1) Supporting the teaching of research methods for graduate students .	2) Maintaining the existence tools and means of scientific research .	3) Purchasing more instruments, tools and equipments that in line with the scientific plan of the faculty .
The activities of the objectives	1. Developing the research methods .	2.1- evaluating the current situation .	3.1- Purchasing the raw materials and the specialized research resources .
		2.2- Specialized maintenance programs .	3.2- Purchasing the instruments, tools and equipments .
		2.3- training the professionals, the faculty members and their assistants	
		2.4- establishing a maintenance centers for the scientific instruments .	

Methodology of the plan formulation

- ❖ **The previous experiences of other universities have utilized by a depth research of many previous plans.**
- ❖ **The research plan has formulated with a mixture of upward and downward approach between colleges and the university.**
- ❖ **Several workshops and meetings attended by agents of post graduate studies and representatives from the colleges were held.**
- ❖ **The plan aims to developing the work system in the field of research to solve problems in various fields.**
- ❖ **The plan has formulated according to the need of faculties and the problems of research activities.**

General direction of the plan

Benha University focuses at the next time and over the coming five years on the problems that are handled at an international level between the scientific teams in different disciplines. The University depends on main elements that are the quality and excellence, focusing on creating a new knowledge to promoting the science or education and enhancing the society in addition to encouraging and supporting the local, regional and international partnership.

It is supposed that the University offers a number of current, emerging and potential areas of research excellence which determine areas of excellence in accordance with power of scientific research, particularly the priority research of the State like:

- ❖ Public Health and Environment**
- ❖ Promoting the country and family health**
- ❖ Energy alternatives and the climate**
- ❖ Water and food**

The Main elements of the plan

The research plan achieves the mission of Benha University in the field of research throughout four basic elements.

The main elements of the plan



Achieving the objectives of the plan requires a number of scientific programs as following:-

1) Supporting and rewarding the research excellence whatever it is found throughout.

- 1) A) Formulating an indicators of main performance to proceeding the achieved progress of the research plan of the faculties of the University as following:**
 - 1) Innovation and development of knowledge
 - 2) Effecting on the local and regional community
 - 3) Publishing the researches at distinguished scientific magazines
 - 4) Creating a spirit of competition in providing the support and the external funding
 - 5) Success in training, guidance and support
 - 6) Identifying the excellence of research

B) Making a comprehensive survey for the needs of academic and individual researches at the faculties of the University. (increasing the operating budget of the scientific research).

C) Offering internal research grants to provide the financial support for the researchers and encourage the research projects as well as increasing the constructive competition between the researchers.

D) Enhancing the administrative support for researches (developing the research services unit to be a support unit of innovation and renewable for the researchers).

E) A program for the research guide of the University (A committee of distinguished research leaders at the various disciplines of the University).

F) Offering a gifts for researches and stimulating the research excellence.

2) Determining the areas of the potential, emerging and current research excellence:

- ❖ Modernizing the list of research priorities for each college on the basis of the pluralism of disciplines, creating new research priorities based on areas of available investment at the multi-discipline researches and the joined researches between colleges, exchanging the faculty members, and maximizing the research priorities as well as achieving the maximum benefit of available resources.

❖ Multi-discipline, cooperation and partnership in the field of research excellence are the basis of the research plan and **our objectives as following:-**

- 1) **Creating better environment to achieve the innovation and distinguished researches among multi-discipline.**
- 2) **Strengthening and enhancing the research cooperation between the University and other universities inside and outside**
- 3) **Activating the sustainable and distinguished partnership with the public and private sector and with the institutions of investment and industrial financing**
- 4) **Increasing the level of external funding for researches**
- 5) **Increasing the marketing opportunities for the scientific research and opening a new marketing outlets as possible**
- 6) **Creating new research activities have a beneficial impact to the community.**

The building and enhancing the relationships to achieve our ambitious goals requires a long-term commitment and sustained effort to seize the opportunities when they arise and also requires a depth analysis of the areas that enabling us to build and enhance our research activities.

3) Building a new research bridges through the pluralism of fields, cooperation and partnership as following:

- **Creating multi-discipline new teamwork inside and outside**
- **proceeding the progress objective of the research grants**
- **Encouraging the research cooperation inside the faculty and between the different faculties**
- **Enhancing the partnership between the University and the internal and external research centers**

4) Enhancing the areas of leadership and research excellence throughout the development priorities of the faculties of the University

This is by setting criteria at the level of the University to determine the priorities of the University from the development researches on condition that the research priorities shall not to be linked with the applicable organizational structures of the University and not be confined to specific disciplines but it must be an activities that including several units within the frame of multi-discipline that provide opportunities for cooperation and synergy between the various faculties of the University on condition that activities must be observed seriously as well as the research activities of each faculty must meet the most of the following criteria:

- The research activity in the area of existing research excellence (as defined previously). The research activity is already useful and it is expected that attracts the internal and external financing
- **Research activity must have competitive and comparative advantage between the other universities**
- Research activity covers social requirements and have an international and local impact

Obstructions and risks

- 1) Lacking the government funding of scientific research
- 2) Lacking the available financial resources
- 3) Slowness in implementing the strategy of the University
- 4) Lacking the relationship between the University and the economic enterprises of the state
- 5) Lacking the confidence of the donor investment institutions at the level of presented researches

Implementation of the plan

1) Participants in the Implementation of the plan

A) At the level of the University

- ❖ **The vice-president for Post Graduate Studies and Researches .**
- ❖ **The vice-president for Community Service and Environment Development .**
- ❖ **Quality and Development Management Unit .**
- ❖ **University Committee of Ethics, Developing, and marketing the Scientific Research .**

The main tasks of the Committee.

- 1) Proceeding the results of social needs studies and determining the problems of the community as well as the requirements of the other beneficiaries from the services offered by the University**
- 2) Announcing about the research projects supported by the University and proceeding the expenditure of support according to the reports of researchers and the marketing of products**
- 3) Facilitating the difficulties that obstruct the implementation of the research plans at the faculties of the university**
- 4) Implementing the policy of the University for the communication and the research contacting with the research and economic institutions at home and abroad**
- 5) Proceeding the marketing of the results of research projects to solve the problems of community and meet its needs**

- 6) Adopting and proceeding the support of master's and doctorate financially to promote the quality of scientific research**
- 7) The periodic proceeding of the scientific research database of the University to determining the progress of the research abilities of the University faculties**
- 8) Proceeding the implementation of the plan and classifying the dissertations according to its applicability and marketing at the economic institutions**
- 9) Contacting with the Egyptian scientists abroad to fund projects and provide scientific grants**

B) At the level of faculties

- **Deputy Dean for Post Graduate Studies and Researches**
- **Deputy Dean for Environment Affairs and community Service**
- **Deputy Dean for Education and Student Affairs**
- **Heads of scientific Departments**
- **Faculty members and their assistants**
- **Graduate students (Master's and doctorate)**
- **Undergraduate students**
- **Researchers**

C) Others at the level of community

- ❖ **Foreign Members of economic institutions and civil community that participate in the research projects**

2) Elements of the plan implementation

- 1) Providing water resources**
- 2) Providing the infrastructure such as equipped laboratories, materials and research resources**
- 3) Abundance of scientific trained members**
- 4) Benefiting from the state's plan to support education and scientific research**
- 5) Benefiting from the research projects financed by the European Union**

3) Proceeding the Implementation of research plan

Formulating a committee to follow up the implementation within main performance indicators that enabling to follow up the achieved progress of such plan, commitment to the timetable and evaluation the results of such plan annually as well as making a report. There are alternative plans to overcome implementation obstructions if it found.

4) Reviewing the research plan

Makers of the research plan conduct a review to it annually as well as adding the new research projects according to the approval of specialized committees and the University council.

Pivots of the research plan

Benha University consists of 13 colleges and one institute were divided into four sectors

A. Sector of Medical Sciences (Faculty of Medicine and Faculty of Nursing)

B. Sector of Engineering Sciences (Faculty of Engineering, Faculty of Computers and Information, and Higher Institute of Technology)

C. Sector of Basic Sciences (Faculty of Veterinary Medicine, Faculty of Agriculture, Faculty of Science, and Faculty of Physical Education)

D. Sector of Human Sciences (Faculty of Arts, Faculty of Education, and Faculty of Specific Education*)

E. Sector of Social Sciences (Faculty of Commerce and Faculty of Law)

Pivots of the research plan according to the Sectors

First: Sector of Medical Sciences

The sector	The faculty	Pivots of the research plan
Sector of Medical Sciences	Faculty of Medicine	<ol style="list-style-type: none">1. The prevalence rate of liver disease and its reasons in Qaluobia2. Environmental pollution and various diseases3. Diseases of heart and blood vessels4. Early detection of tumors and methods of prevention5. Use of modern techniques in medicine
	Faculty of Nursing	<ol style="list-style-type: none">1. Nursing role in chronic diseases2. Nursing role in medicine (tumors)3. Field of environment and preventive health4. Technology of education and nursing practice5. Quality assurance in education and nursing practice

Second: Sector of Engineering Sciences

The sector	The faculty	Pivots of the research plan
Sector of Engineering sciences	Faculty of Engineering	<ol style="list-style-type: none">1. Mechanical Engineering2. Civil Engineering3. Electrical Engineering4. Architectural Engineering5. Survey Engineering6. Mathematics and Physics Engineering
	Higher Institute of Technology	<ol style="list-style-type: none">1. Environment and Sustainable Energy2. Basic Sciences3. Communications and Information Technology4. Materials Science; Engineering Systems and Quality Management5. Advanced Technology
	Faculty of Computers and Information	<ol style="list-style-type: none">1. Development of Computer Science2. Development of Information systems

Third: Sector of Basic Sciences

The sector	The faculty	Pivots of the research plan
Sector of Basic Sciences	Faculty of Veterinary Medicine	<ol style="list-style-type: none"> 1. Protecting animal wealth from epidemic, migrant, and common diseases as well as preserving public health and food safety 2. Using modern approaches to increase the productivity of farm animals, poultry, and fish 3. Using modern techniques in the diagnosis of diseases and reducing the waste and mortality 4. Molecular biology and its use in the diagnosis of diseases 5. Controlling the diseases
	Faculty of Agriculture	<ol style="list-style-type: none"> 1. Optimal use of available agricultural resources to reduce the food gap 2. Developing the animal wealth, poultry and fish wealth 3. Recycling agricultural waste to create a new economic resources 4. Environmental Safety 5. Applications of bio-techniques
	Faculty of Science	<ol style="list-style-type: none"> 1. Fields of new and renewable energy 2. resources, management and desalination of water 3. biological and medical sciences 4. sciences of Agriculture and food sources 5. fields of oil and mineral wealth 6. Applications of Science in industrial fields 7. Fields of mathematics and its applications
	Faculty of Physical Education	<ol style="list-style-type: none"> 1. Physical Training and Movement Sciences 2. School sport 3. Sports management, recreation and sports media 4. Educational, psychological, socialist, and physical health

Fourth: Sector of Human Sciences

The sector	The faculty	Pivots of the research plan
Sector of Human Sciences	Faculty of Arts	<ol style="list-style-type: none"> 1. Developing the language and literary skills as well as translation 2. Analyzing the community issues, thought and human behavior 3. Issues and problems of the history of Egypt through the ages 4. Developing the environment and monitoring the problems, mistakes, and disasters 5. Promoting the media performance, communication, and documentation
	Faculty of Education	<ol style="list-style-type: none"> 1. Effects of globalization on educational institutions 2. Administrative and structural reform of educational institutions 3. Improving the practices and behaviors of education and teaching 4. Developing the institutions of special education 5. Improving the classroom environment in educational institutions 6. Using the educational technology
	Faculty of Specific Education*	<ol style="list-style-type: none"> 1. Educational technology 2. Art Education and Applied Arts 3. Social sciences and media arts 4. Childhood and the issues of the day 5. Life Sciences and Home Economics 6. Music Education and its applications 7. Educational and Psychological Sciences

*** Faculty of Specific Education has being transferred to faculty of applied arts and its scientific disciplines have being distributed among the Faculties of Arts, Education and Agriculture.**

Fifth: Sector of Social Sciences

The sector	The faculty	Pivots of the research plan
Sector of Social Sciences	Faculty of Commerce	<ol style="list-style-type: none"> 1. Economic and social development 2. Electronic management 3. Investment and insurance issues in the community 4. Crisis and disasters management 5. Globalization and its impact on Egyptian society
	Faculty of Law	<ol style="list-style-type: none"> 1. Legal protection of the environment 2. Legal Protection of the Family, Women and Children 3. The legal framework for electronic contracts 4. Development of labor laws and social insurance 5. Competition and prevention of monopoly and their role in promoting the economic system in Egypt 6. Recent developments in the commercial, civil and economic arbitration systems 7. amending the laws of civil servants in the State 8. Recent developments in the legislation of personal status 9. Population growth and its impact on economic development 10. International financial crisis and stock market 11. Organ Transplant between Sharia and Law 12. Economic Courts