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# EGY VAC Summer Programs







# Cytotoxicity on Cells



#### **Training topics:-**

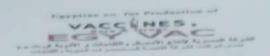
This training is covering the

- Principal of MTT assay for synthetic preparation and extracts on different normal and cancerous cells.
- · Preparation of cells for the test.
- Method of preparing the materials to be tested for their toxicity on cells.
- Method of calculating the toxicity of substances on cells and Deter minin
   The half Maximal inhibitory concentration
   (IC50) (Data analysis) .
- Comparison example with other method.
- The Time of course 3 days (theoretical & practical).

#### **Beneficiaries:-**

For by chemistry / biotechnology / microbiology / biophysics / bioinformatics / Botany zoology / chemistry / graduates & post graduates DMLT / B.Sc.
MLT students / PhD scholars / teaching professional.











## **Training topics:-**

This training is covering the following techniques using human and animal cell lines:

- Type of media
- Components of media
- Types of water used in production
- Methods of sterilization for production
- Methods of filtration
- Process of preparation and steps of production different types of media
- Packaging of media
- Tests and specification of media
- Storage condition of media
- The Time of course 3 day( theoretical)

## **Beneficiaries:**

For by chemistry / biotechnology / microbiology / biophysics / bioinformatics / Botany zoology / chemistry / graduates & post graduates DMLT / B.Sc.

MLT students / PhD scholars / teaching professional.









# Cell culture training course

#### **Training topics:-**

This training is covering the following techniques using human and animal cell lines:

- Introduction to basic cell culture techniques.
- Various sterilization techniques.
- Culture media and its types.
- Thawing of cell lines.
- · Sub / culturing of cells.
- Cell counting techniques.
- Cryopreservation techniques.
- The Time of course 5 days (theoretical & practical).

#### **Beneficiaries:-**

For by chemistry / biotechnology / microbiology / biophysics / bioinformatics / Botan zoology / chemistry / graduates & post graduates DMLT / B.Sc.

MLT students / PhD scholars / teaching professional.









## **Fermentation**

#### **Training topics:-**

Fermentation is a process of using microorganisms such as bacteria to produce vaccines, drug health Benefits foods.

- Preparation of solid and liquid media
- Growth of organism
- Morphology of bacteria
- Identification of the organism by bacteriological staining
- · Fermentation basics.
- Fermentation system.
- Fermentation process (inoculum preservation / growth of inoculum / fermenter culture)
- Downstream process (separation / release of intracellular products concentration purification / etc.....) .Applied fermentation.
- The Time of course 5 days (theoretical & practical).

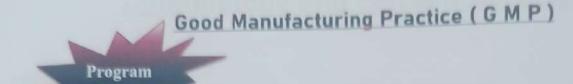
#### **Beneficiaries:-**

These courses are beneficial to all the following majors' science / biotechnology / pharma Agriculture.









#### **Training topics:-**

- · Introduction of training course.
- Materials.
- · Personal.
- · Premises.
- · Qualification & validation.
- · Quality management.
- · Sanitation & Hygiene.
- · Self-inspection & quality audits.
- · Sterile pharmaceutical products.
- · The Time of course 3 days (theoretical).

#### Beneficiaries:-

These courses are beneficial to all the following majors' science biotechnology / pharmacy

Agriculture.







# Immunology and cell proliferation



## Training topics:-

Lymphocyte proliferation is the first step in a proper immune response to create Lymphocytes

- Evaluation of T- cell immune response by measuring in vitro proliferative activity of lymphoid cell.
- The Time of course 2 days {session ( 6 h ) & work shop ( 6 h) }

## **Beneficiaries:-**

These courses are beneficial to all the following majors' science biotechnology pharmacy / Agriculture.









# Protein electrophoresis

#### **Training topics:-**

This test use to determine the molecular weights of protein sample in the presence of protein marker.

- Preparation of gel buffers with adjusted pH
- Preparation of the gel
- Preparation of samples and markers.
- Loading the samples
- · Gel staining and de- staining.
- Data analysis
- The Time of course 2 days {session (2 h) & work shop (6 h) }

#### **Beneficiaries:-**

These courses are beneficial to all the following majors' science / biotechnology pharmacy / Agriculture.







# Disk diffusion method



#### **Training topics:-**

Disc\_diffusion in agar is a common method of testing the sensitivity of Bactria to natural proclike antibiotics.

A microorganism is judged sensitive or resistant according to the diameter of the zone of inhibition of cultural growth.

- Preparation of agar plates.
- Preparation of bacterial inoculum.
- Inoculating agar plate.
- Applying disk.
- Reading results & interpretation
- The Time of course 2 days {session (1 h) & work shop (3 h) }

#### Beneficiaries:-

These courses are beneficial to all the following majors' science biotechnology pharmacy / Agriculture.







# Definition of the influenza virus & vaccine manufacturing principles



### **Training topics:-**

- Introduction to the center and its role.
- · Introduction to Influenza.
- Influenza virus Lecture.
- MDCK cell culture and virus inoculation.
- Collecting samples from patients.
- Preparation of solutions.
- Titration of the virus.
- Sample inoculation in embrocated eggs.
- · Safety measures in the lab.
- Fundamentals of vaccine manufacturing.
- The Time of course 5 day (theoretical & practical)

#### **Beneficiaries:-**

these courses are beneficial to all the following majors' science / biotechnology pharmacy / Agriculture.





# Total Quality Management (T Q M)



### **Training topics:-**

- Introduction to Quality Management.
- Quality Management Principles.
- · Quality Tools.
- Statistical Process Control.
- Quality Management System & Internal Audit.
- Quality Function Deployment.
- Quality Cost.
- Service Quality Model.
- Failure Mode & Effect Analysis.
- · Lean Six Sigma.
- The Time of course 5 day (theoretical & practical)

#### **Beneficiaries:-**

These courses are beneficial to all the following majors' science / biotechnology pharmacy / Agriculture.







# Good Laboratory Practice (G L P)



#### **Training topics:-**

GLP stands for Good Laboratory Practice, a quality system guideline covering the organizational process and conditions, under which non-clinical laboratory studies are planned, performed, monitored, recorded, reported, and archived. Course content

The course will cover, among others, the following topics: GLP basics - what is GLP, when should you use it? Who are the different actors in the GLP system? GLP requirements for

- 1. Test Facility Organization and Personnel
- 2. Quality Assurance Programmed
- 3. Facilities
- 4. Apparatus, Material, Reagents
- 5. Test Systems
- 6. Test and Reference Items
- 7. Standard Operating Procedures
- 8. Performance of the Study
- 9. Reporting of Study Results
- 10. Storage and Retention of Records and Materials

#### Who should attend?

Anyone who wants to learn about the OECD GLPs, e.g. personnel newly employed in a GLP lab, people who wants to start up a GLP facility, GLP professionals who need to refresh their GLP knowledge, receiving authorities of GLP studies.

. The Time of course 3 day (theoretical)

#### **Beneficiaries:-**

These courses are beneficial to all the following majors' science / biotechnology / pharmacy / Agricultu

Customized programs Can be available upon request 25% discount for groups.

1500 L.E







# Venomous Animals

#### Training topics:-

- Decoding Venomous Animal Behavior:- Understanding Their Actions
- Venomous Species Identification:- Exploring the Reptile and Invertebrate World
- Safety in Handling Venomous Animals:- Prevention is Key
- Venomous Animal Toxin Research: Unveiling the Mysteries of a Hidden Realn
- First Aid for Venomous Animal Bites: A Lifesaving Guide.

#### **Beneficiaries:-**

These courses are beneficial to all the following majors' science / biotechnolog pharmacy / Agriculture.

Customized programs

Can be available upon request.

25% discount for groups.

Session1 day (500 L.E)

Course 3day (5000)





# From Venom To Medicine Training



#### **Training topics:-**

- Venom milking and purification.
- Pharmacological Effects of Animal Venoms.
- Antivenin Development: Racing Against Time.
- Medical Applications of Animal Venoms: New Hope for Disease Treatment.
- Ethical Considerations in Venom Use: A Delicate Balance between Science and Ethics.

#### **Beneficiaries:-**

These coerces are beneficial to all the following majors science / biotechnolo pharmacy / Agriculture.

Customized programs

Can be available upon request.

25% discount for groups.

Session1 day (500 L.E)

Course 3day (5000)





# Venomous Animal Management



## **Training topics:-**

- Captive Venomous Animal Husbandry: The Art Handling Exceptional
- Venomous Animal Conservation in the Wild: Protecting Biodiversity
- Venom Animal control; combating a deadly invasion.
- Public awareness of Venomous Animal Hazards: Spreading Knowled to save Lives.
- Lows and Regulations for Venomous Animals: Ensuring Safe Interactions.

### Beneficiaries:-

These courses are beneficial to all the following majors' science / biotechnolog pharmacy / Agriculture

**Customized programs** Can be available upon request. 25% discount for groups.

Session1 day (500 L.E)

Course 3day (5000)





## **Basic Six Sigma**

Program 15

#### Training topics:-

- Introduction, Developments that led to Six Sigma Methodoly .
- · Why Six Sigma.
- What is Six Sigma, Define phase?
- Six Sigma Phases, Measure Phase, Analyze Phase, Improve Phase, Control Phase.
- Terms ,Six Sigma Belts , Six Sigma as a metric , Six sigma as mythologies (DMADV - DMAIC).
- VOC is Customer, VOB is profit, VoE is process.
- VARIATION.
- The Time of course 4 day.

#### **Beneficiaries:-**

These courses are beneficial to all the following majors' science / biotechnolog pharmacy / Agriculture

**Customized programs** Can be available upon request. 25% discount for groups.

2000 L.E



# **Monoclonal Antibodies Production**



### **Training topics:-**

- The immunological basis of antibody Production.
- Tissue Culture technology and preparation of required media and regent.
- Protocol and technical skills for immunization of laboratory animals.
- Separation of immune cells from the spleen of immunization mice.
- · Growing & throwing of mouse myeloma cells.
- Fusion technology.
- · Cloning.
- The Time of course 1 day theoretical.

#### Beneficiaries:-

 These courses are beneficial to all the following majors' science biotechnology / pharmacy / Agriculture.







# Introduction To Intellectual Property

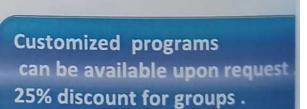


Intellectual property (IP) plays a crucial role in research and development (R&D)

- Definition of Intellectual Property
- Types of Intellectual Property
- Copyright
- Trademarks
- Trade Secrets
- Importance of Intellectual Property
- Laws and International Agreements
- Case Studies and Practical Applications
- Analysis of Case Studies
- Successful case studies in protecting intellectual property
- Practical Applications
- Workshops on how to register patents. Conclusion and Assessment Comprehensive review Of the course
- Assessment of students' understanding of intellectual property concepts
  - The Time of course 3 days (session & Workshop).

#### Beneficiaries:-

- Students and academics.
- Creative art students.
- Entrepreneurs and startups.
- Researchers and scientists.
- Research and development department.











# Antiviral Course

## **Training topics:-**

Studying the Effect of Chemicals and natural extracts on Viruses and measuring the Quantitative and Qualitative effect of these materials

- Cytotoxicity Test of sample.
- · Virus titration.
- · Virus titration with sample.
- Observation for CPE of Virus.
- Calculate Titer of Virus & Analysis of Result.
- The Time of course 3 days (theoretical & practical).

#### **Beneficiaries:-**

For by chemistry / biotechnology / microbiology / biophysics / bioinformatics

Botany / zoology / chemistry / graduates & post graduates DMLT / B.Sc.

MLT students /PhD scholars / teaching professional.





Comprehensive course

# Training topics:-

- Media.
- · Cell Culture.
- Toxicity.
- Antiviral Effect on Cells.
- Fermentation.
- Protein Electrophoresis.
- Poisonous Reptiles, Their Antidotes and How to deal With Them.
- Basic GMP.
- The Time of course 2 weeks.

## Beneficiaries:-

These courses are beneficial to all the following majors' so biotechnology / pharmacy / Agriculture.

Customized programs can be available upon request.

