

**“Hands-on-Training on Advanced Diagnostic Techniques in Clinical Practices”**

**Value Added Course**

**5-14 May, 2023**

**Application Form**

1. Name of the student:.....
2. College name.....
3. Enrollment No:.....
4. Student: Department.....
5. Educational qualification:.....
6. Address of Student:.....
7. Correspondence Address.....
8. Mobile Number.....
9. Email ID of Student:.....
10. Signature of Student with date.....
11. Forwarded with OIC/ HOD  
.....

**Chief Patron**

Dr. K. K. Singh

Hon'ble Vice Chancellor

**Patron**

Dr. Rajeev Singh

Dean, COVAS

**Course Director**

Dr. Vikas Jaiswal

Asst. Prof., Veterinary Pathology

**Course Coordinator**

Dr. Harshit Verma

Asst. Prof., Veterinary Microbiology

**Organizing Secretaries**

Dr. R. A. Siddique, Assoct. Prof.

Dr. Shriya Rawat, Asst. Prof.

Dr. P.S. Maurya, Asst. Prof.

**Co-organizing Secretaries**

Dr. Naresh Chandra, Asst. Prof.

Dr. Jeny K. John, Asst. Prof.

Dr. Shailja Katoch, Asst. Prof.

Dr. K. Ranjan, Asst. Prof.

Dr. Shivani Sahu, Asst. Prof.

Dr. M.K. Bharti, Asst. Prof.

**Hands-on-Training on Advanced Diagnostic Techniques in Clinical Practices**

**Value Added Course**

**Duration 10 Days (30 Hrs)**

**Dates 5-14 May, 2023**



**Organized by**

**Department of Veterinary Pathology  
College of Veterinary & Animal Sciences  
S.V.P.U. of Agri. & Technology, Meerut**

### Course Outcomes

- ◆ The course is intended to equip the post graduate students with various diagnostic procedures involved in veterinary practice and research.
- ◆ This course may cater the high demand research and diagnostic industry.
- ◆ The participant can utilize this knowledge to new startups.
- ◆ Knowledge gained by this training course will help the students to perform their research work with ease and plan future prospective research.
- ◆ Recognize and troubleshoot various diagnostic techniques.
- ◆ Understanding the principles and methodology of various advanced diagnostic techniques.



### Topic to be Covered

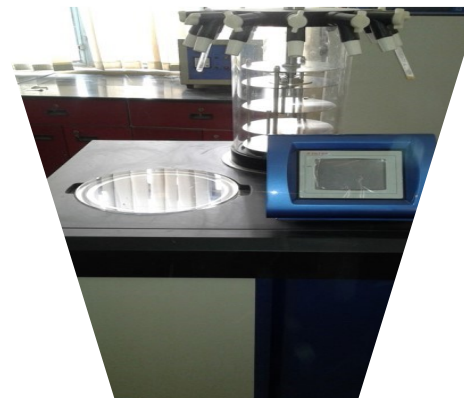
- ◆ Sampling & Transportation of clinical samples from field to laboratory for disease diagnosis.
- ◆ Molecular approach for the characterization of enteric pathogens from clinical samples.
- ◆ Isolation of viruses in Embryonated chicken eggs & preparation of chicken embryo fibroblast cell culture
- ◆ Enzyme linked immune sorbent assay (ELISA), its variants Methodology and its application
- ◆ Modern techniques for diagnosis of viral zoonotic pathogens
- ◆ Antimicrobial resistance mechanism and public health significance.
- ◆ Determination of antimicrobial resistance in pathogens using phenotypic and genotypic methods.
- ◆ Bioinformatics in animal disease diagnosis
- ◆ Detection of anthelmintic resistance and its mitigation in small ruminants.
- ◆ Immunohistopathology
- ◆ Fluorescent antibody test FAT
- ◆ SDS-PAGE in disease diagnosis
- ◆ Role of immune blotting techniques in diseases diagnosis
- ◆ Application of RNA-PAGE in diagnosis of Rotavirus.
- ◆ Primer Designing

### Key Differentiators

- ◆ Certificate course under Advanced Diagnostic Laboratory, Department of Veterinary Pathology, COVAS, SVPUAT
- ◆ Experienced faculty from Five departments (Department of Veterinary Pathology/ Veterinary Microbiology/ Veterinary Parasitology/ Veterinary Biochemistry/ Veterinary Public health & epidemiology).
- ◆ Hands-on training using variety of clinical samples such as blood, urine and tissue etc
- ◆ Limited seats for individual attention.
- ◆ Demonstration of latest diagnostic Instruments.
- ◆ Certification on successful completion of practical examination.
- ◆ Course intended to current industrial demand.

### Eligibility

Students pursuing Postgraduate degree in Veterinary/Animal Sciences or any other allied sciences.



### About the Course

Department of Veterinary Pathology was started in the year 2011 with the inception of College of Veterinary & Animal Sciences, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut. Currently in India, the Contract Research Organizations (CROs) and research laboratories are growing with remarkable rate and opened a new area of employment to newly pass out veterinary post graduate students. These research laboratories are in continuous need of experienced certified professionals. The PG student are generally specialized in one or only few techniques which were used in their research work. So many a times, most of the PG students don't know some of the advanced diagnostic techniques/tools which are utmost necessary to carry out any research in the industry. Fortunately, our laboratory is equipped with high end diagnostic facilities such as serology, molecular biology, fluorescent microscopy, hematology and histopathology etc. We are continuously getting demand of a hands on training course (value added) on various advanced diagnostic instruments present in our department.

In light of above facts, we planned to conduct a 10 day (30 hours) value added course programme for PG students from **5th of May to 14th of May 2023.**