

IQAC recommendation

IQAC, Vivekananda College, Thakurpukur, met on 14/Sept/2021, to envisage, formulate and design Add-On Courses, beyond prescribed Curriculum

A. It was decided that all the departments of Humanities, Science and Commerce would design and formulate 30 hour Add-On Courses for the session 2021-22, Academic calendar, as per UGC guidelines.

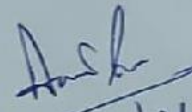
B. It was decided that the Departments would be free to choose the Courses on the basis of their (subject) relevance, practicality and feasibility.

C. It was decided that the Departments would have a Course Coordinator, who would design the Course and Course materials, in consultation with all teachers of the Department.

D. It was decided that each Department would design its own format; and could follow a blended mode of instruction.

E. It was decided that the Departments would be encouraged to use and utilize their own resources while formulating the Add-On Courses, rather than relying on Outsourcing.

F. IQAC would send its recommendations to the Principal/TIC for perusal and implementation.


14/09/21

Co-ordinator
IQAC
Vivekananda College
Kolkata-700 063



VIVEKANANDA COLLEGE

(GOVT. SPONSORED) (NAAC ACCREDITED GRADE 'A')

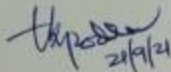
Ref. No.

Date 21/9/21

Notice

It is hereby notified that Vivekananda College, Thakurpukur, will offer Add-On Courses to All Honours students for the Academic year 2021- 22.

Each Department will offer an Add-On Course as per UGC guidelines. Each Course will be structured & overseen by a Course Coordinator, selected from the respective Department. Departmental Heads are requested to take up the matter on an urgent basis.


21/9/21

Principal
Vivekananda College
Thakurpukur, Kol-63

DEPARTMENT OF BIOCHEMISTRY

Date: 17/02/22

A departmental meeting will be held on 17.02.2022 at 12:00 noon to discuss the following agenda. All teachers are requested to kindly attend the meeting.

Agenda of the meeting:

- i) Introduction of Add-on course on "Clinical Diagnostic Technique" for UG Sem-II Honours students.
- ii) Introduction of Add-on course on "Techniques in Biochemistry" for PG Sem-III Students from the session 2022-2023


17/02/22
HOD

DEPARTMENT OF BIOCHEMISTRY

Resolution of the departmental meeting held on 17.02.22

A) Teacher present:

1. Dr. Dibyendu Raj  17/02/22
2. Dr. Kakali Sinha Roy  17/02/22
3. Nireesha Sen Banerjee 17.2.22
4. Dr. Subhanti Banerjee  17/02/22

B) Minutes of the meeting

1. In the Departmental meeting dated 17.02.2022 the teachers of the UG Department of Biochemistry unanimously decided that:

a. The UG Sem-II Honours students would be offered a 30-hour Add-on Course on "Clinical Diagnostic Technique" in Collaboration with IQAC, Vivekananda College.

b. Another 30-hour Add-on course on "Techniques in Biochemistry" will be offered to UG Sem-II students from the Session 2022-2023.

2. It was also decided in the meeting that Dr. Kakali Sinha Roy, Department of Biochemistry would be the Course Coordinator for the Add-On Course on "Clinical Diagnostic Technique" for the Academic session 2021-2022 and Dr. Dibyendu Raj, H.O.D would be the Course Coordinator for the Add-On Course on "Techniques in Biochemistry"

3. The Course structure of the course on "Clinical Diagnostic Technique" would be submitted by Dr. Kakali Sinha Roy and was accepted by all teachers of the department.

4. The Course structure of the course on "Techniques in Biochemistry" would be submitted by Dr. Dibyendu Raj and was accepted by all teachers of the department.

5. Certificates would be given to each student at the successful completion of the Course.

[ADD ON COURSE]

CERTIFICATE COURSE IN CLINICAL DIAGNOSTIC TECHNIQUES

Session: 2021-22 Onwards

1. The duration of the course of instruction for Certificate in Clinical Diagnostic Techniques shall be of one academic year. The medium of instruction and examination shall be English.
2. The candidates who have qualified +2 in sciences (physics, chemistry, biology or mathematics) with at least 45% marks in aggregate shall be admitted to certificate course.
3. The admission to Certificate shall be open to all those candidates who have sought admission as regular candidates to B.Sc. course of Vivekananda College, Thakurpukur under Calcutta University, Kolkata.
4. The candidate who has attended minimum 75% of delivered lectures and secured at least 25% marks in house examination(s) shall be allowed to appear in annual examination of Certificate Course.
5. The examination shall be held in accordance with the syllabus prescribed by the college.
6. The examination for Certificate shall be held along with the annual and supplementary examinations of B.Sc.
 - 6.1 The annual/supplementary examination for theory paper shall be of 50 marks and that for practical shall be of 30 marks.
 - 6.2 The candidates shall be required to obtain at least 35% of the total marks in theory and practical separately in order to be declared pass in Certificate Courses.
 - 6.3 The candidate who has secured 35% but less than 50% marks in aggregate of theory and practical shall be placed in third division. The candidate who has secured 50% or more and less than 60% marks in aggregate shall be placed in second division. The candidate who has secured 60% or more marks in aggregate shall be placed in first division.
7. A candidate who does not appear or fails in theory of practical or both in annual examination held in May of relevant year and three consecutive examinations held thereafter shall be debarred continuing his/her studies for Certificate Courses.
 - 7.1 Grace marks and re-evaluation shall be allowed as per university rules for B.Sc. course.

SYLLABUS OF CERTIFICATE COURSE IN CLINICAL DIAGNOSTIC TECHNIQUES

For 2021-22

3 Hrs./Week
Max. Time: 3Hrs.
Max. Marks: 50
Internal Assessment: 10
Total Marks: 60

SECTION – A

1. Structure of Animal Cell.
2. Cleaning and sterilization of glass ware.
3. Introduction to Haematology:
Composition and function of blood – parts, functions, principles and working of simple and compound microscope, centrifuge, water bath and cell counter.
4. Blood cell and haemoglobin:
Erythropoiesis, leukopoiesis and thrombopoiesis. Types of haemoglobin and its functions. Formation of haemoglobin and its breakdown.
5. Blood coagulation and Anticoagulants:
Mechanism of blood coagulation. Separation of serum and plasma. Various types of anticoagulants, their modes of action and clinical advantages.

SECTION – B

6. Haematological Estimations
Collection of blood samples, method of estimation of haemoglobin, bleeding time clotting time, erythrocyte sedimentation rate and staining.
6.1 Haemocytometry: Preparation and staining of blood films, Romanowsky stains, method of counting R.B.C., W.B.C. and platelets. Clinical significance of variation in haemoglobin, RBC, TLC, DLC, ESR and platelet count.
7. Definition and scope of clinical biochemistry.
8. Methods of estimation and clinical significance of the following:
 - 2.1 Blood sugar and glucose tolerance
 - 2.2 Blood Urea
 - 2.3 Blood Cholesterol

- 2.4 Serum bilirubin, calcium amylase, alkaline and acid phosphatase, SGOT and SGPT
2.5 Serum creatinine and Uric acid, renal function test.
9. Formation and composition of urine. Macroscopic, microscopic and biochemical examination of uric and their clinical importance.

LABORATORY

3 Hrs./Week
Max. Time: 3 Hrs.
Max. Marks: 40

1. Use and care of glassware, microscope, centrifuge, analytical balance and spectrophotometer.
2. Estimation of serum urea (DAM method), uric acid and creatinine.
3. Assay of SGOT and SGPT (kit method) from serum sample.
4. Estimation of haemoglobin.
5. Total Red Blood Cell (RBC) count using hemocytometer.
6. Estimation of serum Ca^{2+} by O-Cresolphalein Complexone, End Point Assay
7. Estimation of blood glucose by GOD-POD method.
8. Estimation of lipid profile: triglycerides and total cholesterol.

BOOKS RECOMMENDED

1. Medient Lab. Technology Vol. I, II and III. By Kanai L Mukherjee, Tata MC Grawhill New Delhi.
2. Manual of Medical Lab Technology By A.V. Naingokar, Pillani Book Depot, Bombay.
3. A concise Note on Medical Lab. Technology By C.R. Maitt. Centre Book Agency, Calcutta/
4. Handbook of Medical Lab Technology, By V.H. Talib, CBS Publishers, Delhi.
5. Medical Lab Technology, 5th edition By Ramnik Sood, Jaypee Brothers, New Delhi.
6. Practical Manual of Biochemistry, 4th edition, By S.P. Singh, CBS Publishers, New Delhi.

Vivekananda College

Department of Biochemistry
Add on Course Title: Clinical Diagnostic Technique
Syllabus distribution

Course	30 Hours	Faculty
Structure of Animal Cell.	2	DR
Cleaning and sterilization of glass ware.	2	DR
Introduction to Haematology:	4	KR
Blood cell and haemoglobin	2	KR
Blood coagulation and Anticoagulants	2	KR
Haematological Estimations	2	KR
Definition and scope of clinical biochemistry	2	NS
Methods of estimation and clinical significance	2	NS
Formation and composition of urine	2	SB
LABORATORY SKILL		
Use and care of glassware, microscope, centrifuge, analytical balance and spectrophotometer.	1	SB
Estimation of serum urea (DAM method), uric acid and creatinine.	2	KR
Assay of SGOT and SGPT (kit method) from serum sample.	1	KR
Estimation of haemoglobin.	1	KR
Total Red Blood Cell (RBC) count using hemocytometer.	2	DR
Estimation of serum Ca ²⁺ by O-Cresolphalein Complexone, End Point Assay	1	KR
Estimation of blood glucose by GOD-POD method.	1	NS
Estimation of lipid profile: triglycerides and total cholesterol.	1	KR