ANDHRA UNIVERSITY

Telegrams: UNIVERSITY Telephone: 284 4000 Fax: 0891-2755324

No. L I (2)/U.G. Courses/MQP/2021

All Official letters, packages etc, should be addressed to the Registrar by designation and not by name.

Visakhapatnam, Dt: 12-10-2021

From: THE REGISTRAR

To

The Controller of Examinations, Andhra University, Visakhapatnam.

Sir,

Sub:

Approval of Model Question Papers - Reg.

Ref:

Email's dt 28-09-2021, 06-10-2021 & 07-10-2021 along with

Model Question Papers.

With reference to the above, I am by direction to inform you that the Choice Based Credit System, U.G. Courses (w.e.f. 2020-2021) Model Question Papers of have been approved as detailed below:

| S.No. | Subject | Name & Designation | Name of the College | Model question papers | Name of the Paper |
|-------|------------------------|--|--|-----------------------------|--|
| 1. | B.Sc. Botany | Dr.R. Prameela, Chairperson | M.R. Degree College, Vizianagaram | Semester-II (MQP) | Basics of Vascular Plants and Phytogeography |
| 2. | B.Sc. Biochemistry | Gudimella Shakuntala, Associate Professor, Chairperson | Dr. L.B. College, Visakhapatnam | Semester-II (MQP) | Analytical Techniques |
| 3. | B.Sc. Biotechnology | Dr. R. Haritha, Lecturer in Biotechnology, | Visakha Government Degree College for Women, Visakhapatnam | Semester-II (MQP) | Biotechnology |
| 4. | B.Sc. Chemistry | Dr. A. Ram Gopal, Asst. Professor in Chemistry | Collegiate Education & Chairman, Board of Studies, U.G. Chemistry, A.U. | Semester-II (MQP) | Organic & General Chemistry |
| 5. | B.Sc. Physics | Dr. Srinivas Siriki, Professor of Physics | Mrs. A.V.N. College, Visakhapatnam | Semester-II (MQP) | Skill Development Course Solar Energy |

MODEL PAPER

B.Sc BIOCHEMISTRY revised syllabus under CBCS

w.e.f. 2020-2021

B.Sc. DEGREE EXAMINATION

SEMESTER-II

Course: Analytical Techniques

Code: BCH-II

TIME: 3 HOURS

MAXIMUM MARKS:75

PART-A

ANSWER ANY FIVE OF THE FOLLOWING QUESTIONS EACH CARRIES FIVE MARKS

5x5=25 MARKS

- 1. Svedberg unit
- 2. Homogenisation of tissues
- 3. Rf value
- 4. Ion exchange resins
- 5. ELISA
- 6. Beer-Lamberts law
- 7. Paper electrophoresis
- 8. Acid fast staining

PART-B

ANSWER ALL QUESTIONS EACH CARRIES TEN MARKS

5x10=50 MARKS

9 (a). Write the principle, Instrumentation& applications of Analytical Ultra Centrifuge.

OR

9 (b). Write the Principle and describe the methodology and applications of Density Gradient Centrifugation.

10 (a). Describe the Principle, methodology and applications of Paper Chromatography.

OR

10 (b). Write about the Principle, methodology and applications of Ion exchange chromatography.

11 (a) Describe the Principle, Instrumentation and applications of UV-Visible Spectrophotometry.

.OR

11(b). Write the Principle, Instrumentation and applications of flame photometry.

12 (a). Write the Principle, Methodology and applications of SDS-PAGE.

OR

12 (b) Discuss the different types and applications of Immunoelectrophoresis

13 (a) Describe the Principle and applications of Phase Contrast and Electron microscopy.

OR

13 (b). Describe the different methods of Sterilisation in Microbiology.

G.W. Chapenin