No. LI (1)/UG Courses/B.A., B.Sc./2021.

Visakhapatnam,
Dt: 15-07-2021.

From: THE REGISTRAR

To
The Principals of the
All Affiliated Colleges (U.G.),
Courses (B.A., B.Com., B.Sc., B.B.A.)

Sir/Madam,


Ref : 1. APSCHE syllabus of Under CBCS frame work w.e.f 2020-21.
2. Letter dt. 5-7-2021 along with Syllabus & Model Question Papers, received from the Special Officer, Govt. Degree College, Nakkapalli, Visakhapatnam.

* * *

I am by direction to inform that the Principals of the affiliated colleges to strictly adhere to the APSCHE guidelines for the revised Choice Based Credit System, Approval of Syllabus & Model Question Papers of B.A. (Office Management & Secretarial Practice and B.Sc. (Analytical Chemistry) offered by Govt. Degree College Nakkapalli, Visakhapatnam, w.e.f 2020-21 academic year U.G. Courses (CBCS) placed in A.U. website.

Thanking you,

Yours faithfully,

(B. RAMACHANDER)
DEPUTY REGISTRAR (ACADEMIC)

Copies to:
1. The Dean of Academic Affairs, A.U., VSP.
3. The Dean, CDC, A.U., Vsp.
4. The Dean, Confidential, A.U., Vsp.
5. The Controller of Examinations, A.U., Vsp.
6. The Principal’s, All Affiliated Colleges (U.G.)
7. The Secretary to V.C., Rector Table, P.A. to Registrar, A.U., Vsp.
8. The Director, Computer Centre, A.U., Vsp.
9. O.C. & O.O.P.
From

The Special Officer,
Govt. Degree College,
Nakkapalli – 531081,
Visakhapatnam District.
Mobile No: 9502776566

To

The Registrar,
Andhra University,
Visakhapatnam.

Sir,

Sub: - Requisition to accept the syllabus and Model question papers of
B.A (Office Management & Secretarial Practice),
B.Sc (Analytical Chemistry) – Reg.

******

I submit that Govt. Degree College, Nakkapalli is a newly established college
during the academic year 2020-21 and sanctioned five Courses but BA(OM&SP) and
B.Sc(Analytical Chemistry) is not offered by any UG Colleges affiliated to Andhra University.
Hence I submit the syllabus and model questions papers for the above mentioned courses
for your kind consideration and necessary action.

Thanking you sir,

Yours faithfully,

Principal.

Principal
S.G.A.Govt.Degree College
YELSAMANCHILI - 531085
Visakhapatnam District.

Enclosures.

1. Affiliation Letter issued by the CDC, Andhra University.
2. Courses Sanctioned letter by the Commissioner.
3. Syllabus copies and model papers of BA(OM & SP),
   B.Sc (Analytical Chemistry).
Rc.No.20/GDC/2019  dated:04/12/2020

Sub:- Collegiate Education – Sanction of new Government Degree College at Nakkapalli in Payakaraopet Constituency, Visakhapatnam District – Instructions – Issued


# # #

Copy of G.O.Ms.No.36, Higher Education (CE A1) Department, dated 27.10.2020 is herewith communicated.

Accordingly, to start the new Degree College at Nakkapalli in Payakaraopet Constituency, Visakhapatnam District from the academic year 2020-21, Dr K. Malayadri, Principal, Govt. Degree College, Yellamanchili, Visakhapatnam District is appointed as Special Officer to newly established Government Degree College at Nakkapalli, Visakhapatnam District in additional to his normal duties.

Therefore, the Special Officer is requested to initiate steps to start the new Govt. Degree College at Nakkapalli, Visakhapatnam District from the academic year 2020-21 duly following the guidelines:

(i) To start with the following courses:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Course</th>
<th>Combination</th>
<th>Medium</th>
<th>Student strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B.A.</td>
<td>Political Science, Economics, Office Management &amp; Secretarial Practice</td>
<td>English</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>B.Com</td>
<td>Accountancy, Taxation</td>
<td>English</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Applications</td>
<td>English</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>B.Sc.</td>
<td>Mathematics, Statistics, Computer Science</td>
<td>English</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mathematics, Chemistry, Analytical Chemistry</td>
<td>English</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zoology, Chemistry, Analytical Chemistry</td>
<td>English</td>
<td>30</td>
</tr>
</tbody>
</table>

(ii) Obtain affiliation for the above courses from the University concerned regarding admission process, courses to be offered.

(iii) To approach the Principal, Government Junior College, Nakkapalli and request to accommodate Govt. Degree College, Nakkapalli in the GJC, premises.

(iv) To approach the District Collectorate to identify the suitable land to the extent of minimum of 5.0 Acres for construction of buildings to establish new Government Degree College at Nakkapalli.

(v) To make necessary steps to run the college in a smooth manner.

Sd./M M Nayak
Special Commissioner of Collegiate Education

To
The Principal, Government Degree College, Yellamanchili, Visakhapatnam District.
Copy to the District Collector, Visakhapatnam District.
Copy to Revenue Divisional Officer concerned.
Copy to Regional Joint Director of Collegiate Education, Rajahmundry
Copy to Principal, Identified VR Krishna Government Degree College, Visakhapatnam.
Copy to D.T.O. and S.T.O. concerned.
Copy to Services-I, CAO, Academic Cell of this office for information
Spare.1

N.Pani
Superintendent
GOVERNMENT OF ANDHRA PRADESH

ABSTRACT

Higher Education Department - Sanction of new Government Degree College at Nakkapalli in Payakaraopet Constituency, Visakhapatnam District from the academic year 2020-21 - Administrative sanction Orders Issued.

HIGHER EDUCATION (C.E.A1) DEPARTMENT

G.O. Ms.No.36. Dated:27/10/2020
Read the following :-

3. From the Secretary, APSCHE, Lt.No.No.APSCHE/AC/New GDC / Payakaraopet const/2020-21, dated:05.06.2020

... In the reference 1st read above, Sri. Golla Babu Rao, Hon'ble M.L.A, Payakaraopet, Visakhapatnam District has requested Hon'ble Minister of Education for sanction of new Government Degree College either at Narasipatnam Addaroad or Nakkapalli in Payakaraopet Constituency.

2. Accordingly, in the references 2nd and 3rd read above, the Special Commissioner of Collegiate Education, Andhra Pradesh, Vijayawada and the Secretary, A.P. State Council of Higher Education have sent proposals. Government after careful examination of the proposals hereby accord administrative sanction for establishment of new Government Degree College at Nakkapalli in Payakaraopet Constituency in Visakhapatnam District from the academic year 2020-21.

3. The Special Commissioner of Collegiate Education, Andhra Pradesh shall take further action to send proposals for the budget, both for construction of new college campus and for teaching and non-teaching staff for the above New Degree College. The Special Commissioner of Collegiate Education shall plan and start such degree courses that includes significant skilling component to enable youth in securing employment in addition to regular courses as per the demand.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

SATISH CHANDRA
SPECIAL CHIEF SECRETARY TO GOVERNMENT

To
The Special Commissioner of Collegiate Education,
Andhra Pradesh, Vijayawada.

Copy to:
The Secretary, A.P. State Council of Higher Education, Mangalagiri, Guntur Dist.
The Collector & District Magistrate, Visakhapatnam.
The Regional Joint Director of Collegiate Education, Rajahmahendravaram,
E.G.Dist.
The P.S. to Addl. Secy. to C.M.
The P.S. to Minister for Education.
The P.S. to Spl. Chief Secretary to Govt, Higher Education Department.
Sc/Sf.

//FORWARDED :: BY ORDER //

SECTION OFFICER
COLLEGE DEVELOPMENT COUNCIL

NO.C-Ir4/ New Govt. Degree College, Vijayawada, 05-07-2021

From: OFFICE OF THE DEAN

To:
The Principal
Government Degree College
Nakkapalli
Visakhapatnam.

Sir,

Sub: Starting of New Govt. Degree College from the academic year 2020-21 – Orders – Issued.


I am by direction to inform you that permission be granted to start New Government Degree College, Nakkapalli in Payakaraopeta, Visakhapatnam Dist., with sanctioned Courses/Combinations with take and Medium of instructions as noted against each from the academic year 2020-21 subject to fulfillment of conditions/requirements as per the Andhra Pradesh Statutes, Rules & Regulations, and the conditions, norms of the Govt. & APSCHE.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the Course and Combinations</th>
<th>Intake</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>B.A. (Political Science, Economics, Office Management &amp; Secretarial Practice)</td>
<td>30</td>
<td>English</td>
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<td>2.</td>
<td>B.Com (Accountancy, Taxation)</td>
<td>30</td>
<td>English</td>
</tr>
<tr>
<td>3.</td>
<td>B.Com (Computer Applications)</td>
<td>30</td>
<td>English</td>
</tr>
<tr>
<td>4.</td>
<td>B.Sc. (Mathematics, Statistics, Computer Science)</td>
<td>30</td>
<td>English</td>
</tr>
<tr>
<td>5.</td>
<td>B.Sc. (Mathematics, Chemistry, Analytical Chemistry)</td>
<td>30</td>
<td>English</td>
</tr>
<tr>
<td>6.</td>
<td>B.Sc. (Zoology, Chemistry, Analytical Chemistry)</td>
<td>30</td>
<td>English</td>
</tr>
</tbody>
</table>

Yours faithfully,

(S.N. K. V. GANESH)
ASST. REGISTRAR (CDC)

Copies to:
1. The Principal of the Degree College.
2. The Dean, UG Examinations, A.U., for information and necessary action.
3. The Dean, Academic Affairs, A.U., for information and necessary action.
4. The Controller of Examinations, A.U., for information and necessary action.
5. The Superintendent(s) of E-I to E-XI, School of Section, A.U., for information.
7. The Secretary, APSCHE, Telangana Branch, Hyderabad.
8. The Secretary to Vice-Chancellor, A.U.
Model Paper
First Year B.A., Degree Examination,
SEMESTER-I

Time : 3 Hours
Marks : 75

PART-A

Answer any FIVE of the following questions. Each carries FIVE marks.

1. Importance of office.
2. Duties of an office Manager.
3. Good filing.
4. Types of Forms.
5. Relation of office with other department of business organization.
6. Importance of office machines.
7. Setting of work standards in office.
8. Techniques of setting standards in office.

5 x 5 = 25 Marks

PART-B

Answer ALL the questions. Each question carries TEN marks.

9.(a) Write an essay on different types of Offices ?
   (OR)
9.(b) Write an essay on elements of office managements ?

10.(a) What is Filing ? Explain about centralized and decentralized Filing system ?
   (OR)
10.(b) What is the meaning of Indexing? Explain the types of Indexing in a business organization ?

11.(a) Write an essay on Principles of forms designing and specimens of forms used in office?
   (OR)
11.(b) Explain what are the different types of records kept in a business organization ?

12.(a) Write an essay on the importance of office safety and safety hazards?
   (OR)
12.(b) Explain the steps to improve office security ?

13.(a) Write an essay on different ways of measurement of office work ?
   (OR)
13(b) Write about different types of Office manuals and steps involved in preparing office manuals ?

5 x 10 = 50 Marks

Principal
S.G.A. Govt. Degree College
YELAMANCHILI - 531
Vizianagaram District
MODEL PAPER
FIRST YEAR B.Sc. DEGREE EXAMINATION
SEMESTER-I
ANALYTICAL CHEMISTRY Course-I

Time: 3 hours
Maximum Marks: 75

PART-A
5 X 5 = 25 Marks
Answer any FIVE of the following questions. Each carries FIVE marks

1. Explain the terms Mole and molariass.
2. Explain in brief about the general steps in chemical analysis.
3. Write short note on methods of detecting analytes.
4. What is a Laboratory note book?
5. Write account on types of errors. Accuracy and Precision.
6. Describe the safety with chemical and waste.
7. What are thermometric methods?
8. Explain how the calibration of volumetric glassware is done.

PART-B
5 X 10 = 50 Marks
Answer ALL the questions. Each carries TEN marks

9 (a). Explain standards solutions, primary standards and secondary standards giving examples.
(or)
(b). Explain the terms a) Molar concentration b) Analytical molarity c) Equilibrium molarity of a particular species d) Percent concentration e) Parts per million and billion.

10 (a). Write an essay on the operation and theory of the Single pan analytical balance.
(or)
(b). Explain errors in weighing, care of an analytical balance.

11 (a). Describe the use of any five common laboratory apparatus.
(or)
(b). What is a pH meter and describe the components of a pH meter and its use.

12 (a). Explain the Gaussian distribution, mean and standard deviations.
(or)
(b). Explain the statistical tests of data. Write in detail about i) Test ii) t-test.

13 (a). Explain the Principles of TGA and DTA in detail.
(or)
(b). What are thermometric titrations and write its applications.

***

Subject Expert
A. V. Ramana

Principal
S.G.A. Govt. Degree College
YELLAMANCHILI - 531 051
Vizianagaram District.
MODEL PAPER
FIRST YEAR B.Sc., DEGREE EXAMINATION
SEMESTER-I
ANALYTICAL CHEMISTRY Course-I

Time: 3 hours
Maximum Marks: 75

PART- A
5 X 5 = 25 Marks
Answer any FIVE of the following questions. Each carries FIVE marks

1. Explain the terms Mole and molarniass.
2. Explain in brief about the general steps in chemical analysis.
4. What is a Laboratory notebook?
5. Write account on types of errors. Accuracy and precision.
6. Describe the safety with chemical and waste.
7. What are thermometric methods?
8. Explain how the calibration of volumetric glassware is done.

PART- B
5 X 10 = 50 Marks
Answer ALL the questions. Each carries TEN marks

9 (a). Explain standard solutions, primary standards, and secondary standards giving examples. 
(or)
(b). Explain the terms a) Molar concentration b) Analytical molarity c) Equilibrium molarity of a particular species d) Percent concentration e) Parts per million and billion.

10 (a). Write an essay on the operation and theory of the Singlepananalytical balance. 
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(or)
(b). What is a pH meter and describe the components of pH meter and its use.

12 (a). Explain the Gaussian distribution, mean and standard deviations. 
(or)
(b). Explain the statistical tests of data. Write in detail about i) F test ii) t test.

13 (a). Explain the Principles of UV and DTA in detail. 
(or)
(b). What are thermometric titrations and write its applications.

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Principal
S.G.A. Govt. Degree College
YELLAMANCHILI - 531 031
Visakhapatnam District.
MODEL PAPER
FIRST YEAR B.Sc., DEGREE EXAMINATION
SEMESTER-II
ANALYTICAL CHEMISTRY Course-II: QUANTITATIVE METHODS OF ANALYSIS

Answer any FIVE of the following questions. Each carries FIVE marks

1. Explain in brief about the co precipitation of Gravimetry
2. Explain in brief about the general practical gravimetric procedures
3. Write short note on coulometric titrimey 
4. Explain the theory of indicators and buffers?
5. What are the different types of rotors used in centrifugation?
6. What is polarography write its applications
7. Write the llkovic equation and explain its significance
8. Explain the different types of sampling methods adopted in environmental analysis

PART - B

Answer ALL the questions. Each carries TEN marks

9 (a). Explain the general principles of precipitation methods of gravimetric analysis

(or)

(b). Explain the general principles of volatilization methods of gravimetric analysis

10 (a). Write an essay on the Aqueous and non-aqueous acid-base titration with examples

(or)

(b). Explain the redox titration, Complexometric titrations and precipitation titrations with examples

11 (a). Describe the determination of Copper and Zinc in brass using polarography

(or)

(b). Explain the experimental set up the instruments used in Polarography and write its applications

12 (a). Explain the sedimentation and relative centrifugal force in detail

(or)

(b). Explain the different types of centrifugation techniques with examples

13 (a). Explain the Environmental pollution from industrial effluents and radiochemical waste

(or)

(b). What are the water pollutants and explain the different methods of waste analysis

***

Principal
S.G.A.Govt. Arts College
MODEL PAPER
FIRST YEAR B.Sc., DEGREE EXAMINATION
SEMESTER-III
ANALYTICAL CHEMISTRY Course-III; SEPARATION METHODS-I

Time: 3 hours
Maximum Marks: 75

PART-A

Answer any FIVE of the following questions. Each carries FIVE marks

1. Explain in brief about the Batch extraction
2. Explain the principle of differential migration
3. Write a short note on modes of chromatography.
4. Explain the various modes of development of paper chromatography
5. Write a short notes on the adsorption chromatography
6. Write a short notes on different types of detectors used in HPLC
7. What is normal phase chromatography, give an example
8. Explain the reversed phase liquid chromatography

PART-B

Answer ALL the questions. Each carries TEN marks

9 (a). Explain the principle of solvent extraction in detail. ii) Explain the determination of Iron (III)

(or)

(b). Explain the action of ion exchanger resins and separation of inorganic mixtures

10 (a). Write an essay on the general principles of chromatography in detail

(or)

(b). Explain the terms i) column efficiency and resolution ii) Sample preparation and iii) Chromatograph

11 (a). Describe the techniques of paper chromatography and its applications

(or)

(b). Explain the experimental set up of the thin layer chromatography with a detailed note of its applications in quantitative analysis

12 (a). Explain the principle of column chromatography and its applications

(or)

(b). Explain the principle and the parts involved in HPLC

13 (a). Explain the principle and ion exchangers of Ion exchange chromatography

(or)

(b). Write an essay on liquid liquid partition chromatography

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Adviseto students to prepareareport.

**Assessment Methods:**

a. Presentation byindividual student
b. Class test
c. Laboratory test
d. Written assignments
c. End semester University theory and practical examinations

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**MODEL PAPER**

**FIRST YEAR B.Sc. DEGREE EXAMINATION**

**SEMESTER-IV**

**ANALYTICAL CHEMISTRY Course-IV; SEPARATION METHODS-II**

**Time:** 3 hours

**Maximum Marks:** 75

**PART- A**

\[ 5 \times 5 = 25 \text{ Marks} \]
Answer any **FIVE** of the following questions. Each carries **FIVE** marks

1. Write a short notes on selection and attachment of ligands in affinity chromatography
2. Explain the principle of electro-osmosis
3. Write a short note on the classification of electrophoresis
4. Explain the various applications of electrophoresis
5. Write a short notes on the filters nitrocellulose related to dialysis
6. Write a short notes on membrane filtration of fiberglass and polycarbonate
7. Write a short notes on the support media used in membrane filtration
8. Explain the density gradients of centrifugation

**PART- B**

5 \times 10 = 50 \text{ Marks}

Answer **ALL** the questions. Each carries **TEN** marks

9 (a). Explain the principle of gel chromatography and its applications
   (or)
(b). Explain the gas – liquid chromatography and its applications
10 (a). Write an essay on the factors affecting mobility, macromolecular size and charge interactions with supporting electrolyte
   (or)
(b). Explain in detail about the factors affecting electrophoresis phenomena
11 (a). Describe the instrumentation, methodology, preparation of gel-staining and destaining
   (or)
(b). Explain the preparative zone electrophoresis and continuous electrophoresis
12 (a). Explain the principle of dialysis and membrane filtration
   (or)
(b). Explain the general laboratory methods of membrane filtration
13(a). Explain the principle and types of centrifugation methods
   (or)
(b). Write an essay on the sedimentation and relative centrifugal force methods

***

**SEMESTER IV**

Course- V

**ANALYTICAL CHEMISTRY-5**

60hrs (4h/w)

**ANALYTICAL BIOCHEMISTRY AND ENVIRONMENTAL CHEMISTRY**

Objectives:

Subject expert

A. V. Ramakrishna
PART-A

5 x 5 = 25 Marks

Answer any FIVE of the following questions. Each carries FIVE marks.
1. Write a short notes on characterization of polysaccharides
2. What are lipids? Write their properties
3. Write a short note on the Blood collection and preservation of samples.
4. Explain the microbial limit test
5. Write a short notes on the different dosage forms with the IP requirements
6. Write a short notes on the additives used in tablet manufacture
7. Explain the Classification of water pollutants
8. Explain in brief about the Waste water treatment

PART - B

Answer ALL the questions. Each carries TEN marks

9 (a). Explain the Biochemical function of steroid hormones

(or)

(b). Explain the characterization and functions of proteins

10 (a). Write an essay on the Composition and function of blood and blood coagulation.

(or)

(b). Explain in detail about regulation, estimation and interpretation of data for blood sugar

11 (a). Describe the Microbiological assay of antibiotics in detail

(or)

(b). Explain the cup plate method and two level factorial assay of ampicillin

12 (a). Explain IP requirements and analytical methods for the aspirin and Rifampicin

(or)

(b). Explain the standardization and Quality Control and dosage forms of mouthwashes and ointments

13 (a). Explain in detail about the disposal of radioactive wastes

(or)

(b). Describe the pollution due to the industries of Pulp, Paper and Textile

***

Principal
S.G.A. Govt. Degree College
YELLMANCHILI 531 503
Visakhapatnam District

Subject Expert
A. V. Ramaiah