B.Sc. I Year II - SEMESTER

Physics Practicals Paper – II :

1. Determine the logarithmic decrement using oscillating disk.

2. Study the oscillations of an oscillating disk

3. Determine Viscosity of water using oscillating disk.

4. Determine the viscosity of a given liquid by oscillating disk

5. Find the frequency of vibration of a bar using Melde's experiment.

6. Find the loop length of a transverse standing wave using Melde's experiment

7. Obtain Lissagious figures from CRO.

8. Find the loop length of longitudinal stationary wave by Melde's experiment

9. Determine the frequency of a tuning fork using volume resonator.

10. Find the end correction of volume resonator bottle.

11. Find the velocity of transverse wave along a stretched string.

12. Study the damped vibrations of a bar pendulum in air.

13. Verify the two laws of a stretched string.

14. Find the velocity of transverse wave in a string

15. Verify perpendicular axis theorem using bifilar suspension.

16. Show that $Iz=Ix+Iy$ in bifilar suspension

17. Find moment of inertia of a block using bifilar suspension in different directions.

18. Find linear mass density of a string by theoretical and experimental method.

Faculty of Science
B.Sc. II Semester (Practical) Examination
Subject: Chemistry; Paper-II
QUESTION BANK
W.E.F. from 2017

Time: 2 hrs
Max.marks: 25

1. Write brief procedure along with group separation table for the identification of the following cations when they are present in a mixture.

(5)

Q.No	Cations
1	Cd^{2+}, Ca^{2+}
2	Ag^+, NH_4^+
3	Al^{3+}, Ba^{2+}
4	Mg^{2+}, NH_4^+
5	Ba^{2+}, Mg^{2+}
6	Bi^{3+}, Al^{3+}
7	Cr^{3+}, Sr^{2+}
8	Hg_2^{2+}, NH_4^+
9	Fe^{3+}, Mg^{2+}
10	Zn^{2+}, Mg^{2+}
11	Cu^{2+}, Ba^{2+}
12	Mn^{2+}, Mg^{2+}
13	Sb^{3+}, Ca^{2+}

II. Analyse the given mixture using semi-micro qualitative technique systematically and report two anions and two cations present in it.

(16)

Q.No	Salt mixture
1	$CdAc_2$ + $(NH_4)_3PO_4$
2	$ZnCl_2$ + NH_4Cl
3	$CaCO_3$ + $Mg(NO_3)_2$
4	$AlCl_3$ + $Ba(NO_3)_2$
5	$FeSO_4$ + NH_4Cl
6	$Bi(NO_3)_2$ + $(NH_4)_3PO_4$
7	$Sr(NO_3)_2$ + $MgCO_3$
8	$Al(SO_4)_3$ + $ZnCl_2$
9	$MgSO_4$ + $(NH_4)_2CO_3$
10	$CaCO_3$ + NH_4Br
11	$PbAc_2$ + NH_4NO_3
12	$Ba(NO_3)_2$ + NH_4Ac
13	$CdAc_2$ + $Sr(NO_3)_2$
14	$AgCl$ + NH_4Ac
15	$PbCl_2$ + $Ba(NO_3)_2$

III. Record & Viva ------------------------------ 4 marks

B.Sc. II Semester (Practical) Examination
Subject: Chemistry; Paper-II
Scheme of Valuation

I.   Procedure ------------------------------------- 5 marks
II.   Solubility ------------------------------------- 1mark
      Flame test ------------------------------------- 1mark
      Two anions + two cations -------- 4 x 3 = 12 marks
      Report   ------------------------------------- 2 marks
III. Record & Viva ------------------------------ 4 marks

FACULTY OF SCIENCE

B.Sc. II Semester (Practical) Examination
Subject: BOTANY
Paper – II
(Bryophytes, Pteridophyes, Gymnosperms and Paleobotany)
QUESTION BANK
W.E.F. Annual 2017

Time: 2 ⸱ ⸱ Hours   **Max. Marks: 25**

Note: Answer **All** questions. Draw well labeled diagrams wherever necessary.

1. Prepare a double stained permanent mount of the given material' ' A' (Pteridophyte) Draw diagram & give reasons for identification.   **7M**

      1.   Lycopodium stem
      2.   Equisetum stem
      3.   Marsilea Petiole / Rhizome

2. Prepare a double stained permanent mount of the given material' 'B '(Gymnosperms) Draw diagram & give reasons for identification.   **8M**

      4.   Pinus needle
      5.   Gnetum stem
      6.   Gnetum leaf

3. Identify given specimens (C,D,E,F) Bryophtya – 2; Pteridophyta-1, Gymnosperms – 1
                                                       4x1= 4M

SPECIMENS:
      7.   Marchantia thallus with Gemma cups
      8.   Marchantia thallus with Antheridiophore
      9.   Marchantia thallus with Archegonionphore
    10.   Anthoceros Thallus
    11.   Anthoceros with Sporophyte
    12.   Polytrichium with Sporophyte
    13.   Lycopodium with cone
    14.   Equisetum with cone
    15.   Marsilea with sporocarp
    16.   Pinus male cone
    17.   Pinus female cone
    18.   Gnetum twig
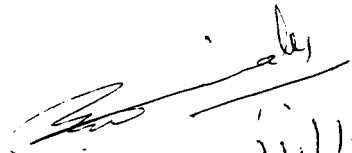   19.   Gnetum male cone
    20.   Gnetum female cone

4. Identify the given slides G, H, 1 & J (Bryophyte- 2, Pteridophyte- 1 & Gymnosperm.-I)

4x1= 4M

SLIDES:

21. Marchantia thallus V.S.
22. Marchantia thallus with Gemma cups
23. Marchantia antheridiophore L.S.
24. Marchantia archegoniophore L.S.
25. Marchantia sporophyte V.S.
26. Anthoceros thallus V.S.
27. Anthoceros thallus with antheridia
28. anthoceros thallus with archegonia
29. Anthoceros sporophyte L.S.
30. Anthoceros sporophyte T.S.
31. Polytrichum leaf T.S.
32. Polytrichum stem T.S.
33. Polytrichum antheridial branch
34. Polytrichum archegonial branch
35. Polytrichum capsule L.S.
36. Polytrichum protonema
37. Rhynia (Fossil slide)
38. Lycopodium strobiuls L.S.
39. Equisetum strobilus L.S.
40. Marsilea sporocarp V.S.
41. Cycadeoidea (Fossil Slide)
42. Pinus male cone V.S.
43. Pinus pollen grains
44. Pinus female cone V.S.
45. Pinus ovule V.S.
46. Gnetum male cone V.S.
47. Gnetum female cone V.S.
48. Gnetum ovule V.S.

5. Record   **2M**

FACULTY OF SCIENCE
B.Sc. II-Semester (CBCS) (Practical) Examination

Subject: ZOOLOGY

Paper - II
Ecology, Zoogeography and Animal Behaviour

Model Question Paper
W.E.F. – 2016- 2017

Time: 2 hrs   Max. Marks: 25

I.   Write the procedure, conduct experiment and comment on results.   (2+6+2=10)

II. Identify the one zoogeographical region in given map and specify the fauna of that region.   (5)

III. Identify any two endangered wild life experiment species of India which was demonstrated during practicals and comment on them.   (2+2=4)

IV. Record   (3)

V   Viva   (3)

Note: For I & II Question bank has given
        For III, IV & V Common questions for all batches.

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FACULTY OF SCIENCE
B.Sc. II-Semester (CBCS) (Practical) Examination

Subject: ZOOLOGY

Paper - II
Ecology, Zoogeography and Animal Behaviour

Question Bank
W.E.F. – 2016- 2017

Time: 2 hrs   Max. Marks: 25

I. Write the procedure, conduct experiment and comment on results.   (2+6+2=10)

(a) Write procedure of determination of pH in water sample and determine the pH of given sample.
(b) Write the procedure of estimation of salinity in given water sample and estimate the salinity in the sample.
(c) Writ the procedure of estimation of dissolved oxygen in pond water and estimate the dissolved oxygen in given sample.
(d) Write the procedure of estimation of biocarbonate in given water sample and estimate alkalinity of water sample.

II. Identify the one zoogeographical region in given map and specify the fauna of that region.   (5)

(a) Oriental region
(b) Neotropical
(c) Palaeorctic region
(d) Nearctic region
(e) Autralian region

III. Identify any two endangered wild life experiment species of India which was demonstrated during practicals and comment on them.   (2+2=4)
(a)
(b)

IV. Record   (3)

V   Viva   (3)

Note: For I & II Question bank has given for III, IV & V Common questions for all batches.

2.2.1 Practicals Question Bank

Differential Equations

Unit-I

Solve the following differential equations:

1. $y' = \sin(x + y) + \cos(x + y)$

2. $x\,dy - y\,dx = a(x^2 + y^2)dy$

3. $x^2 y\,dx - (x^3 + y^3)dy = 0$

4. $(y + z)dx + (x + z)dy + (x + y)dz = 0$

5. $y \sin 2x\,dx - (1 + y^2 + \cos^2 x)dy = 0$

6. $y + px = p^2 x^4$

7. $yp^2 + (x - y)p - x = 0$

8. $\frac{dx}{y - zx} = \frac{dy}{yz + x} = \frac{dz}{(x^2 + y^2)}$

9. $\frac{dx}{x(y^2 - z^2)} = \frac{dy}{y(z^2 - x^2)} = \frac{dz}{z(x^2 - y^2)}$

10. Use the transformation $x^2 = u$ and $y^2 = v$ to solve the equation $axyp^2 + (x^2 - ay^2 - b)p - xy = 0$

Unit-II

Solve the following differential equations:

11. $D^2 y + (a + b)Dy + aby = 0$

12. $D^3 y - D^2 y - Dy - 2y = 0$

13. $D^3 y + Dy = x^2 + 2x$

14. $y'' + 3y' + 2y = 2(e^{-2x} + x^2)$

15. $y^{(5)} + 2y''' + y' = 2x + \sin x + \cos x$

16. $(D^2 + 1)(D^2 + 4)y = \cos \frac{x}{2} \cos \frac{3x}{2}$

17. $(D^2 + 1)y = \cos x + xe^{2x} + e^x \sin x$

18. $y'' + 3y' + 2y = 12e^x$

19. $y'' - y = \cos x$

20. $4y'' - 5y' = x^2 e^x$

14

Unit-III

Solve the following differential equations:

21. $y'' + 3y' + 2y = xe^x$

22. $y'' + 3y' + 2y = \sin x$

23. $y'' + y' + y = x^2$

24. $y'' + 2y' + y = x^2 e^{-x}$

25. $x^2 y'' - xy' + y = 2\log x$

26. $x^4 y''' + 2x^3 y'' - x^2 y' + xy = 1$

27. $x^2 y'' - xy' + 2y = x\log x$

28. $x^2 y'' - xy' + 2y = x$

Use the reduction of order method to solve the following homogeneous equation whose one of the solution is given:

29. $y'' - \frac{2}{x}y' + \frac{2}{x^2}y = 0, y_1 = x$

30. $(2x^2 + 1)y'' - 4xy' + 4y = 0, y_1 = x$

Unit-IV

31. Form the partial differential equation, by eliminating the arbitrary constants from $z = (x^2 + a)(y^2 + b)$.

32. Find the differential equation of the family of all planes whose members are all at a constant distance r from the origin.

33. Form the differential equation by eliminating arbitrary function F from $F(x^2 + y^2, z - xy) = 0$.

Solve the following differential equations:

34. $x^2(y - z)p + y^2(z - x)q = z^2(x - y)$

35. $x(z^2 - y^2)p + y(x^2 - z^2)q = z(y^2 - x^2)$

36. $(p^2 - q^2)z = x - y$

37. $z = px + qy + p^2 q^2$

38. $z^2 = pqxy$

39. $z^2(p^2 + q^2) = x^2 + y^2$

40. $r + s - 6t = \cos(2x + y)$

BS206   **C++ Lab**

Practical: 2 Hours/Week   Credit: 1

1. Write a program to.

   a. Print the sum of digits of a given number.

   b. Check whether the given number is Armstrong or not

   c. Print the prime number from 2 to n where n is natural number given.

2. Write a program to find largest and smallest elements in a given list of numbers and sort the given list.

3. Write a menu driven program that can perform the following functions on strings. (Use overloaded operators where possible).

   a. Compare two strings for equality (== operator)

   b. Check whether first string is smaller than the second (<= operator)

   c. Copy the string to another.

   d. Extract a character from the string (overload [])

   e. Reverse the string.

   f. Concatenate two strings (+ operator)

4. Write a program using friend functions and inline functions.

5. Write a program to find area of a rectangle, circle, and square using constructors.

6. Write a program to implement copy constructor.

7. Write a program to demonstrate single inheritance and multiple inheritances.

8. Write a program to demonstrate hierarchical inheritance and multipath inheritance(using virtual functions)

9. Write a program to demonstrate static polymorphism using method overloading.

10. Write a program to demonstrate dynamic polymorphism using method overriding and dynamic method dispatch.

11. Write a program to demonstrate the function templates and class templates.

12. Write a program to menu driven program for accepting two numbers and perform calculator operations addition, subtraction, multiplication, division and remainder using function template.

13. Write a program to demonstrate exception handling.

14. Write a program to demonstrate various input-output manipulations.

15. Write a program to implement stack abstract data type.

16. Write a program to demonstrate array of objects.

Note: Recommended to use Open Source Software: GCC on Linux; DevC++ (or) CodeBlocks on Windows 10.

FACULTY OF SCIENCE
B.Sc. II-Semester (Practical) Examination, 2017
Subject : MICROBIOLOGY
Paper – II
QUESTION BANK
W.E.F. 2016- 2017

Time: 2 Hours   **Max. Marks: 25**

Note: Each candidate has to perform one experiment and four spotters.

I. Experiment Question.   (12 Marks)

1. Identify the unknown amino acids in the given mixture using Paper chromatography.

2. Identify the unknown sugars in the given mixture using Paper chromatography.

3. Find out the Absorption Maxima of the given coloured solution.

4. Verify Beer-Lamberts law for coloured solution using colorimeter.

5. Define buffer. Prepare a buffer solution with specific pH and report its pH.

II. Specimen for Spotting.   (4 Spotters 4x2=8 Marks)

6. P^H Meter/ P^H strip
7. Paper chromatogram (amino-acids/sugars)
8. Buffer
9. Colorimeter
10. Rhizopus
11. Aspergillus
12. Yeast
13. Pencillium
14. Fusarium
15. Spirogyra
16. Nostoc
17. Anabeana
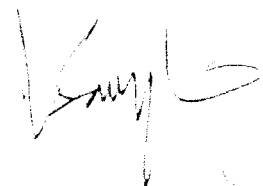18. Volvox
19. Chlamydomonas
20. Scytonema

III. Record .

B.Sc. I Year II - SEMESTER

Electronics Practicals Paper – II :

1. Study I-V characteristics of PN junction diode

2. Find the knee voltage and forward resistance of a PN junction diode from its I-V characteristics

3. Find the breakdown voltage of given zener diode from its characteristic curve

4. Draw the load line of zener diode

5. Design voltage regulator circuit using zener diode

6. Find h parameters of a transistor using its characteristic curves

7. Find g_m of a FET from its characteristics curves.

8. Study the output characteristics of a FET

9. Find the stand off ratio of UJT

10. Design the relaxation oscillator using UJT and find its frequency.

11. Study the characteristics of LDR

12. Study the I V characteristics of solar cell and find its fill factor

13. Study the characteristics of photo diode

14. Study the characteristics of photo transistor

15. Construct a regulated power supply for 3.5V using Zener diode

16. Find the cut- in voltage of a zener diode

17. Draw the input characteristic of a given transistor

18. Study the output characteristics of a given transistor

19. Find the intrinsic stand-off ratio of UJT

20. Find the efficiency of a solar cell.

Question Bank for B.sc. C.A. Sem-II

BS206   **C++ Lab**

Practical: 2 Hours/Week   Credit: 1

1. Write a program to print the sum of digits of a given number
2. Write a program to check whether the given number is Armstrong or not
3. Write a program to check whether the given string is Palindrome or not
4. Write a program to read the student name, roll no, marks and display the same using class and object.
5. Write a program to find area of a rectangle, circle, and square using class and object.
6. Write a program to implement inline function inside and outside of a class for

    a. Finding the area of a square

    b. Finding the area of a cube

7. Write a program to implement friend function and friend class
8. Write a program to implement constructor and destructor with in a class.
9. Write a program to demonstrate hierarchical inheritance.
10. Write a program to demonstrate multiple inheritances.
11. Write a program to demonstrate the constructor overloading.
12. Write a program to demonstrate static polymorphism.
13. Write a program to demonstrate dynamic polymorphism.
14. Write a program to implement polymorphism using pure virtual functions.
15. Write a program to demonstrate the function templates and class templates.
16. Write a program to demonstrate exception handling using try, catch, and finally.

Note: Recommended to use Open Source Software: GCC on Linux; DevC++ (or) CodeBlocks on Windows 10.

206   C++ Lab

Practical: 2 Hours/Week   Credit: 1

U1

1. Write a program to print the sum of digits of a given number.

2. Write a program to check whether the given number is Armstrong or not

3. Write a program to check whether the given string is Palindrome or not

4. Write a program to read the student name, roll no, marks and display the same using class and object.

5. Write a program to find area of a rectangle, circle, and square using class and object.

6. Write a program to implement inline function inside and outside of a class for

U2

    a. Finding the area of a square

    b. Finding the area of a cube

7. Write a program to implement friend function and friend class

8. Write a program to implement constructor and destructor with in a class.

9. Write a program to demonstrate hierarchical inheritance.

10. Write a program to demonstrate multiple inheritances.

U3

11. Write a program to demonstrate the constructor overloading.

12. Write a program to demonstrate static polymorphism.

13. Write a program to demonstrate dynamic polymorphism.

U4

14. Write a program to implement polymorphism using pure virtual functions.

15. Write a program to demonstrate the function templates and class templates.

16. Write a program to demonstrate exception handling using try, catch, and finally.

Note: Recommended to use Open Source Software: GCC on Linux; DevC++ (or) CodeBlocks on Windows 10.

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B.Sc BIOTECHNOLOGY I YEAR
II- SEMESTER
PAPER-II: NUCLEIC ACIDS & BIOINFORMATICS (BS206)
QUESTION BANK FOR PRACTICALS

Duration= 2 hours   **Total= 25M**

I. MAJOR PRACTICALS   1x10=10M
1. Isolation of DNA from Plant cells
2. Isolation of DNA from Animal cells
3. Estimation of DNA by Diphenylamine method
4. Estimation of RNA by Orcinol method
5. Database searching and downloading bioinformatics data- DNA (Gen bank, DDBJ, ENA/EBI)
6. Database searching and downloading bioinformatics data- Protein (Uniprot)
7. Visualization of Protein structures-RASMOL

II. MINOR PRACTICALS   1x5 = 5M
1. Exploring data bases: Genbank and Uniprot
2. Exploring the structural data bases: PDB, MMDB
3. Pairwise sequence alignment (global and local) of DNA and proteins
4. Multiple sequence alignment of DNA & protein sequences using ClustalW/Omega
5. Database searching with heuristic algorithms: BLAST/FASTA

III. SPOTTERS / EXHIBITS   5x1 = 5M
1. Hershey and Chase/Griffith experiment
2. Tobacco Mosaic Virus
3. Forms of DNA
4. Cot curve
5. Tm curve
6. Satellite DNA
7. Messelson and Stahl experiment
8. Linear DNA replication
9. Circular DNA replication
10. Rolling circle DNA replication
11. Theta DNA replication
12. D loop model DNA replication
13. Direct Repair mechanism
14. Excision Repair mechanism
15. Methyl mediated mismatch Repair mechanism
16. Recombinational Repair mechanism

17. DNA recombination-homologous recombination
18. Site specific recombination
19. NHEJ (NonHomologous End Joining)
20. GenBank
21. EMBL
22. DDBJ
23. PDB
24. SWISS-PROT
25. UNIPROT
26. PIR
27. BLAST,
28. ENTREZ
29. Pairwise alignment
30. Multiple sequence alignment
31. Phylogenetic tree
32. 3D Structure of a protein (α-helices, β-sheets)

IV. RECORD & VIVA   5M

FACULTY OF SCIENCE

B.Sc. I-Year II – Semester (PRACTICAL) EXAMINATION

Subject: Geology

Paper – II

Time: 2 Hours

Max.Marks: 25

QUESTION BANK

I. Identify (6) crystal models from the given crystal model list. Give their crystal system, symmetry elements and forms present with general symbol. (6x2=12)

CUBIC SYSTEM

1 Cube
2 Octahedron
3 Dodecahedron
4 Cube and octahedron
5 Cube and dodecahedron
6 Tetrahexahedron
7 Octahedron and dodecahedron

8 Cube and Tetrahexahedron
9 Trisoctahedron
10 Cube and Trisoctahedron
11 Trapezohedron
12 Octahedron and Trapezohedron
13 Hexaoctahedron
14 Cube, Octahedron and Dodecahedron

TETRAGONAL SYSTEM

15 Prism and Pinacoid
16 Zircon
17 Tetragonal bipyramid

18 Ditetragonal prism and Basal Pinacoid
19 Prism and Pyramid
20 Ditetragonal Pyramid

ORTHORHOMBIC SYSTEM

21 Basal, Brachy and Macro pinacoids
22 Prism and Basal pinacoid
23 Bipyramid
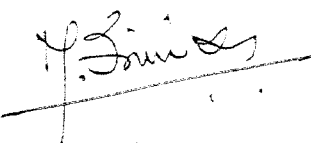24 Brachy Pinacoid and Macrodome

HEXAGONAL SYSTEM

25 Prism and Basal Pinacoid
26 Rhombohedron
27 Dihexagonal prism and Pinacoid

28 Bipyramid
29 Scalenohedron
30 Dihexagonal Pyramid

MONOGLINIC SYSTEM

31 Combination of Pinacoids
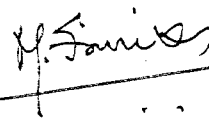32 Prism
33 Gypsum
34 Hemipyramid

TRICLINIC SYSTEM

35 Hemi Prisms
36 Axinite
37 Pinacoids

II. Identify 4 mineral thin sections from the list given below on the basis of their optical properties : (4x2=8)

38 Quartz	46 Biotite
39 Orthoclase	47 Garnet
40 Microcline	48 Olivine
41 Plagioclase	49 Chlorite
42 Augite	50 Kyanite
43 Hornblende	51 Siliimanite
44 Hypersthene	52 Leucite
45 Muscovite	53 Calcite

III Record (05)

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B.Sc GENETICS I YEAR
II- SEMESTER
PAPER-II: CYTOGENETICS (BS206)
QUESTION BANK FOR PRACTICALS

Duration= 2 hours   **Total= 25M**

I. MAJOR PRACTICALS   1x10=10M
  1. Study of Mitosis in Onion root tips
  2. Study of Meiosis in Maize/Grasshopper
  3. Preparation of Drosophila Salivary gland chromosome

II. MINOR PRACTICALS   1x5 = 5M
  1. Identification of chromosomal structural aberrations
  2. Identification of chromosomal numerical aberrations
  3. Identification of any one of the Mitotic stages
  4. Identification of any one of the Meiotic I & II stages

III. SPOTTERS / EXHIBITS   5x1 = 5M
  1. Cell cycle
  2. Mitosis stages
  3. Meiosis I & II stages
  4. Synaptonemal complex
  5. Chromosome structure
  6. Nucleosome
  7. Higher order organisation
  8. Lampbrush chromosome
  9. Polytene chromosome
  10. Chromosome structural aberrations-Deletions, Duplications, Inversions & Translocations
  11. Chromosome numerical aberrations- Euploidy & Auto-polyploidy and Allo-polyploidy
  12. Cell signalling- Paracrine, Endocrine, Autocrine
  13. Tight junction
  14. Gap junction
  15. G-protein coupled receptor
  16. Tyrosine kinase receptor
  17. Necrosis
  18. Apoptosis

IV. RECORD & VIVA   5M

FACULTY OF SCIENCE

B. SC., BIOCHEMISTRY SEMESTER II

END SEMESTER PRACTICAL EXAMINATIONS

CHEMISTRY OF NUCLEIC ACIDS AND BIOCHEMICAL TECHNIQUES

Model Paper

Duration: 2 hours   **Max. Marks 25**

1. Write the Principles for the following experiments   5 Marks

2. Major Experiment   10 Marks

3. Minor Experiment   5 Marks

4. Viva-Voce and Record   5 Marks

APPLIED NUTRITION AND PUBLIC HEALTH

END SEMESTER PRACTICAL EXAMINATIONS

SEMESTER – II
NUTRITIONAL BIOCHEMISTRY
PRACTICAL MODEL PAPER

DATE: BATCH: _____

TIME: 2 HoursMAX. MARKS: 25

I. QUANTITATIVE ANALYSIS   **20 MARKS**

WRITE IN DETAIL THE FOLLOWING:

a)   Aim and Principle   5 Marks

b)   Procedure   5 Marks

c)   Calculations, Observations and Result of the following experiment .   10 Marks

1Q. Estimate the amount of reducing sugar present in the given sample by BENEDICTS METHOD.
                              OR

2Q. Estimate the amount of proteins present in the given sample by BIURET METHOD.
                              OR

3Q. Estimate the amount of ascorbic acid present in 100 gms of green chillies by DYE METHOD.

II.   RECORD   **5 Marks**

CLINICAL NUTRITION AND DIETETICS

<u>**SEMESTER 2**</u>

BASIC NUTRITION

Date: **Max Marks: 25**
Time: 2 Hrs   Batch:

1. **Plan a day's diet for the given age and sex A/B/C or D**   **(10 Marks)**
   A. Pregnant woman aged 28 years (Sedentary work)
   B. Adolescent boy aged 16 years
   C. Adult Man (Moderate work)
   D. School going boy aged 12 years

   -   Nutrient requirement table   2 Marks
   -   Menu for the day   8 Marks

2. **Calculate the corresponding RDA (Energy, Protein and Iron)**   **(10 Marks)**

   -   Nutritive value of the diet planned   7 Marks
   -   Grand Total Table   3 Marks

3. **Practical Record**   **(5 Marks)**