

Dr. Babasaheb Marathwada University, A'bad

FACULTY OF SCIENCE

B.Sc. IIIyr Practical Examination

Biochemistry

Paper Laboratory – III B

Time 6 hrs

Mark - 100

- | | | |
|------|--|----|
| Q. 1 | Estimate Titrable acidity and ammonia in urine.
OR
Determine albumin in Serum.
OR
Estimate the amount of glucose in blood | 30 |
| Q. 2 | Determine the capacity of resin
OR
Detect the constituents of urine
OR
Effect of chloride on amylase. | 30 |
| Q.3 | Write down the principles of the two underlined....
Titrable acidity & ammonia / albumin in serum /
glucose in blood/ constituents of urine/ capacity of resin /
effect of chloride on amylase. | 15 |
| Q. 4 | Record Book & Project Work | 25 |

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FACULTY OF SCIENCE

B.Sc. IIIyr Practical Examination

Biochemistry

Paper Laboratory – III A

Time 6 hrs

Mark - 100

- | | | |
|------|---|----|
| Q. 1 | Isolate and Characterise RNA / Starch.
OR
Estimate SGOT / SGPT from given sample. | 25 |
| Q. 2 | Estimate the amount of creatinine / Phosphorus / Calcium/
Hemoglobin / RNA in the given sample | 30 |
| Q.3 | Write down the principles of the two underlined
Isolation of RNA / Starch / Estimation of SGOT/ SGPT / Pi
Ca / Hb / RNA / creatinine / Determination of achromic point
of amylase. | 15 |
| Q. 4 | Record Book & Viva-voce | 20 |
| Q. 5 | Seminar Report / Visit to Lab etc. | 10 |

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FACULTY OF SCIENCE

B.Sc. First Year Practical Examination

Biochemistry

(Paper: Laboratory – I- A)

Time 4 hrs		Mark - 100
Q. 1	Detect the given sample: Carbohydrate/Protein/Lipid.	40
Q. 2	Estimate the given carbohydrate by Hane's method OR Determine saponification value/iodine number of fats	35
Q.3	Write down the principles of : a) Five tests for Carbohydrates/Proteins/Lipids.	10
	b) Estamation of glucose by Hne's method/Saponification Value/ Iodine no.of fats.	05
Q. 4	Record Book	10

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FACULTY OF SCIENCE

B.Sc. First Year Practical Examination

Biochemistry

(Paper: Laboratory – I- B)

Time 4 hrs

Mark - 100

Q. 1	Estimate Glycine/ascorbic acid from the given sample: Carbohydrate/Protein/Lipid.	35
Q. 2	Verify Beer's Lambert law/Extract lipids/detect food adulterants/ determine pH of given solution	25
Q. 3	Write down the principles and procedure of : Preparation of standard buffers/ Titration curve of amino acids/ Determination of pH.	15
Q. 4	Write down the principles of: a) Estimation of glycine/ascorbic acid	08
	b) Beer's Lambert Law/extraction of lipids/ detection of food adulterants	07
Q. 5	Record Book	10

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FACULTY OF SCIENCE

B.Sc. Second Year Practical Examination

Biochemistry

(Paper: Laboratory – II- A)

Time 6 hrs

Mark - 100

Batch No.

Date

- Q. 1 Isolate and characterize albumin/casein/glycogen from biological source. 35
- OR
- Estimate protein (Biuret/Lowry's method).
- OR
- Determine the conformation of protein structure by Viscometer.
- Q. 2 Estimate glucose/Vitamin C/ nitrogen colorimetrically from given sample. 35
- OR
- Determine the free and total acidity of given sample.
- Q. 3 Write down the principle of : 20
- a) Isolation of albumin/casein/glycogen/Viscosity estn.
- b) Estimation of protein bluret/Lowry/glycose/nitrogen/Vitamin C/ free and total acidity.
- Q. 5 Record Book 10

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FACULTY OF SCIENCE

B.Sc. Second Year Practical Examination

Biochemistry

(Paper: Laboratory – II- B)

Time 6 hrs

Mark - 100

Batch No.

Date

Q. 1 Separate and identify amino acids by paper chromatography. 20

OR

Separate and identify amino acids/liquids by TLC.

OR

Detect the presence of enzyme in the given sample.

Q. 2 Find out the effect of substrate/temperature/pH/enzyme concn. 30
on enzyme activity Report the km/optimum temp/pH/eng.concn.

Q. 3 Report on Seminar/Project/ Visit to Lab or Research or 20
educational Institute.

Q. 4 Write down the principle of : 10
a) Separate of amino acids/ lipids by paper chromatography or
TLC.

b) Detection of enzyme-
Invertase/anlyase/Urease/alkaline phosphatase/lipase.

OR

Effect of substrate concn./enzyme concn./temp/pH on emzyme
activity.

Q. 5 Viva. 10

Q. 6 Record Book 10