Kadi Sarva Vishwavidyalaya, Gandhinagar
FACULTY OF SCIENCE
Exam Pattern For Semester End Evaluation
(All B.Sc Programme, As per NEP 2020)

Major Course- Credit 4

(Theory) :SEMESTER END EVALUATION (SEE)-50 Marks

Exam Duration 2.5 Hrs

Kadi Sarva Vishwavidyalaya, Gandhinagar
Semester End Evaluation (SEE)
Major Course Theory Examination

B.Sc Semester-I/II/III/IV/V/VI/VII/VIII Examination, Month– Year

Course Code	**:**		**Course Title**	**:**	
Date	**:**		**Time**	**:**	
Total Marks	**:**	**50**	**Duration**	**:**	**2.5 Hours**

Q-1 from Unit-1 Answer any 2 questions out of 3. Each question carries 5 marks.	**[5X2=10 Marks]**
Q-2 from Unit-2 Answer any 2 questions out of 3. Each question carries 5 marks.	**[5X2=10 Marks]**
Q-3 from Unit-3 Answer any 2 questions out of 3. Each question carries 5 marks.	**[5X2=10 Marks]**
Q-4 from Unit-4 Answer any 2 questions out of 3. Each question carries 5 marks.	**[5X2=10 Marks]**
Q-5 from all Unit 10 MCQ (Attend any 10 out of 12)(3 MCQ from each Unit) Each Question carries 1 Mark.	**[1X10=10 Marks]**

Minor/Multidisciplinary

(Theory) :SEMESTER END EVALUATION (SEE)-25Marks

Exam Duration 2.0 Hrs

Kadi Sarva Vishwavidyalaya, Gandhinagar
Semester End Evaluation (SEE)

Minor/Multidisciplinary Course Theory Examination

B.Sc Semester-I/II/III/IV/V/VI/VII/VIII Examination, Month– Year

Course Code	**:**		**Course Title**	**:**	
Date	**:**		**Time**	**:**	
Total Marks	**:**	**25**	**Duration**	**:**	**02 Hours**

Q-1 from Unit-1 Answer any 2 questions out of 3. Each question carries 5 marks.	**[5X2=10 Marks]**
Q-2 from Unit-2 Answer any 2 questions out of 3. Each question carries 5 marks.	**[5X2=10 Marks]**
Q-3 from all Unit 5 MCQ (Attend any 5 out of 6) 3MCQ from each Unit. Each Question carries 1 Mark.	**[1X5=05 Marks]**

Kadi Sarva Vishwavidyalaya, Gandhinagar
FACULTY OF SCIENCE
Evaluation Pattern For Semester End Evaluation
(All B.Sc Programme, As per NEP 2020)

SEC Course – 2 Credit

(Theory) :SEMESTER END EVALUATION (SEE)-25Marks

Exam Duration 2.0 Hrs

Kadi Sarva Vishwavidyalaya, Gandhinagar
Semester End Evaluation (SEE)
Skill Enhancement Course Examination

B.Sc Semester-I/II/III/IV/V Examination, Month– Year

Course Code	**:**		**Course Title**	**:**	
Date	**:**		**Time**	**:**	
Total Marks	**:**	**25**	**Duration**	**:**	**02 Hours**

Q-1 from Unit-1 Answer any 2 questions out of 3. Each question carries 5 marks.	**[5X2=10 Marks]**
Q-2 from Unit-2 Answer any 2 questions out of 3. Each question carries 5 marks.	**[5X2=10 Marks]**
Q-3 from all Unit 5 MCQ (Attend any 5 out of 6) 3MCQ from each Unit. Each Question carries 1 Mark.	**[1X5=05 Marks]**

KADI SARVA VISHWAVIDYALAYA

Microbiology Semester V Major Course

MBM303-3C – Microbiology Practical V

Practical Examination Skeleton (3 Days Examination)

TIME: 2.5 Hrs each day **TOTAL MARKS: 50**

Day-1

EX 1 Write the Principle, Requirement and Procedure for the given experiment and perform. **10 M**

1. To isolate antibiotic producer from soil sample by crowded plate / Wilkin's method.
2. To isolate Amylase producer from soil sample.
3. To isolate Protease producer from soil sample.
4. To isolate Lipase producer from soil sample.
5. To isolate organic acid producer from soil sample.

EX 2 Write the Principle, Requirement and Procedure for the given experiment and perform. **10 M**

1. To determine Antimicrobial spectrum of Antibiotic producer.
2. To estimate Streptomycin by sodium nitroprusside method.
3. To perform Bioassay of Penicillin.
4. To determine Oxygen Transfer Rate (OTR) under static, sparing and shaking condition by sodium sulphite method.

Day-2

Ex- 3 Write the Principle, Requirement and Procedure for the given experiment and perform. **10 M**

1. To determine Oxygen Transfer Rate (OTR) under static, sparing and shaking condition by sodium sulphite method.
2. To extract Pigment from *Pseudomonas* determination of its λ max.
3. To extract Pigment from *Serratia* and determination of its λ max.
4. Quantitative analysis of DNA using UV-Visible spectroscopy.
5. Quantitative analysis of RNA using UV-Visible spectroscopy

EX 4 Spotting **05 M**

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Day-3

EX 7 Write the Principle, Requirement and Procedure for the given experiment. **05 M**

1. Isolation of Plasmid DNA.
2. Isolation of Plant DNA.
3. Total RNA isolation.
4. Agarose gel Electrophoresis for separation of DNA.
5. SDS-PAGE for separation of proteins.
6. Restriction digestion of DNA
7. Ligation of DNA fragments
8. Transformation and selection of recombinants
9. DNA and RNA Purity check using UV spectroscopy.

EX 8 Viva **05 M**

EX 9 Journal and Slide Box **05 M**

KADI SARVA VISHWAVIDYALAYA

Microbiology Semester V Minor Course

MBE301-3C - Water Microbiology

Practical Examination Skeleton (1 Day Examination)

TIME: 2.5 Hours **TOTAL MARKS: 25**

EX 1 Write the Principle, Requirement and Procedure for the given experiment and perform. 10 M

1. Determination of Total Solids (TS), Total Dissolved Solids (TDS) and Total Suspended Solids (TSS) from water.
2. Estimation of Hardness from given water sample.
3. Estimation of NO2-N from the given water sample.
4. Estimation of Chloride from the given water sample.
5. Estimation of Phosphate from the given water sample.

EX 2 Write the Principle, Requirement and Procedure for the given experiment. 05 M

1. To study various water sampling techniques and sample preservation.
2. Test for Coliforms from drinking water.
3. Bacteriological analysis of water by Most Probable Number (MPN) technique.
4. Microbiological analysis of water by SPC.
5. Total Viable count of Fresh water /Marine water.

EX 3 Viva **05 M**

EX 4 Journal and Slide Box **05 M**

KADI SARVA VISHWAVIDYALAYA

Microbiology Semester V Minor Course

MBE302-3C - Advanced Agriculture Microbiology

Practical Examination Skeleton (1 Day Examination)

TIME: 2.5 Hours **TOTAL MARKS: 25**

EX -1 Write the Principle, Requirement and Procedure for the given experiment and perform. **10 M**

1. To perform micro propagation from appropriate sample.
2. To perform explant selection, sterilization, preparation and inoculation.
3. Sterilization techniques in plant tissue culture: Glass ware sterilization, Media sterilization.
4. Preparation of working complex nutrient medium (Murashige & Skoog's medium) from Stock media.
5. Isolation of pathogen from citrus cancer/tomto leaf curl/ groundnut rust.

EX- 2 Write the Principle, Requirement and Procedure for the given experiment. **05 M**

1. Study of laboratory equipment and tissue culture laboratory set up.
2. To study significance of growth hormones in culture medium.
3. Development of callus culture.
4. Sub culturing of initiated cultures.
5. Acclimatization of cultures.

EX 3 Viva **05 M**

EX 4 Journal and Slide Box **05 M**

KADI SARVA VISHWAVIDYALAYA

Kadi Sarva Vishwavidyalaya, Gandhinagar

Proposed Practical Evaluation Pattern for Science Discipline (All B.Sc.Programme)

B.Sc. Semester 5 (as per NEP 2020)

Skeleton for Chemistry Practical

Major(Practical): Practical Examination for two days (~~5=5Hrs.~~) Credit: 4

- **50M SEE (Practical Exam for End Semester)** 2-5 Hrs per day.

Practical-1(Inorganic Practical) Inorganic Preparations, Paper Chromatography, Gravimetric Analysis (15M Performance of Practical + 5M Writing section)	20M
Practical-2(Analytical Practical) (15M Performance of Practical + 5M Writing section)	20M
Journal(05marks) and Viva (05marks)	10M
Total:	50M

Minor (Practical): Credit:2

- **25M SEE (Practical Exam for End Semester) 2.5 Hrs. Practical Examination**

Practical-1 **(10M Performance of Practical + 5M Writing section)**	15M
Journal (05marks) and Viva (05marks)	10M
Total:	25M

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Skeleton for B.Sc. Mathematics Practical Exam

B.Sc. Semester 5 & 6 (as per NEP 2020)

Major (Practical):

- **50Marks SEE (Practical Exam for End Semester) 5 Hrs. Practical Examination**

Description	Marks
Writing and performance	30 Marks
Viva	10 Marks
Journal	10 Marks
Total:	50 Marks

For writing and performance:

2 Practicals of 6 marks will be asked out of which student have to perform 1 practical.

7 Practicals of 4 marks will be asked out of which students have to perform 6 Practicals

Kadi Sarva Vishwavidyalaya, Gandhinagar

Skeleton for B.Sc. Mathematics Practical Exam

B.Sc. Semester 5 & 6 (as per NEP 2020)

Minor/Multidisciplinary:

- **25 Marks SEE (Practical Exam for End Semester) 2.5 Hrs. Practical Examination**

Description	Marks
Writing and performance	15 Marks
Viva	5 Marks
Journal	5 Marks
Total:	25 Marks

For writing and performance:

7 Practicals of 3 marks will be asked out of which students have to perform 5 practicals.

KADI SARVA VISHWAVIDYALAYA

Kadi Sarva Vishwavidyalaya, Gandhinagar
Proposed Practical Evaluation Pattern for Science Discipline (All B.Sc. Programme)
B.Sc. Semester 5& Semester-6(as per NEP 2020)

Skeleton for Physics Practical

Major (Practical):Practical Examination for two days (5+5 Hrs.)

Credit: 4

- **50M SEE (Practical Exam for End Semester)**

Practical-1: • Performance of Practical: 10 Marks • Writing Section of Practical: 05 Marks (Aim & Apparatus, Figure/Circuit Diagram, Observations & Observation Table, Calculations/Plots, Results/Conclusion) Viva: 05 Marks	20M
Practical-2: • Performance of Practical: 10 Marks • Writing Section of Practical: 05 Marks (Aim & Apparatus, Figure/Circuit Diagram, Observations & Observation Table, Calculations/Plots, Results/Conclusion) Viva: 05 Marks	20M
Journal /Record Book	10M
Total:	**50 M**

Minor(Practical):
Credit:2

- **25M SEE (Practical Exam for End Semester) 2.5 Hrs. Practical Examination**

Practical-1: • Performance of Practical: 10 Marks • Writing Section of Practical: 05 Marks (Aim & Apparatus, Figure/Circuit Diagram, Observations & Observation Table, Calculations/Plots, Results/Conclusion) Viva: 05 Marks	20 M
Journal /Record Book	05 M
Total:	**25 M**