III SEMESTER B.PHARM END SEMESTER EXAMINATION

EVALUATION GUIDELINES FOR PRACTICAL EXAMINATION

PHARMACEUTICAL ORGANIC CHEMISTRY II

Time: 4 hrs **Max Marks: 35**

Note: 1. Procedure for experiments should be given.
2. Weighing can be done in electronic balance.

I. SYNOPSIS **(2.5 x 2 = 5 Marks)**

Principle involving chemical reactions of any two experiments

II. . MAJOR EXPERIMENT

Determination of acid value/ Saponification value/ Iodine value of fixed oils **(15 Marks)**

A. Standardization of the titrant : 5 Marks

B. Determination of specified analytical constant : 10 Marks

Actual normality should be given for calculating the specified analytical constant.

Evaluation is based on % error of result:

0 – 1 % error – 10 marks

1 – 2 % error - 9 marks

2 – 3 % error- 8 marks

3 – 5 % error- 6 marks

5 – 10 % error- 4 marks

Above 10% error: 3 marks to be given if the candidate has performed the experiment correctly.

III. MINOR EXPERIMENT **(10 Marks)**

Synthesize and submit any one organic compound mentioned in the syllabus

Evaluation & Mark distribution:

Colour	: 1 Mark
Odour	: 1 Mark
Dryness	:1 Mark
Texture	: 2 Marks
Yield	: 5 Marks

IV. VIVA VOCE **(5 Marks)**

III SEMESTER B.PHARM END SEMESTER EXAMINATION

EVALUATION GUIDELINES FOR PRACTICAL EXAMINATION

PHYSICAL PHARMACEUTICS I

Time: 4 hrs **Max Marks: 35**

I. SYNOPSIS **(2.5 x 2 = 5 Marks)**

Principle and procedure of any two experiments mentioned in the syllabus

II. MAJOR EXPERIMENT (Any one among the following) **(15 Marks)**

a) Study of particle size using Microscopic method

b) Determination of partition coefficient of benzoic acid between benzene and water

c) Determination of bulk density, true density and porosity

III. MINOR EXPERIMENT (Any one among the following) **(10 Marks)**

a) Angle of repose

b) Determination of pKa value of a weak acid by half neutralisation method

c) Determination of solubility of a drug at room temperature

Split of marks for Major and Minor Experiments:

Sl.No		Major (15)	Minor (10)
1.	Procedure with tabular column	4	3
2.	Calculation including graph	4	3
3.	Performance of the experiment	4	2
4.	Report	3	2
Total		**15**	**10**

IV. VIVA VOCE **(5 Marks)**

III SEMESTER B.PHARM END SEMESTER EXAMINATION

EVALUATION GUIDELINES FOR PRACTICAL EXAMINATION

PHARMACEUTICAL MICROBIOLOGY

Time: 4 hrs **Max Marks: 35**

I. SYNOPSIS **(2.5 x 2 = 5 Marks)**

The principle and /or procedure of any two experiments mentioned in syllabus.

II. MAJOR EXPERIMENT **(15 Marks)**

Performing Gram's staining of the given pure culture (plate /slant/ broth) of established Gram positive or negative bacteria and the observations and report thereof in oil immersion objective of a compound microscope.

III. MINOR EXPERIMENT - I **(5 Marks)**

Performing motility of bacteria in a given broth culture by Hanging drop method and the observations and report thereof in high- power objective of a compound microscope.

IV. MINOR EXPERIMENT- II **(5 Marks)**

Performing Aseptic transfer techniques in an aseptic room/hood in any one of the following:

a) Transfer of loop –full of broth culture to afresh broth.
b) Transfer of a colony from a streak/ spread/pour plate or agar slant into fresh broth.
c) Transfer of a loop-full of broth culture to a streak plate or agar slant for isolation of pure culture.
d) Transfer of a sample of IV fluid to Fluid Thioglycollate medium by direct inoculation method.

SPILT UP OF MARKS:

SI. No	Details	Major (15)	Minor-I (5)	Minor-II (5)
1.	Optical Adjustment of microscope (focusing/illumination/nature of the focused field	5	2	
2.	Observations including diagram of field	5	1	
3.	Report	2 ½	1	½
4.	Overall adherence to Aseptic techniques and microbiological protocols while performing the experiments	2 ½	1	4 ½
	Total	**15**	**5**	**5**

V .VIVA VOCE **(5 Marks)**

III SEMESTER B.PHARM END SEMESTER EXAMINATION

EVALUATION GUIDELINES FOR PRACTICAL EXAMINATION

PHARMACEUTICAL ENGINEERING

Time: 4 hrs **Max Marks: 35**

I. SYNOPSIS **(2.5 x 2 = 5 Marks)**

Principle and procedure of any 2 experiments mentioned in the syllabus

II. MAJOR EXPERIMENT (Any one from the following) **(15 Marks)**

a) Determine the effect of surface area/concentration/viscosity on the rate of Evaporation.

b) Construct the drying curve for the given sample powder (determine the moisture content and loss on drying)

c) Perform the particle size analysis of the given sample powder by sieving.

d) Perform the particle size analysis of the given sample powder by beaker decantation.

e) Determine the mixing index of the given sample powder at different time intervals.

III. MINOR EXPERIMENT (Any one from the following) **(10 Marks)**

a) Determination of atmospheric humidity by Psychrometric method.

b) Determination of atmospheric humidity by dew point method.

c) Determine the effect of surface area/concentration/viscosity on the rate of filtration.

SPLIT UP OF MARKS:

Sl No		Major (15)	Minor (10)
1	Procedure with tabular column	4	3
2	Calculation including graph	4	3
3	Performance of the experiment	4	2
4	Report	3	2
	Total	**15**	**10**

IV. VIVA VOCE **(5 Marks)**