

FIRST YEAR B PHARM

SCHEME OF *PRACTICAL* EXAMINATION & SCHEME OF VALUATION

(from 2012 admission onwards)

PHARMACEUTICAL CHEMISTRY- I (INORGANIC & PHYSICAL CHEMISTRY)

(Time : 4 hrs , Max Marks : 80)

1. Synopsis- 15 marks

Two questions

Principle involved in the experiments mentioned in the syllabus.

2. Titrimetric assay of any one inorganic compound. 30 marks

Weighing of assay sample to be done .

Strength of the titrant solution to be provided.

Evaluation of assay done based on percentage error of result.

	0 %	-
	1% error	-
30 marks		
	1%	-
	2% error	-
25 marks		
	2%	-
	3% error	-
20 marks		
	3%	-
	5% error	-
15 marks		
	4%	-
	10% error	-

10 marks

Above 10% error, 5 marks to be given provided the candidate has performed the whole experiment including the calculation correctly..

3. Limit test

15 marks

The limit test of any one of the following impurities to be carried out in the sample provided.

a. Chloride	b. Sulphate	c. Iron	d. Heavy metals.
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Test sample should be provided in the original raw material form. The candidate should be aware of the sampling techniques. Official Pharmacopoeias are to be provided for reference.

Marks may be awarded based on the general presentation and the analytical interpretation of the results.

4. Preparation of the inorganic compound.

20 marks

Marks may be awarded, taking into consideration, the colour, nature and dryness of the compound.

PHARMACEUTICAL CHEMISTRY- II
(ORGANIC CHEMISTRY)

(Time : 4 hrs , Max Marks : 80)

1.SYNOPSIS

15 marks

Two questions May include (i) Qualitative tests for different functional groups and /or (ii) Principles of preparation of organic compounds.

2. MAJOR EXPERIMENT

40 marks

Identification of an unknown organic compound by a systematic qualitative analysis. Students shall not report the compound with its specific name.

Report the result as -aliphatic/aromatic.

-saturated/unsaturated.

-special element contained in it (like nitrogen, sulphur, halogens or phosphorus)

-functional group(s) it contains.

Compounds having the following functional groups may be given.

- i) Alcohol
- ii) Aldehyde
- iii) Ketone
- iv) Amines
- v) Carboxylic acids
- vi) Phenolic acids
- vii) Hydrocarbons
- viii) Esters
- ix) Amides and Diamides
- x) Phenols
- xi) Carbohydrates
- xii) Nitro compounds.

Preparation of a derivative of the organic compound is not implicated.

3. MINOR EXPERIMENT

25 marks

Preparation of an organic compound through a one step reaction.

Preparation of the following compounds shall be included.

- i) Preparation of Aspirin
- ii) Preparation of Acetanilide
-) Preparation of Iodoform
- i**) Preparation of Benzamide
- iii) Preparation of Phenyl benzoate

- iv) Preparation of Benzanilide
- ii) Preparation of Benzaldehyde phenyl hydrazone
- iii) Preparation of Benzene azo-2-naphthol
- v) Preparation of *p*-Nitroacetanilide
- vi) Preparation of *p*-Bromoacetanilide

Scheme of valuation

(I) SYNOPSIS (Total 15 marks)

Full marks shall be given for correct and complete answer, ie, the answer shall be complete with chemical structure and chemical equations. Otherwise marks shall be reduced proportionally.

II) MAJOR EXPERIMENT (Total 40 marks)

Identification of an unknown organic compound by a systematic qualitative analysis. Full credit shall be given for correct and complete answer. The answer shall be complete like "*the given organic compound is a saturated aromatic alcohol*" OR "*the given organic compound is a saturated aliphatic diamide (Urea) etc.*"

Mark distribution:

Aliphatic/Aromatic	: 5
Saturated/Unsaturated	: 5
Detection of elements	: 10
Qualitative tests including confirmatory tests	: 20

Marks shall be reduced proportionally if all the qualitative and confirmatory tests are not performed fully.

III) MINOR EXPERIMENT (Total 25 marks)

Preparation of an organic compound through a one step reaction. Full credit shall be given to the preparation if the compound prepared is of correct texture (Crystal shape), colour, odour, dryness and yield.

Mark distribution:

Colour	: 2
Odour	: 2
Dryness	: 3
Texture	: 5
Yield	: 13

Marks shall be reduced proportionally if any of the above criteria is not satisfactory.

PHARMACEUTICS –I
(Time : 4 hrs, Max Marks : 80)

1. Synopsis

(15 marks)

Principle, procedure, use, dose and label requirements of **ANY THREE** preparations.

2. ONE major preparation

(25 marks)

Any one emulsion

3. ONE minor preparation

(20 marks)

Include,

- a) Mixtures containing diffusible solids/ indiffusible solids/ precipitate forming liquids
- b) Biphasic Liniments/ lotions
- c) Ointments prepared by fusion method
- d) Powders with geometrical dilution

4. ONE minor preparation

(20 marks)

Include,

- a) Simple mixtures/ solutions Si
- b) Divided powders/ bulk /dusting powders Di
- c) Ointments prepared with trituration method Oi

SPLIT UP OF MARKS

	Major (25)	Minor (20)	Minor (15)
Calculation of working formula of the prescription (from given)	5	5	5
Evaluation of the product	10	10	10
Container selection and label	5	3	3
Performance of the experiment	5	2	2
TOTAL	25	20	20

HUMAN ANATOMY & PHYSIOLOGY

(Time : 4 hrs , Max Marks : 80)

Synopsis

- Two questions carrying
- includes principle / procedure of experiment

.Spotters

(2 1/2x10=25 marks)

- Include Bone/model/chart/instruments

III .Experiment

Two minor experiments

(2x20=40 marks)

OR

One major experiment

40 marks

Minor experiment include : B.P, Hemoglobin estimation Bleeding time, clotting time, ESR, Blood grouping, Heart rate, pulse rate, Body temperature, Tidal Volume, Vital Capacity.

Major Experiment include : RBC Count, WBC Count, Differential Count.

Mark distribution for minor experiment

Conduct of experiment	-	10 marks
Result + Experiment Viva	-	10 marks

Mark Distribution for major experiment

Conduct of experiment	-	20 marks
Result + Experiment Viva	-	20 marks

PHARMACOGNOSY I

(Time : 4 hrs , Max Marks : 80)

I Synopsis 15 marks

a. Chemical test/detection of adulterants of any three drugs from following:
Honey, Agar, Tragacanth, Starch, Asafoetida, Benzoin, Myrrh, Acacia, Castor oil,
Shark liver oil, Woolfat, Bees wax

II Taxonomy 20 marks

Mark Distribution

Diagram	-	8 marks
Description	-	8 marks
Floral Formula	-	2 marks
Floral Diagram	-	2 marks.

III. Transverse section of any one crude drug mentioned in the syllabus 24 marks

Diagram	-	4 marks
T.S	-	20 marks

IV Spotters 21 marks

Identification

Biological Source

Chemical Constituents

and uses of any seven organized and unorganized drugs mentioned in the theory.

(3 x

7=21)