

IV BPHARM
SCHEME FOR PRACTICAL EXAMINATIONS
PHARMACEUTICAL CHEMISTRY V

Max marks:100

Duration:4hrs

1. SYNOPSIS

(4x5=20 Marks)

Principle including chemical reactions of any four experiments.

II. Synthesize and submit dry pure recrystallised product of drug intermediate/drug candidate involving one step. Carry out the identification tests and melting point to confirm the product synthesized. (Procedure should be given)

25+5 marks

Yields, colour, texture, dryness and recrystallisations

Identification tests and melting point

10 Marks

III. Quantitative estimation/ Assay of synthetic drug in formulation and report the amount of drug present/ the percentage purity of the drug in the formulation. (Procedure should be given)

20 marks

In case of experiment involving titration, the strength of titrant solution to be provided. Evaluation is based on percentage error of the report.

0-1% error- 20 marks

1-2% error- 17 marks

2-3% error- 13 marks

3-5% error- 8 marks

6-10% error- 5 marks

Above 10% error, 3 marks to be given provided the whole experiment is correct.

Viva voce

20 Marks

FINAL YEAR B.PHARM SCHEME FOR PRACTICAL EXAMINATIONS

PHARMACEUTICAL ANALYSIS – II

Time: 4 Hours

Max. Marks: 100

I. Synopsis: Any four questions like the principle involved in practical exercises may be asked.

(4x5=20 marks)

Note: 15 minutes time shall be allotted for answering the questions.

II. Major Experiment: Carry out the Assay of the given sample of single component tablets / capsules by U.V.-visible spectroscopy / spectrofluorimetry and report

the percentage of labeled / stated amount present in the average weight of the tablet / capsule contents.

(35 marks)

Note: Evaluation is done based on the percentage error of the result as follows:-

1% (+/-) error	....	35 marks
2% (+/-) error	....	28 marks
3% (+/-) error	....	20 marks
4% (+/-) error	....	15 marks
5% (+/-) error	....	10 marks
> 5% error	....	10 marks, provided the candidate has including the calculations, correctly.

- III. Minor Experiment:** Perform a paper chromatographic / TLC separation of the given mixture (in solution) containing two components and identify each component in the unknown mixture, by simultaneously running three standards two of which are the components in the unknown mixture. **(25 marks)**

Evaluation is done as follows:-

Quality of Chromotogram	....	15 marks
Identification of Components	....	10 marks

Marks may be reduced proportionately for poor resolution, tailing, and other defects and for wrong identification.

Viva-voce **20 marks**

**FINAL YEAR B.PHARM PRACTICAL EXAMINATION
PHARMACETUICS - VI
(FORMULATIVE & INDUSTRIAL PHARMACY)**

Time: 4 Hours

Max. Marks for Practical: 80
Max. Marks for Viva: 20

2. PRACTICAL

- 1. Synopsis. (5x4=20)**

Any Four questions from the Principle and / or procedure involved in the experiments mentioned in the syllabus.

- 3. Major experiment. (35 marks)**

Any one from the following list.

- i. Preparation & evaluation (drug loading) of micro spheres / micro particles / micro capsules

- ii. Preparation & evaluation (angle of repose, Carr's compressibility index and Hausner ratio) of granules for 30 tablets.
- iii. Preparation of 30 tablets by direct compression using given excipient (s) & its evaluation (hardness, friability and disintegration time).
- iv. Preparation of 30 tables by using the given granules & its evaluation (hardness, friability and disintegration time).
- v. Formulation, ampoule filling and sealing and evaluation (clarity test and leak test of parenterals).
- vi. Assessment of effect of elevated temperature (exposure time = 90 minutes) on physical and / or chemical stability of given formulation.

4. Minor experiment.

(25 marks)

Any one from the following list.

- i. Preparation & Labeling of Cream.
- ii. Preparation & Labeling of shampoo.
- iii. Preparation & Labeling of Nail Polish.
- iv. Preparation & Labeling of Lipstick.
- v. Preparation & Labeling of Dentifrice.
- vi. Preparation & Labeling of Shaving Cream.

SPLIT UP OF MARKS

Sl. No.	PARTICULARS	MAJOR (35)	MINOR (20)
1.	Calculations	5	3
2.	Preparation / formulation / evaluation	20	10
3.	Container selection / label	5	5
4.	Report	5	2
	TOTAL	35	20

Viva voce

(20 marks)

FINAL YEAR B.PHARM SCHEME FOR PRACTICAL EXAMINATIONS

PHARMACOGNOSY- III

Time: 4 Hours

Max. Marks: 100

I. Synopsis

Isolation of any one phytochemical listed in syllabus / Physicochemical evaluation of crude drugs and Formulations / Tissue Culture / Estimation of Phytochemicals given in the syllabus / standards of fixed oils (Four Questions)

(20 marks)

- | | | |
|------|---|------------|
| I. | Isolation and calculation of percentage yield of any one phytochemical listed in syllabus / isolation of starch from potato / calcium citrate from lemon juice / casein from milk / protein from ground nut | (25 marks) |
| II. | Simple TLC / Paper Chromatography experiment. | (15 marks) |
| III. | Quantitative Estimation / Analysis of fixed oils / Estimation of phytochemicals / Refractive index / Extractive value / Quantitative Microscopy. | (20 marks) |
| IV. | Viva voce | (20 marks) |

FINAL YEAR B.PHARM SCHEME FOR PRACTICAL EXAMINATIONS

PHARMACOLOGY- III

Max Marks - 100

Duration 4Hrs

1. Synopsis

20 marks

Four questions related to Pharmacology Practical's with 5 marks each

Example -Principles of Bioassay

Indications of Bioassay

Types of Bioassay

Screening of Analgesic activity

Screening of Anticonvulsant activity

Screening of Anti-inflammatory activity

Screening of Anti-catatonic activity

Screening of Skeletal muscle relaxant activity

Screening of Anticonvulsant activity

2. **Major Experiments**

35 Marks

Example -

To estimate the strength of the test sample of agonist/ drug (e.g. Acetylcholine, Histamine) using a suitable isolated smooth muscle preparation employing matching bioassay.

To estimate the strength of the test sample of agonist/ drug (e.g. Acetylcholine, Histamine) using a suitable isolated smooth muscle preparation by interpolation bioassay.

To estimate the strength of the test sample of agonist/ drug (e.g. Acetylcholine, Histamine) using a suitable isolated smooth muscle preparation by three point bioassay

Identification of unknown drug (spasmogens/ spasmolytics) using a suitable isolated smooth muscle preparation

Minor Experiments

25 Marks

Example-

Study of local anaesthetic property of procaine and lignocaine by -Surface Anesthesia (corneal reflex-rabbit)

Study of local anaesthetic property of procaine and lignocaine by Infiltration anesthesia (guinea pig)

Statistical calculations in experimental pharmacology by giving suitable data.

- a. Students-t-test b. ANOVA.

VIVAVOCE

20 MARKS

FINAL YEAR B.PHARM SCHEME FOR PRACTICAL EXAMINATION

PHARMACY PRACTICE

Time: 4 Hours

Max. Marks: 100

I.

- Synopsis
- Examples **(20 marks)**
- Dosage adjustment in geriatrics, pediatrics, heart failure, renal failure cases
- Inventory control methods (ABC, ABC-VED matrix, ABC-VED-SOS matrix)
- Evaluation of surgical dressings

II. Major experiments

Examples

(35 marks)

Critically analyze case and present the evaluation in traditional documentation format (SOAP or FARM)

PPn of Slide	-	15
Presentation & Answering Questions	-	20

Give a verbal presentation of counseling for the patient on the given Prescription

Verbal presentation	-	15
Answering questions	-	20

B Examples

- The drug information queries by using modified systematic approach for drug information retrieval – 20
- Preparation of drug profiles, leaflets, packaging inserts. **(25 marks)**

III.

Viva voce

(20 marks)

- All the cases recorded in the practical record can ask for examination
- The case should contain at least two problems.