


Vidarbha Youth Welfare Society's
INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH
Borgaon (Meghe), Wardha (M.S.)

**MECHANISM OF INTERNAL / EXTERNAL
ASSESSMENT IS TRANSPARENT AND THE
GRIEVANCE REDRESSAL SYSTEM IS
TIME- BOUND AND EFFICIENT**




(Dr. R. O. Ganjiwale)
Principal
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2.5.1 (Q_iM) Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient (Write description in a maximum of 500 words)

College Level:


- Students are made aware of Continuous assessment scheme of PCI for Theory and Practical. Term work marks are displayed on notice board. Any discrepancy in continuous assessment is resolved at college level.
- If a student is not able to appear for examination due to medical or any genuine reason, examination is conducted for that student as per norms, provided he/she submits application enclosing proper documents supporting the problem cited.
- If any student scores less mark and wants to improve in that subject, he/ she can appear once in next semester for the Improvement Examination.
- The grievances of the students with respect to assessment are clarified by showing his/ her performance in the answer sheet.
- The answer sheets of such students are assessed once again in the presence of the students. If any totalling mistake is identified by the student, then the corrections in the total is immediately done by the faculty members.
- Any student who is not satisfied with the assessment and award of marks may approach the Exam Controller who can inform the matter to the principal.
- The institute follows open evaluation system where the student performance is displayed on the notice board and the same is informed to the parents. Students can raise the grievance, if any, within 7 days from the date of display of marks.

University Level:

- The grievances during the conduction of the University Online/ offline theory examinations and discrepancies in the mark sheets are addressed and discussed in consultation with College Examination Board and addressed to the Director of Board of Examination and Evaluation, RTMNU, Nagpur.
- The incharge of College Examination Board forward the application of students to the University for the further action.

- University declares the schedule for revaluation and student can demand photocopy of corrected answer script after declaration of the results.
- Assistance is provided by the College Examination Section to apply regarding the student's grievances to the Director Board of Examination and evaluation, RTMNU, Nagpur.




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CONTINUOUS INTERNAL EVALUATION GUIDELINES

Internal assessment: Continuous mode

The marks allocated for Continuous mode of Internal Assessment shall be awarded as per the scheme given below.

Table-XI: Scheme for awarding internal assessment: Continuous mode

Theory		
Criteria	Maximum Marks	
Attendance (Refer Table – XII)	4	2
Academic activities (Average of any 3 activities e.g. quiz, assignment, open book test, field work, group discussion and seminar)	3	1.5
Student – Teacher interaction	3	1.5
Total	10	5
Practical		
Attendance (Refer Table – XII)	2	
Based on Practical Records, Regular viva voce, etc.	3	
Total	5	

Table- XII: Guidelines for the allotment of marks for attendance

Percentage of Attendance	Theory	Practical
95 – 100	4	2
90 – 94	3	1.5
85 – 89	2	1
80 – 84	1	0.5
Less than 80	0	0

Sessional Exams

Two Sessional exams shall be conducted for each theory / practical course as per the schedule fixed by the college(s). The scheme of question paper for theory and practical Sessional examinations is given below. The average marks of two Sessional exams shall be computed for internal assessment as per the requirements given in tables – X.

Sessional exam shall be conducted for 30 marks for theory and shall be computed for 15 marks. Similarly Sessional exam for practical shall be conducted for 40 marks and shall be computed for 10 marks.

Question paper pattern for theory Sessional examinations

For subjects having University examination

I. Multiple Choice Questions (MCQs)	=	10 x 1 = 10
OR		OR
Objective Type Questions (5 x 2) (Answer all the questions)	=	05 x 2 = 10
I. Long Answers (Answer 1 out of 2)	=	1 x 10 = 10
II. Short Answers (Answer 2 out of 3)	=	2 x 5 = 10

Total	=	30 marks

For subjects having Non University Examination

I. Long Answers (Answer 1 out of 2)	=	1 x 10 = 10
II. Short Answers (Answer 4 out of 6)	=	4 x 5 = 20

Total	=	30 marks

Question paper pattern for practical sessional examinations

I. Synopsis	=	10
II. Experiments	=	25
III. Viva voce	=	05

Total	=	40 marks

1. Promotion and award of grades

A student shall be declared PASS and eligible for getting grade in a course of B.Pharm. program if he/she secures at least 50% marks in that particular course including internal assessment. For example, to be declared as PASS and to get grade, the student has to secure a minimum of 50 marks for the total of 100 including continuous mode of assessment and end semester theory examination and has to secure a minimum of 25 marks for the total 50 including internal assessment and end semester practical examination.

2. Carry forward of marks

In case a student fails to secure the minimum 50% in any Theory or Practical course as specified in 12, then he/she shall reappear for the end semester examination of that course. However his/her marks of the Internal Assessments shall be carried over and he/she shall be entitled for grade obtained by him/her on passing.

3. Improvement of internal assessment

A student shall have the opportunity to improve his/her performance only once in the Sessional exam component of the internal assessment. The re-conduct of the Sessional exam shall be completed before the commencement of next end semester theory examinations.

4. Re-examination of end semester examinations

Reexamination of end semester examinations shall be conducted as per the schedule given in table XIII. The exact dates of examinations shall be notified from time to time.

Table-XIII: Tentative schedule of end semester examinations

Semester	For Regular Candidates	For Failed Candidates
I, III, V and VII	November / December	May / June
II, IV, VI and VIII	May / June	November / December

Question paper pattern for end semester theory examinations

For 75 marks paper

I. Multiple Choice Questions(MCQs)	=	20 x 1	=	20
OR				OR
Objective Type Questions (10 x 2)	=	10 x 2	=	20
(Answer all the questions)				
II. Long Answers (Answer 2 out of 3)	=	2 x 10	=	20
III. Short Answers (Answer 7 out of 9)	=	7 x 5	=	35

Total = 75 marks

For 50 marks paper

I. Long Answers (Answer 2 out of 3)	=	2 x 10	=	20
II. Short Answers (Answer 6 out of 8)	=	6 x 5	=	30

Total = 50 marks

For 35 marks paper

I. Long Answers (Answer 1 out of 2)	=	1 x 10	=	10
II. Short Answers (Answer 5 out of 7)	=	5 x 5	=	25

Total = 35 marks

Question paper pattern for end semester practical examinations

I. Synopsis	=	5
II. Experiments	=	25
III. Viva voce	=	5

Total = 35 marks

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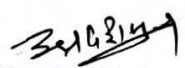
SECOND SESSIONAL EXAMINATION (THEORY), 2021-2022

As per PCI Pattern (Subjective)

B.PHARM- Sem - VI


T I M E T A B L E (Revised)

Day & Date	Time	Class	Subject
FRIDAY 06-05-22	9.30 am To 10.30 am	B. PHARM SEM - VI	MEDICINAL CHEMISTRY- III
SATURDAY 07-05-22	9.30 am To 10.30 am	B. PHARM SEM - VI	PHARMACOLOGY - III
MONDAY 09-05-22	9.30 am To 10.30 am	B. PHARM SEM - VI	HERBAL DRUG TECHNOLOGY
TUESDAY 10-05-22	9.30 am To 10.30 am	B. PHARM SEM - VI	BIOPHARMACEUTICS & PHARMACOKINETICS
WEDNESDAY 11-05-22	9.30 am To 10.30 am	B. PHARM SEM - VI	QUALITY ASSURANCE
THURSDAY 12-05-22	9.30 am To 10.30 am	B. PHARM SEM - VI	PHARMACEUTICAL BIOTECHNOLOGY


(Ms. S. P. Gautam/Mr. A. J. Deshmukh)
Exam-in-Charge

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(Dr. R.O. Ganjiwale)
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Borgaon (Meghe) Wardha

SECOND SESSIONAL PRACTICAL EXAMINATION, 2021-2022

As per PCI Pattern (Subjective)

B. PHARM - III (SEM - VI)

T I M E T A B L E (Revised)

DAY & DATE	TIME	BATCH	SUBJECT
MONDAY 02-05-22	9.30 A.M. TO 1.30 P.M. 9.30 A.M. TO 1.30 P.M. 9.30 A.M. TO 1.30 P.M.	A B C	PHARMACOLOGY - III MEDICINAL CHEMISTRY- III HERBAL DRUG TECHNOLOGY
WEDNESDAY 04-05-22	9.30 A.M. TO 1.30 P.M. 9.30 A.M. TO 1.30 P.M. 9.30 A.M. TO 1.30 P.M.	B C A	PHARMACOLOGY - III MEDICINAL CHEMISTRY- III HERBAL DRUG TECHNOLOGY
THURSDAY 05-05-22	9.30 A.M. TO 1.30 P.M. 9.30 A.M. TO 1.30 P.M. 9.30 A.M. TO 1.30 P.M.	C A B	PHARMACOLOGY - III MEDICINAL CHEMISTRY- III HERBAL DRUG TECHNOLOGY

Gadhang

(Ms. S. P.Gautam / Mr. A. J. Deshmukh)

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R.O. Ganjiwale

(Dr. R.O. Ganjiwale)

Principal

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SECOND SESSIONAL THEORY EXAMINATION 2021-2022

B. PHARM III (Sem VI)

SUBJECT:- HERBAL DRUG TECHNOLOGY

Time: 1.00 Hour

Date: 09/05/2022

Max. Marks: 30

Instructions: 1] Solve all the questions.

Que.No. 1 Attempt all the questions. (10)

- a) Define & classify herbal excipients with examples.
- b) What are phytosomes? Explain.
- c) Define Biopiracy and IPR?
- d) What are the objectives of GMP?
- e) Give biological source, chemical constituents and uses of Amla.

Que.No. 2 Solve any ONE of the following (10)

- a) Describe WHO guidelines for the assessment of herbal drugs.
- b) Explain infrastructural and general requirements of factory premises.

Que.No.3 Solve any TWO of the following (10)

- a) Justify case study of curcuma.
 - b) Constitution of ASU- DTAB
 - c) What is patent? Discuss the procedure for obtaining a patent.
-

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SECOND SESSIONAL EXAMINATION 2021-2022

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SECOND SESSIONAL PRACTICAL EXAMINATION 2021-2022
B. PHARM III (Sem VI)
Subject: HERBAL DRUG TECHNOLOGY

Time: 4 Hrs.

Max Marks: 40

.....
Batch (A): 04.05.2022 [Time 9.30 am to 1.30 pm]
Batch (B): 05.05.2022 [Time 9.30 am to 1.30 pm]
Batch (C): 02.05.2022 [Time 9.30 am to 1.30 pm]

Que. No. 1: Synopsis.

10 Marks

Batch A 1. Describe distillation method of alcohol content determination in asava & arishta.
2. What are syrups? Give suitable examples of it.
3. Write botanical source of ephedra stem.
4. Differentiate between asava and arishta.
5. What are polyphenols? Justify.

Batch B 1. Describe maceration.
2. What are syrups? Give evaluation parameters of syrups.
3. Discuss the role of honey in herbal syrup formulations.
4. Give the reaction between citral and hydroxyl amine hydrochloride.
5. What is the biological source of cinchona bark?

Batch C 1. What are asavas & arishtas?
2. Define medicated and non-medicated syrups.
3. What is the biological source of cinchona bark?
4. What is ash value? Give its significance.
5. What is quantitative analysis?

Que. No. 2: Major experiment.

25 Marks

Determination of cineole content of given eucalyptus oil sample.

OR

Determination of alcohol content in given sample of asava and arishta.

Que. No. 3: Viva - voce.

05 Marks

Radhika
6/5/22

Vidarbha Youth Welfare Society's
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WARDHA

Name Aayushi S. Pandey Subject: Herbal drug Technology Examination First/Second
Third/Re Sessional

Class B-Pharm III Examination Seat No. 07 Date 09/05/22 Signature of the Supervisor

Q. No.	1	2	3	4
MARKS	9.5	10	9.5	-

TOTAL
29
30

Smt. A. S. Pandey
9/5/22

Start Writing answer below this line.

Ans a:

- ① Excipients / pharmaceutical aids.
- ② Little or no therapeutical volume.
- ③ Application -
 - i) To increase / make up volume of formulation
 - ii) Mask bitter taste
 - iii) Improve appearance
 - iv) Improve odour.

- o Colourants - Henna, Chlorophyll, Saffron
- o Diluents - Lactose, Mannitol
- o Binding Agents - Acacia, Tragacanth, Starch
- o Disintegrating Agents - Starch, Ispaghol husk
- o Waxes - Lanolin wax, Beeswax
- o Flavouring agents - vanilla, orange & lemon oil, Cardamom.
- o Sweetening agents - liquorice, stevia.
- o Viscosity builder - Acacia, Tragacanth, gelatin.

02 Ans b. - phytosomes include herbal ingredients surrounded by phospholipids
 - formed by bonding phosphatidyl choline with Active ingredients
 ↓
 'Complex'.

phospholipids $\left\{ \begin{array}{l} \text{water soluble choline head} \\ \text{water insoluble phosphatidyl position} \end{array} \right.$

choline heads bind with drug \rightarrow surrounded by phosphatidyl.

↓
Microsphere / vesicles

02 - Increase absorption & bioavailability & ~~in~~ protect ingredient from destructive gastric juice & enzymes.

Defn: (1) ~~is~~ Biopiracy term by 'Patmooney'

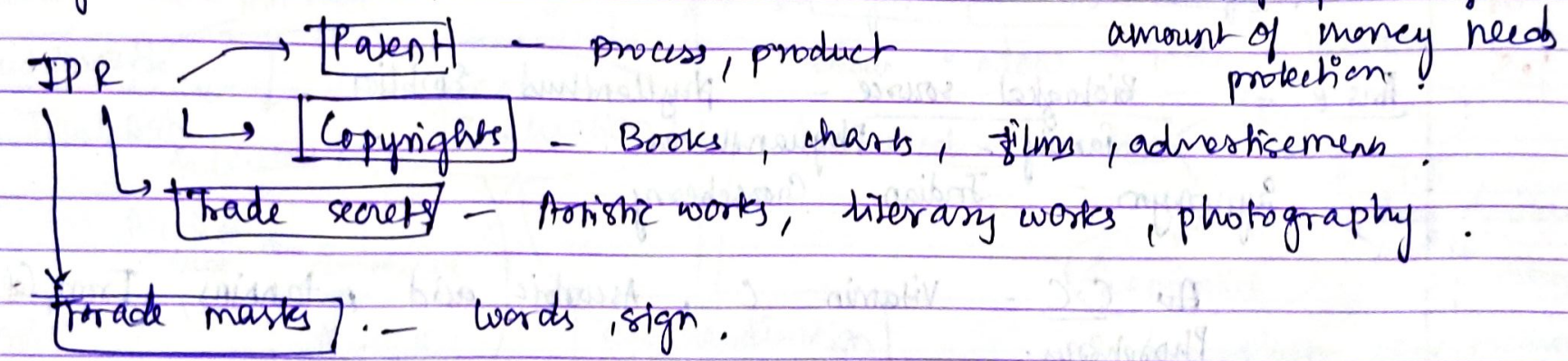
(2) Indigenous knowledge of ~~people~~ herbs/nature originating from indigenous people, utilised by others for their own profit without proper authorisation / compensation to indigenous people is Biopiracy.

(3) Bioprospector takes indigenous knowledge of ~~&~~ nature \rightarrow patented by medical companies \rightarrow not new / novel invention

02 " Deprove indigenous people to authorise it / ~~commercialise~~ commercialise it & take benefits of patent "

IPR - Exclusive rights given to inventor for his / her discovery excluding others from making, copying, using his proprietary subject matter over certain period of time

Legal characterisation



~~82~~
84

- And -
- ① clearly defined & controlled manufacturing procedures.
 - ② All critical process parameters should be validated

↓
to give consistent products as per specification & maintain compliance

- ③ changes in process evaluated - specially if it affects quality.
- ④ Records maintained manually / recording equipment to demonstrate that process / steps were in fact taken & performed & it gives specified quantity & quality of product.

- 5) Batch records to be maintained
- 6) System for batch recall
- 7) Any defects in marketed product or complaint must be examined & appropriate steps taken to prevent such future complaint & defects.

Ans e - Biological source - Phyllanthus Emblica
family - Phyllanthaceae
Synonym - Indian Gooseberry

At C.C - Vitamin C, Ascorbic acid, tannins, Iron, Calcium, Phosphorus.

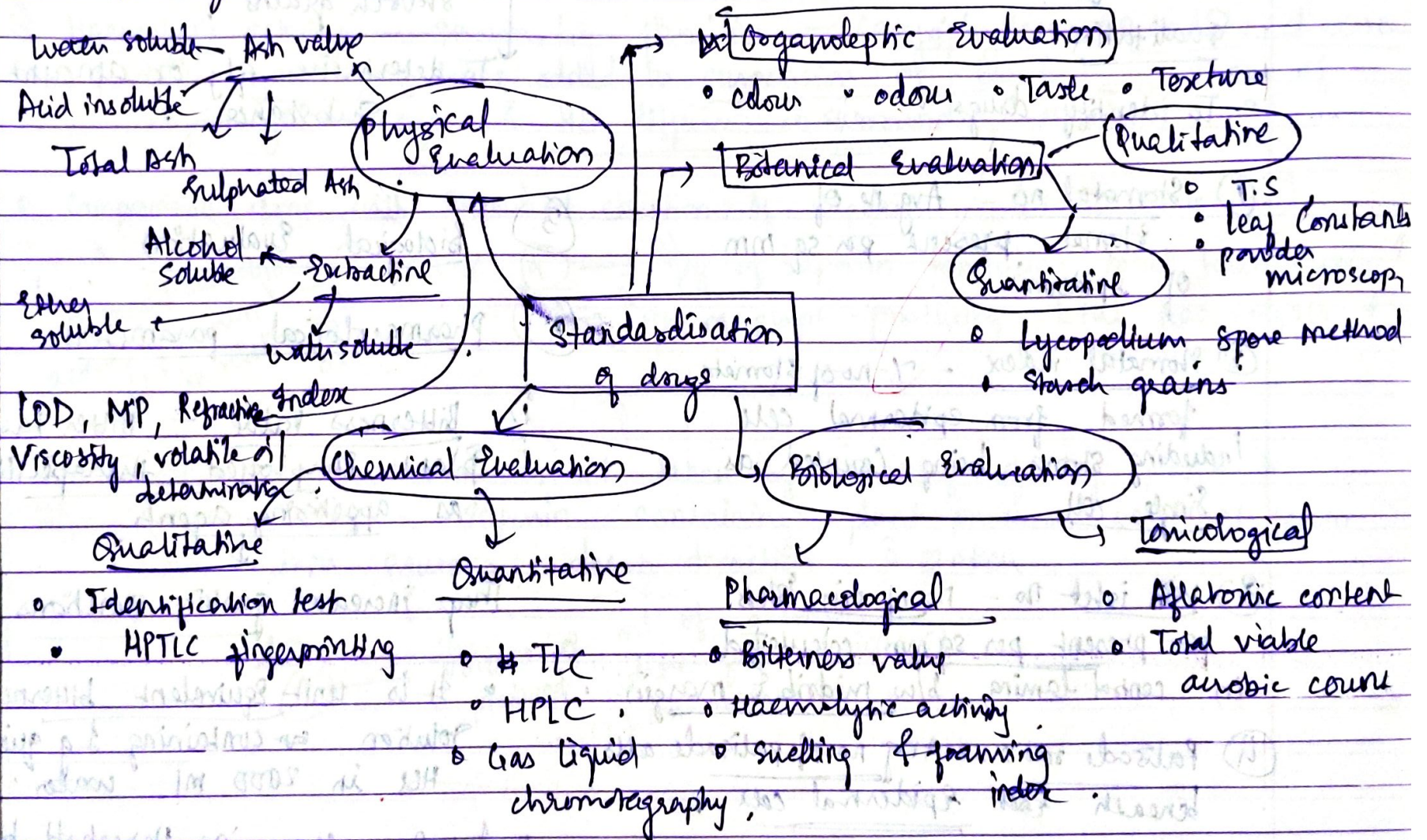
- Uses :-
- ① Hair Conditioner
 - ② Hair colourant
 - ③ Hair nourisher
 - ④ Anti-dandruff
 - ⑤ Treats liver problems
 - ⑥ Treats stomach upset
 - ⑦ Antioxidant
 - ⑧ Anti-cancer
 - ⑨ Anti-inflammatory

A Q2] A]

- ① Assessment / evaluation - confirmation of its identity,
- ② Quality, purity, adulterant determined by - physical, chemical, Biological, Macroscopic parameters.

③ Necessary to determine - biochemical variation , deterioration due to storage .

④ Assessment of shelf life / stability , Assessment of toxic effects based on toxicological studies .



①. Organoleptic - visual examination of colour, odour, taste.

② Botanical Evaluation -

Qualitative

o To identify drugs.

③ Quantitative - Lycopodium spore method,

starch grains.

To determine qty or amount of substance.

① Stomatal no - Avg no of stomata present per sq mm of epidermis.

② Stomatal index - $1 - \text{no of stomata formed from epidermal cell}$ including stoma being counted as single cell.

③ vein index no - no of vein isthms per present per sq mm calculated in central lamina b/w midrib & margin.

④ Palisade ratio - Avg no of palisade cells beneath each epidermal cell.

③ Biological Evaluation

① Pharmacological parameters

i) Bitterness value - Bitter tasting plant employed therapeutically as appetising agents

They increase gastric secretions.

o It is unit equivalent bitterness of solution containing 1g quinine HCl in 2000 ml water.

o Involves comparing threshold bitter concentration of extract with standard quinine HCl

Brixness value = $2000 \times \frac{(C)}{(A)} \times (B)$

Volume of quinine HCl
 Volume of test solution
 con of stock test

i) Haemolytic activity - shown by families - Caryophyllace, Sapindace, dioscoreac
 produces haemolysis when added to suspension of blood → shape of Erythrocyte changes & Hb diffuses in surrounding medium.

Comparison done with standard solution of saponin. (1000 units/g)

defined haemolytic activity of saponin in relation to or blood

$(1000) \times \frac{(A)}{(B)}$

Qty of saponin producing total haemolysis
 Qty of plant producing total haemolysis

ii) Swelling index - Volume in ml taken by swelling of 1g plant.

iii) foaming index - saponin containing plant produces persistent foam when their aqueous decoction is shaken.

$\frac{1000}{(A)}$

volume of ml of decoction produced where foam height of 1cm observed.

Toxicological parameters - i) pesticide residue - produces harmful effect like redness in eye, salivation, lacrimation, breathlessness

Systemic effects - Hypotension, tachycardia, Ataxia, Arrhythmia,

A/c to WHO & FAO (Food & Agricultural Organisation) there should be certain limits \rightarrow NMT 1% of pesticide

DDT, BHC, Aldrin - serious side effects.

$$\text{ARL} = \frac{\text{ADI} \times \text{EF} \times 60}{\text{MSDI} \times 100}$$

Mark acceptable daily intake \rightarrow extraction factor
Mean daily intake of pesticides.

- ii) Arseric & heavy metal - lead & cadmium - Environmental pollution.

$$\text{limits of lead} = \underline{10 \text{ mg/kg}} \quad \text{cadmium} = \underline{0.3 \text{ mg/kg}}$$

As per ADI values.

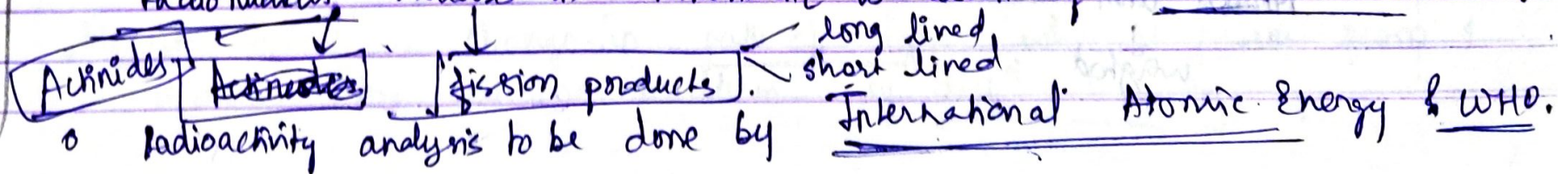
ii) Total viable aerobic Count determination - Bacteria & mould in plant comes from soil. A limits analysis of E-coli indicates harvesting process used.

	Limit (Raw material)	finished	prepared under hygienic conditions.
per gm	max 10^4 cells E coli	10'	
	max 10^5 cell mould propagules		
	max 10^7 cell Aerobic	Nil (topical product)	
	max 10^8 cell Sacchromyces	Nil	
	max 10^5 cell Aerobic	internal use product	
	max 10^8 cell Sacchromyces		
	max 10^3 cell Enterobacteria		

Aflatoxin Content - plant mycotoxin produced by Aspergillus flavus & Aspergillus parasiticus
 Determined by chromatographic method with std aflatoxin B₁, B₂, G₁, G₂ mixtures

ATC to IP - NMT 2 µg / kg of Aflatoxin B₁, & NMT 4 µg / kg of total Aflatoxin
 OSP - NMT 5 ppm of Aflatoxin B₁, & NMT 20 ppt of Total Aflatoxin

Radioactive Contamination - Irradiation may sterilise plant but issue of radionuclides released in environment as result of nuclear accident.



Physical Evaluation

- 1) Organic matter - product should be free from bacteria, mould, faeces.
 - Amt of organic matter should not be more than insect prescribed limit.
 - limit = NMT 2% w/w.

- 2) Ash value - indicates inorganic salts present, Quality & purity
 determined by Ash value

Total Ash

- Ash remaining after ignition.

- Indicates presence of Silica, Silicates, Carbonate, Phosphate

- Material weighed → crucible / china dish

Muffle furnace

Heated until white

↓
weighed

Acid insoluble Ash

- Residue remaining after boiling total Ash with dil HCl

↓
Igniting residue on filter paper

↓
Indicates Sand, Silica, Earthy matter..

Water Soluble Ash

- Indicates presence of water soluble salts

- Diffⁿ in wt b/w Total Ash & Residue after boiling total Ash

Extraction yield - Total Active constituents, extraction extracted from plant.

Alcohol soluble

5 gm drug \rightarrow macerated with
100 ml Alcohol \rightarrow 24 hrs.

Shake for 1st 6 hr

Stand for 18 hr

25 ml filtrate Evaporate

weighed

Water soluble

5 gm drug \rightarrow macerated with 100 ml
water \rightarrow 24 hr \rightarrow Shake for 1st
6 hrs, Allowed to stand for next
18 hr.

25 ml filtrate Evaporated

weighed

LOD - Amount of volatile matter present

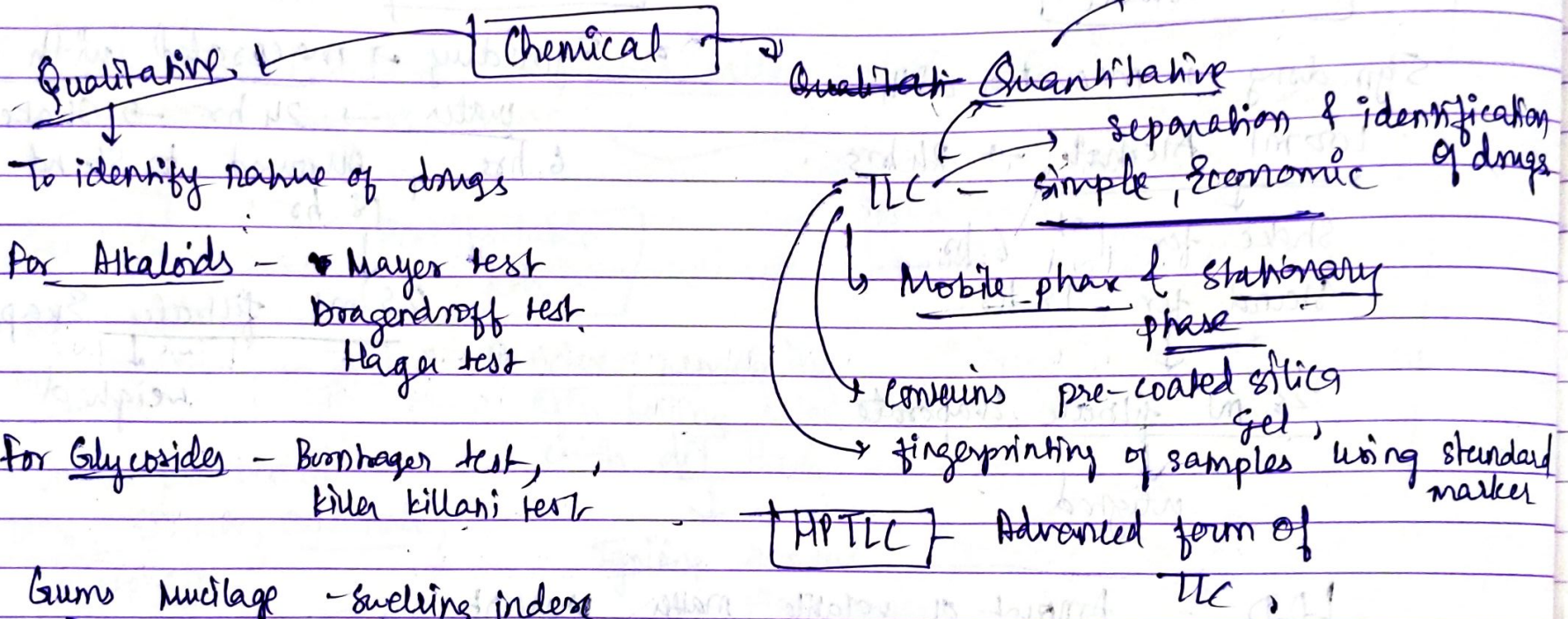
Drug \rightarrow Hot air oven \rightarrow drying & weighing continued at 1 hr
interval till diffⁿ b/w 2 successive weighing in NMT 0.25%.

Reading taken After constant weight.

Refractive Index - Change in path of light when it passes from 1
medium to another medium of diffⁿ density.

$$RI = \frac{\text{velocity of light in vacuum}}{\text{velocity of light in substance}}$$

Chromatography techniques used.



HPLC - used in Quality Control of drugs.
High performance thin layer chromatography.

Mobile phase - ~~Rapid~~ Gas
Stationary phase - liquid

liquid is forced through the stationary column.

Gas liquid chromatography

- Assay & Analysis of starting material.
- Assay of Impurities & Solvent.

10

Q 3 b) constitution of DTAB → Drug Technical advisory board is formed by central govt by notification in official Gazette.

- 1) Director General of Health Services (DGHS)
 - 2) Drug Controller India
 - 3) Director of central drug laboratory
- It advises both central & state govt on technical matters related to section 33-C of D & C Act

- 4) 1 govt Analyst
 - 5) 1 pharmacognocist
 - 6) 1 phytochemist
- nominated by central govt.

- 7) 1 teacher from Bhaishajya, ~~Pravyaguna~~ Kalpane & Pravyaguna & Gurupadam.
 - 8) 1 teacher from Ilmul Adria & Taklis wa Dawasagi
 - 9) 1 teacher from Gurupadam
- nominated by central govt.

- 10) 4 persons → 1 person from Unani pharmacopoeial committee.
- 2 person from Ayurvedic pharmacopoeial committee
- 1 person of Ayur Siddha pharmacopoeial committee.

11) 3 persons each representing Ayurvedic, Siddha & Unani industry

12) 3 persons each amongst practitioners of Ayurvedic & Siddha & Unani & Tibb system of medicine.

05-

Ans 9 :- Source - Curcuma longa
Family - Zingiberaceae.
CC - Curcumin, flavanoids, phenols, tannins.

Uses -
- wound healing
- Anti-inflammatory
- Anti-oxidant
- Anti-cancer.
- Flavouring Agent.
- Indicator in Acid-base titration
- Pye
- Alzheimer Alzheimer disease.

Case study → US patent on turmeric was awarded to university of Mississippi in 1995 (for its wound healing property) (Medical Center)
↓ [2 yrs later].

opposed by India's CSIR.

Claimed that Indians have been using turmeric for its wound healing properties for 1000 of years & patent on its use was not any kind of novel invention.

supported by documentary evidences of Indian Medical Association (Sanskrit text & journals)

↓
USPTO (US patent & trademark office) → investigated the
whole matter.

↓
" finally patent that was given to university of Mississippi
was cancelled) .

4.5

Signature

Vidarbha Youth Welfare Society's
INSTITUTE OF PHARMACEUTICAL EDUCATION & RESEARCH
WARDHA
PRACTICAL EXAMINATION

Name Aayushi S. Pandey Examination Seat No. 07 Examination second sessional practical examination

Class B Pharm III Subject Herbal drug technology - Practical Date 04/05/22
 (6th sem)

Signature of the Supervisor

Q. No.	1	2	3	4	5	6	TOTAL
MARKS							

Signature
21/5/22

Start Writing answer below this line.

Sr. no.	Questions	Max. Marks	Marks obtained
1.	Synopsis .	10 M	9.5
2.	Major Experiment	25 M.	24
3.	Viva Voce	5 M.	4.5
Total		40 M	38

$\frac{38}{40}$

Signature
21/5

Q1] Describe distillation method Alcohol Content determination of Asava & Arishta.

Q2] What are syrups. Give suitable example.

Q3] Write biological source of Ephedra stem.

Q4] Differentiate between Asava & Arishta.

Q5] Write about total polyphenols, groups of secondary metabolites.

Ans 1] Distillation method :- 25 ml sample + 25 ml H_2O .

↓
Carry out distillation, collect distillate 2 ml less than original volume (23 ml).

↓
At sp defined temp, determine specific gravity.

↓
Obtain % Alcohol content from USP Alcoholometric table.

Ans 2] ① Syrups are viscous oral liquids.

② Sugar / sucrose as vehicle + herbal extract → decoction / Infusion

③ Honey is used as preservative in syrup, it increases shelf life of syrup, thickens the syrup.

• 95% Ethanol used

• Soothing vehicle to relieve sore throat, cough mixtures, treats digestive issues.

(ex: Adulsa syrup.)

syrup contents:

- 1) Ashwagandha
- 2) Asparagus
- 3) ~~S. Bombax~~ Glycyrrhiza
- 4) Ela
- 5) Darusita
- 6) syrup q.s.

types, medicated & non-medicated → (ex: Raspberry syrup, orange syrup)

Ans 3 | Synonym :- Ma-huang, Yellow horse, yellow Astingent
Source :- Ephedra Gerardiana, Ephedra nebrodensis.

Family :- Ephedracea.

Constituents :- Ephedrine, pseudoephedrine, Norephedrine, isoeephedrine.

Uses :- Bronchial Asthma, cough, fever, allergy.

02

Asava

Arishta

1) Self generated alcoholic preparation prepared from fresh juices of plant material, water soaked dry drug, herbs

↓
treated with sugar / jaggery to carry out its fermentation.

1) Self generated alcoholic preparation from decoction of raw materials

↓
treated with jaggery to carry out fermentation.

02

Ex :- Ushirasava
Kumaryasava.

Ex :- Arjunarishta.

Ans 4 :- 1) polyphenols are group of secondary metabolites that are found in flavanoids, tannins, etc.

2) flavanoids shows anti-oxidant property because of its reducing nature

3) Due to which it has free radical scavenging property.

4) Used as :-

- Anticancer
- Anti-inflammatory
- Anti-pyretic
- Hepatoprotective

1.5

Ex :- Myristin, Rutin, Iquiritin, etc.

800
415

Vidarbha Youth Welfare Society's
INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH

WARDHA

Examination Seat No. 07 Subject Herbal drug Technology - Practical Signature of the Supervisor

Supplement No. 1 Date 04/05/22

SUP
4/5/22

Start Writing answer below this line.

Q2] Major experiment

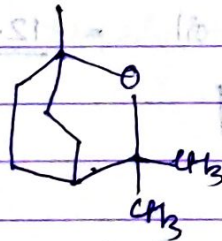
Aim :- To determine cineole content of given eucalyptus oil sample

Theory :- Cineole is the volatile oil present in Eucalyptus. Eucalyptus also contains Eucalyptin, eucalyptol, ferulic acid, gallic acid, etc.

Source is Eucalyptus globulus. family Myrtaceae, obtained from flowers of Artemisia maritime.

Uses - Expectorant, Anti-epileptic, Antihelminthic.

Structure :-



Molecular weight = 154.25 g
Molecular formula = $C_{10}H_{18}O$

Procedure :- ① weigh 3.0 g sample; treat with anhydrous sodium sulphate -

② Place the test tube in apparatus for freezing point.

③ When crystallisation occurs, rise in temperature occurs.

④ Remove it, temperature should not exceed $> 5^{\circ}\text{C}$

⑤ Crystallisation takes place when the mixture has fallen 3° below, stir continuously note the highest temperature.

⑥ Repeat the process until 2 temp obtained, do not differ by more than 0.2°C .

Observation :-

① for Eucalyptus oil :

▷ weight of empty bottle = 9.250 g

▷ weight of empty bottle + Eucalyptus oil = 12.084 g

▷ weight of Eucalyptus taken = 2.840 g

for O-cresol

▷ weight of empty weighing bottle = 9.250 g

▷ weight of empty bottle + O-cresol = 11.350 g

▷ wt of O-cresol = $11.350 - 9.250$

= 2.1 g

Observation Table

Estimation of % w/w of cineole Content -

Sr no	freezing point	Mean freezing point	% Cineole Content	Mean % Cineole Content
1	26°C		48.20 % w/w	
2	25°C	25.3°C	46.40 % w/w	47.0 % w/w
3	25°C		46.60 % w/w	

Result -

The cineole content from Eucalyptus oil was found to be 47.0 % w/w.

INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH

Borgaon (Meghe), Wardha

First / **Second** Sessional Attendance Sheet 2021 - 2022

B.PHARM (SEM-VI)

Sub - Herbal Drug Technology

Date - **09/05/2022**

Sr. No.	Name of Students			Remarks
BATCH:'A'				
1	Ku.	A. A.	Kothiwan	A. A. Kothiwan
2	Ku.	A. A.	Lichade	Alichade
3	Ku.	A. C.	Dongre	Dongre
4	Ku.	A. P.	Chaudhari	Chaudhari
5	Ku.	A. P.	Sute	Sute
6	Ku.	A. R.	Ghughe	Ghughe
7	Ku.	A. S.	Pandey	Pandey
8	Ku.	Alvina	Sheikh	Alvina Sheikh
9	Ku.	Aparna	Shree	Aparna Shree
10	Ku.	B. S.	Gupta	Gupta
11	Ku.	B. S.	Ghodmare	Ghodmare
12	Ku.	D. U.	Vaitage	Vaitage
13	Ku.	G. D.	Deshmukh	Deshmukh
14	Ku.	G. R.	Wadkar	Wadkar
15	Ku.	G. V.	Ingole	Ingole
16	Ku.	H. Y.	Sheikh	Sheikh
17	Ku.	K. C.	Nannaware	Nannaware
18	Ku.	K. V.	Patil	Patil
19	Ku.	M. N.	Dahake	Dahake
20	Ku.	M. N.	Sahu	Sahu
21	Ku.	M. V.	Waskar	Waskar
22	Ku.	P. J.	Lunge	Lunge
23	Ku.	P. S.	Bedarkar	Bedarkar
24	Ku.	P. V.	Ikhar	Ikhar
25	Ku.	R. K.	Saiyad	Saiyad
BATCH:'B'				
26	Ku.	R. R.	Gadekar	Gadekar
27	Ku.	R. R.	Sangole	Sangole
28	Ku.	S. A.	Itekar	Itekar
29	Ku.	S. D.	Lidbe	Lidbe
30	Ku.	S. G.	Gadekar	Gadekar
31	Ku.	S. G.	Maldhure	Maldhure
32	Ku.	S. M.	Chandore	Chandore
33	Ku.	S. M.	Ghode	S. M. Ghode
34	Ku.	S. N.	Sarode	Sarode
35	Ku.	S. S.	Zore	Zore
36	Ku.	S. U.	Verma	Verma
37	Ku.	S. P.	Polshettiwar	Polshettiwar

38	Ku.	T. S.	Tonpe	<i>Tonpe</i>
39	Ku.	V. D.	Madve	<i>Madve</i>
40	Ku.	V. G.	Ahuja	<i>Ahuja</i>
41	Ku.	V. P.	Mate	<i>Mate</i>
42	Ku.	V. R.	Talwekar	<i>Talwekar</i>
43	Ku.	V. S.	Gharat	<i>Gharat</i>
44	Ku.	V. S.	Himane	<i>Himane</i>
45	Ku.	V. S.	Mhaske	<i>Mhaske</i>
46	Mr.	A. A.	Doshi	<i>Doshi</i>
47	Mr.	A. M.	Lode	<i>Lode</i>
48	Mr.	A. U.	Nagtode	<i>Nagtode</i>
49	Mr.	B. R.	More	<i>More</i>
50	Mr.	G. G.	Dige	<i>Dige</i>
BATCH: 'C'				
51	Mr.	G. M.	Sable	<i>Sable</i>
52	Mr.	M. A.	Gede	<i>Gede</i>
53	Mr.	M. P.	Katwe	<i>Katwe</i>
54	Mr.	O. I.	Chikankar	<i>Chikankar</i>
55	Mr.	P. M.	Bomkantiwar	<i>Bomkantiwar</i>
56	Mr.	P. R.	Rawal	<i>Rawal</i>
57	Mr.	P. Y.	Jachak	<i>Jachak</i>
58	Mr.	S. D.	Fating	<i>Fating</i>
59	Mr.	S. J.	Thakare	<i>Thakare</i>
60	Mr.	S. R.	Bomkantiwar	<i>Bomkantiwar</i>
61	Mr.	T. A.	Khopde	<i>Khopde</i>
62	Mr.	V. S.	Admane	<i>Admane</i>
63	Ku.	G. S.	Garje	<i>Garje</i>
64	Ku.	K. A.	Garje	<i>Garje</i>
65	Ku.	M. M.	Biswas	<i>Biswas</i>
66	Ku.	N. P.	Uike	<i>Uike</i>
67	Ku.	N. S.	Bhoyar	<i>Bhoyar</i>
68	Ku.	P. S.	Rangire	<i>Rangire</i>
69	Ku.	R.	Purnekar	<i>Purnekar</i>
70	Ku.	R. M.	Telang	<i>Telang</i>
71	Ku.	T. V.	Durge	<i>Durge</i>
72	Mr.	A. F.	Pathan	<i>Pathan</i>
73	Mr.	A. S.	Kambale	<i>Kambale</i>
74	Mr.	D. S.	Borkar	<i>Borkar</i>
75	Mr.	K. N.	Sathe	<i>Sathe</i>
76	Mr.	M. P.	Rathod	<i>Rathod</i>

Room No => (311) Present = 40
 Absent = Nil
 Total = 40 } *sent*

(Dr. R. O. Ganjiwale)
 Principal

Room No = 314 Present = 36
 Absent = Nil
 Total = 36 } *sent*
 29/10/19

INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH

Borgaon (Meghe), Wardha

First / Second Sessional Attendance Sheet 2021 - 2022

B.PHARM (SEM-VI)

Sub - Herbal Drug Technology (practical)

Date - 2, 4 & 5th Mo
2022

Sr. No.	Name of Students			Remarks
	BATCH:'A' 4/5/2022			
1	Ku.	A. A.	Kothiwan	A. A. Kothiwan
2	Ku.	A. A.	Lichade	Alichade
3	Ku.	A. C.	Dongre	Kongre
4	Ku.	A. P.	Chaudhari	Chaudhari
5	Ku.	A. P.	Sute	Sute
6	Ku.	A. R.	Ghuge	Ghuge
7	Ku.	A. S.	Pandey	Pandey
8	Ku.	Alvina	Sheikh	Alvina Sheikh
9	Ku.	Aparna	Shree	Aparna Shree
10	Ku.	B. S.	Gupta	Gupta
11	Ku.	B. S.	Ghodmare	Ghodmare
12	Ku.	D. U.	Vaitage	Vaitage
13	Ku.	G. D.	Deshmukh	Deshmukh
14	Ku.	G. R.	Wadkar	Wadkar
15	Ku.	G. V.	Ingole	Ingole
16	Ku.	H. Y.	Sheikh	Sheikh
17	Ku.	K. C.	Nannaware	Nannaware
18	Ku.	K. V.	Patil	Patil
19	Ku.	M. N.	Dahake	Dahake
20	Ku.	M. N.	Sahu	Sahu
21	Ku.	M. V.	Waskar	Waskar
22	Ku.	P. J.	Lunge	Lunge
23	Ku.	P. S.	Bedarkar	Bedarkar
24	Ku.	P. V.	Ikhar	Ikhar
25	Ku.	R. K.	Saiyad	Saiyad
	BATCH:'B' 5/5/2022			
26	Ku.	R. R.	Gadekar	Gadekar
27	Ku.	R. R.	Sangole	Sangole
28	Ku.	S. A.	Itekar	Itekar
29	Ku.	S. D.	Lidbe	Lidbe
30	Ku.	S. G.	Gadekar	Gadekar
31	Ku.	S. G.	Maldhure	Maldhure
32	Ku.	S. M.	Chandore	Chandore
33	Ku.	S. M.	Ghode	S. M. Ghode
34	Ku.	S. N.	Sarode	Sarode
35	Ku.	S. S.	Zore	Zore
36	Ku.	S. U.	Verma	Verma
37	Ku.	S. P.	Polshettiwar	Polshettiwar

38	Ku.	T. S.	Tonpe	<i>P. Tonpe</i>
39	Ku.	V. D.	Madve	<i>V. Madve</i>
40	Ku.	V. G.	Ahuja	<i>V. Ahuja</i>
41	Ku.	V. P.	Mate	<i>V. Mate</i>
42	Ku.	V. R.	Talwekar	<i>V. Talwekar</i>
43	Ku.	V. S.	Gharat	<i>V. Gharat</i>
44	Ku.	V. S.	Himane	<i>V. Himane</i>
45	Ku.	V. S.	Mhaske	<i>V. Mhaske</i>
46	Mr.	A. A.	Doshi	<i>A. Doshi</i>
47	Mr.	A. M.	Lode	<i>A. Lode</i>
48	Mr.	A. U.	Nagtode	<i>A. Nagtode</i>
49	Mr.	B. R.	More	<i>B. More</i>
50	Mr.	G. G.	Dige	<i>G. Dige</i>
BATCH: 'C' 2/5/2022				
51	Mr.	G. M.	Sable	<i>G. Sable</i>
52	Mr.	M. A.	Gede	<i>M. Gede</i>
53	Mr.	M. P.	Katwe	<i>M. Katwe</i>
54	Mr.	O. I.	Chikankar	<i>O. Chikankar</i>
55	Mr.	P. M.	Bomkantiwar	<i>P. Bomkantiwar</i>
56	Mr.	P. R.	Rawal	<i>P. Rawal</i>
57	Mr.	P. Y.	Jachak	<i>P. Jachak</i>
58	Mr.	S. D.	Fating	<i>S. Fating</i>
59	Mr.	S. J.	Thakare	<i>S. Thakare</i>
60	Mr.	S. R.	Bomkantiwar	<i>S. Bomkantiwar</i>
61	Mr.	T. A.	Khopde	<i>T. Khopde</i>
62	Mr.	V. S.	Admane	<i>V. Admane</i>
63	Ku.	G. S.	Garje	<i>G. Garje</i>
64	Ku.	K. A.	Garje	<i>K. Garje</i>
65	Ku.	M. M.	Biswas	<i>M. Biswas</i>
66	Ku.	N. P.	Uike	<i>N. Uike</i>
67	Ku.	N. S.	Bhoyar	<i>N. Bhoyar</i>
68	Ku.	P. S.	Rangire	<i>P. Rangire</i>
69	Ku.	R.	Purnekar	<i>R. Purnekar</i>
70	Ku.	R. M.	Telang	<i>R. M. Telang</i>
71	Ku.	T. V.	Durge	<i>T. Durge</i>
72	Mr.	A. F.	Pathan	<i>A. Pathan</i>
73	Mr.	A. S.	Kambale	<i>A. Kambale</i>
74	Mr.	D. S.	Borkar	<i>D. Borkar</i>
75	Mr.	K. N.	Sathe	<i>K. Sathe</i>
76	Mr.	M. P.	Rathod	<i>M. Rathod</i>

	A	B	C	total
present	25	24	26	= 75
Absent	Nil	01	NT/	= 01

(Dr. R. O. Ganjiwale)
I/C Principal

Sadhase
5/5/22

INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH

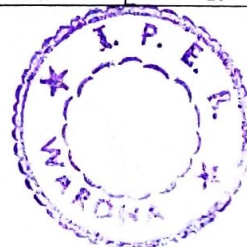
Borgaon (Meghe) Wardha

SECOND SESSIONAL EXAMINATION, 2021-2022

B.PHARM-III (SEM -VI)

*** RESULT - SHEET ***

S.N.	Name of Students	Pharmaceutical Medicinal Chemistry - III	Pharmacology - III	Herbal Drug Technology	Biopharmaceutics & Pharmacokinetics	Pharmaceutical Bitechology	Quality Assurance	Total	Result
1	Ku. A. A. Kothiwan	15.5	21	26	22.5	18	21.5	124.5	PASS
2	Ku. A. A. Lichade	23.5	22.5	27.5	29	25	24	151.5	PASS
3	Ku. A. C. Dongre	8.5	21.5	22.5	18.5	12.5	15.5	99	FAIL
4	Ku. A. P. Chaudhari	11.5	20	23	16.5	10	17	98	FAIL
5	Ku. A. P. Sute	22	22	26	27	25	20	142	PASS
6	Ku. A. R. Ghuge	20.5	18.5	25	18	17	22.5	121.5	PASS
7	Ku. A. S. Pandey	26.5	23	29	30	29	27.5	165	PASS
8	Ku. Alvina Sheikh	6.5	20	16	8	11	13.5	75	FAIL
9	Ku. Apama Shree	20	23	27.5	27	25.5	25.5	148.5	PASS
10	Ku. B. S. Gupta	11.5	16.5	22	20	15	17.5	102.5	FAIL
11	Ku. B. S. Ghodmare	21	20.5	25	26	20	21	133.5	PASS
12	Ku. D. U. Vaitage	12.5	22	23	22.5	17	19	116	FAIL
13	Ku. G. D. Deshmukh	13	18	23	16	11.5	20	101.5	FAIL
14	Ku. G. R. Wadkar	21.5	21	27.5	28.5	23	20.5	142	PASS
15	Ku. G. V. Ingole	23	22	25.5	27	24.5	22	144	PASS
16	Ku. H. Y. Sheikh	13.5	17	22.5	15.5	14	14	96.5	FAIL
17	Ku. K. C. Nannaware	13	18	22	15.5	16.5	17	102	FAIL
18	Ku. K. V. Patil	14.5	16.5	23.5	21	15	20	110.5	FAIL
19	Ku. M. N. Dahake	20	22	27	20	20	22	131	PASS
20	Ku. M. N. Sahu	14.5	18.5	24.5	16	15	23	111.5	FAIL
21	Ku. M. V. Waskar	6	16.5	23.5	13.5	6	13.5	79	FAIL
22	Ku. P. J. Lunge	19.5	18.5	21.5	15	17.5	17.5	109.5	PASS
23	Ku. P. S. Bedarkar	14	16	23	25	16.5	22.5	117	FAIL
24	Ku. P. V. Ikhar	14.5	17.5	16	15	9.5	16.5	89	FAIL
25	Ku. R. K. Saiyad	18	19	25.5	24	18	17	121.5	PASS
26	Ku. R. R. Gadekar	14	13	16.5	17.5	11	18	90	FAIL
27	Ku. R. R. Sangole	AB	18.5	15	7	13.5	15.5	69.5	FAIL
28	Ku. S. A. Itekar	11.5	15	16	14.5	11	10.5	78.5	FAIL
29	Ku. S. D. Lidbe	6	14.5	18	8.5	13.5	15	75.5	FAIL
30	Ku. S. G. Gadekar	20.5	19	26.5	25	19	20	130	PASS
31	Ku. S. G. Maldhure	18	20	24.5	15	21	23	121.5	PASS
32	Ku. S. M. Chandore	16.5	20.5	21.5	19	11	21.5	110	FAIL
33	Ku. S. M. Ghode	16	20	24.5	20	20.5	19.5	120.5	PASS



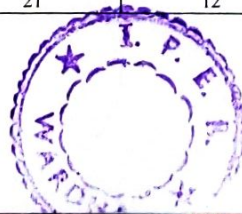

PRINCIPAL
 Institute of Pharmaceutical Education & Research
 Borgaon (Meghe), Wardha

SECOND SESSIONAL EXAMINATION, 2021-2022

B.PHARM-III (SEM -VI)

*** RESULT - SHEET ***

S.N.	Name of Students	Pharmaceutical Medicinal Chemistry - III	Pharmacology - III	Herbal Drug Technology	Biopharmaceutics & Pharmacokinetics	Pharmaceutical Bitechology	Quality Assurance	Total	Result
34	Ku. S. N. Sarode	25	22.5	27.5	30	28.5	25.5	159	PASS
35	Ku. S. S. Zore	11.5	18	23	19	19.5	20	111	FAIL
36	Ku. S. U. Verma	17	17	22.5	22.5	19	18	116	PASS
37	Ku. S. P. Polshettiwar	23.5	19.5	26.5	29.5	26	23.5	148.5	PASS
38	Ku. T. S. Tonpe	16	18.5	21.5	21	19	20	116	PASS
39	Ku. V. D. Madve	18	18.5	26.5	24.5	21	22	130.5	PASS
40	Ku. V. G. Ahuja	19.5	17.5	23.5	18.5	17	18	114	PASS
41	Ku. V. P. Mate	24.5	20	25.5	26	19	21	136	PASS
42	Ku. V. R. Talwekar	11	18.5	24.5	17	12	14	97	FAIL
43	Ku. V. S. Gharat	15.5	18.5	19	19	15.5	13	100.5	FAIL
44	Ku. V. S. Himane	17	21	24	17	15	19.5	113.5	PASS
45	Ku. V. S. Mhaske	21.5	21	23.5	24	25	24	139	PASS
46	Mr. A. A. Doshi	16.5	13.5	24	24	16.5	17	111.5	FAIL
47	Mr. A. M. Lode	17	22	27.5	29	25	19.5	140	PASS
48	Mr. A. U. Nagtode	4	11.5	15	15	10.5	12	68	FAIL
49	Mr. B. R. More	18.5	20.5	23	23.5	24	19.5	129	PASS
50	Mr. G. G. Dige	20	21.5	25	26	26	23.5	142	PASS
51	Mr. G. M. Sable	17	20.5	26	25.5	24	21.5	134.5	PASS
52	Mr. M. A. Gede	17.5	18	20	15.5	19	21.5	111.5	PASS
53	Mr. M. P. Katwe	9.5	15.5	17.5	9	13.5	16	81	FAIL
54	Mr. O. I. Chikankar	13.5	19.5	21	16.5	15	15	100.5	FAIL
55	Mr. P. M. Bomkantiwar	16.5	17	20	21	15.5	19.5	109.5	PASS
56	Mr. P. R. Rawal	23.5	22	28	30	27	23	153.5	PASS
57	Mr. P. Y. Jachak	17	14.5	17.5	23	17.5	13.5	103	FAIL
58	Mr. S. D. Fating	24.5	20.5	26.5	27	22	21	141.5	PASS
59	Mr. S. J. Thakare	16	6	13	6	3	6	50	FAIL
60	Mr. S. R. Bomkantiwar	20.5	18.5	23	24	22.5	23.5	132	PASS
61	Mr. T. A. Khopde	19	22	24.5	22	18	21	126.5	PASS
62	Mr. V. S. Admane	22.5	21.5	27.5	20	23	25.5	140	PASS
63	Ku. G. S. Garje	4	11.5	15	8	10.5	6	55	FAIL
64	Ku. K. A. Garje	12.5	13.5	4	AB	12	11	53	FAIL
65	Ku. M. M. Biswas	7.5	13	19.5	15	8.5	13	76.5	FAIL
66	Ku. N. P. Uike	16.5	17.5	22	16	16.5	16.5	105	PASS
67	Ku. N. S. Bhoyar	17.5	20	27	28	20	22.5	135	PASS
68	Ku. P. S. Rangire	23	19.5	26.5	27	20	24.5	140.5	PASS
69	Ku. R. Purnekar	11	17.5	22	16	18.5	17	102	FAIL
70	Ku. R. M. Telang	6	16.5	21	12	13	13	81.5	FAIL



[Signature]
PRINCIPAL
 Institute of Pharmaceutical Education & Research
 Bargaon (Meghe), Wardha

SECOND SESSIONAL EXAMINATION, 2021-2022
B.PHARM-III (SEM -VI)
*** RESULT - SHEET ***

S.N.	Name of Students	Pharmaceutical Medicinal Chemistry - III	Pharmacology - III	Herbal Drug Technology	Biopharmaceutics & Pharmacokinetics	Pharmaceutical Bitechnology	Quality Assurance	Total	Result
71	Ku. T. V. Durge	21.5	20.5	27.5	26.5	21	25.5	142.5	PASS
72	Mr. A. F. Pathan	14.5	18	23	15	18	12.5	101	FAIL
73	Mr. A. S. Kambale	20.5	21	25.5	23.5	22	20	132.5	PASS
74	Mr. D. S. Borkar	23	20	27.5	25	19	21.5	136	PASS
75	Mr. K. N. Sathe	21	19.5	26	24.5	20	24	135	PASS
76	Mr. M. P. Rathod	22	22	26.5	27	22	21.5	141	PASS

Appeared:	75	76	76	75	76	76	76	76
Passed:	48	67	74	66	56	62	62	43
Result in Percentage:	64.00%	88.16%	97.37%	88.00%	73.68%	81.58%	81.58%	56.58%


Date: 05/04/2022

Entered By:-


(Mr. N. K. Tapre)

Checked By:-
(Ms. S. P. Gautam)




(Dr. R. O. Ganjiwale)
Principal

PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgaon (Meghe), Wardha



INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH,
Borgaon (Meghe), Wardha
CONTINUOUS MODE

(% Attendance & Marks of Theory & Practical, Record Marks, Student Teacher Interaction (STI) & Assignment)

Subject : -

Pharmaceutical Biotechnology

B.PHARM SEM-VI

2021-2022

Roll No.	Theory					Practical					Round Up
	% Atten	Marks Out of 4	STI Out of 3	Assign- Out of 3	Total Out of 10	% Atten	Marks out of 2	Record		Total Out of (2+3) 5	
								Out of 10	Out of 3		
1	91.11	3	3	2	8				0.00	0.00	
2	93.33	3	3	3	9				0.00	0.00	
3	71.11	0	2	2	4				0.00	0.00	
4	53.33	0	2	1	3				0.00	0.00	
5	88.89	2	2	2	6				0.00	0.00	
6	88.89	2	2	2	6				0.00	0.00	
7	100.00	4	3	3	10				0.00	0.00	
8	55.56	0	2	1	3				0.00	0.00	
9	95.56	4	3	3	10				0.00	0.00	
10	95.56	4	3	3	10				0.00	0.00	
11	75.56	0	2	2	4				0.00	0.00	
12	93.33	3	3	3	9				0.00	0.00	
13	80.00	1	2	2	5				0.00	0.00	
14	86.67	2	3	2	7				0.00	0.00	
15	82.22	1	2	2	5				0.00	0.00	
16	97.78	4	3	3	10				0.00	0.00	
17	91.11	3	2	2	7				0.00	0.00	
18	51.11	0	2	1	3			NA	0.00	0.00	
19	75.56	0	2	1	3				0.00	0.00	
20	71.11	0	2	2	4				0.00	0.00	
21	73.33	0	2	2	4				0.00	0.00	
22	84.44	1	2	2	5				0.00	0.00	
23	55.56	0	2	1	3				0.00	0.00	
24	48.89	0	2	1	3				0.00	0.00	
25	88.89	2	3	2	7				0.00	0.00	
26	80.00	1	2	2	5				0.00	0.00	
27	88.89	2	3	2	7				0.00	0.00	
28	82.22	1	2	2	5				0.00	0.00	
29	75.56	0	2	2	4				0.00	0.00	
30	97.78	4	3	3	10				0.00	0.00	
31	86.67	2	3	2	7				0.00	0.00	
32	88.89	2	3	2	7				0.00	0.00	
33	93.33	3	3	3	9				0.00	0.00	
34	95.56	4	3	3	10				0.00	0.00	
35	100.00	4	3	3	10				0.00	0.00	

Roll No.	Theory					Practical					Round Up
	% Atten	Marks Out of 4	STI Out of 3	Assign.- Out of 3	Total Out of 10	% Atten	Marks out of 2	Record		Total Out of (2+3) 5	
								Out of 10	Out of 3		
36	97.78	4	3	3	10				0.00	0.00	
37	91.11	3	3	3	9				0.00	0.00	
38	95.56	4	3	3	10				0.00	0.00	
39	86.67	2	2	3	7				0.00	0.00	
40	77.78	0	2	2	4				0.00	0.00	
41	97.78	4	3	3	10				0.00	0.00	
42	68.89	0	2	1	3				0.00	0.00	
43	93.33	3	3	2	8				0.00	0.00	
44	88.89	2	3	2	7				0.00	0.00	
45	84.44	1	2	2	5				0.00	0.00	
46	84.44	1	2	3	6				0.00	0.00	
47	84.44	1	2	2	5				0.00	0.00	
48	66.67	0	2	2	4				0.00	0.00	
49	53.33	0	2	2	4				0.00	0.00	
50	80.00	1	2	2	5				0.00	0.00	
51	73.33	0	2	2	4				0.00	0.00	
52	93.33	3	3	3	9				0.00	0.00	
53	82.22	1	2	2	5				0.00	0.00	
54	62.22	0	2	1	3				0.00	0.00	
55	86.67	2	3	2	7				0.00	0.00	
56	88.89	2	3	3	8				0.00	0.00	
57	77.78	0	2	2	4				0.00	0.00	
58	84.44	1	2	3	6				0.00	0.00	
59	57.78	0	2	1	3			N.A	0.00	0.00	
60	82.22	1	3	2	6				0.00	0.00	
61	95.56	4	3	3	10				0.00	0.00	
62	100.00	4	3	3	10				0.00	0.00	
63	86.67	2	3	2	7				0.00	0.00	
64	88.89	2	3	2	7				0.00	0.00	
65	77.78	0	2	2	4				0.00	0.00	
66	93.33	3	3	3	9				0.00	0.00	
67	73.33	0	2	2	4				0.00	0.00	
68	84.44	1	3	2	6				0.00	0.00	
69	80.00	1	3	2	6				0.00	0.00	
70	80.00	1	3	2	6				0.00	0.00	
71	82.22	1	3	2	6				0.00	0.00	
72	57.78	0	2	1	3				0.00	0.00	
73	80.00	1	3	2	6				0.00	0.00	
74	93.33	3	3	3	9				0.00	0.00	
75	80.00	1	3	2	6				0.00	0.00	
76	55.56	0	2	1	3				0.00	0.00	

3/14/21
 (Ashiram J. Deshmukh)

END SEMESTER EXAMINATION GUIDELINES

1. Examinations/Assessments

The scheme for internal assessment and end semester examinations is given in Table – X.

End semester examinations

The End Semester Examinations for each theory and practical coursethrough semesters I to VIII shall be conducted by the university except for the subjects with asterix symbol (*) in table I and II for which examinations shall be conducted by the subject experts at college level and the marks/grades shall be submitted to the university.

Tables-X: Schemes for internal assessments and end semester examinations semester wise

Semester I

Course code	Name of the course	Internal Assessment				End Semester Exams		Total
		Continuous Mode	Sessional Exams		Total	Marks	Duration	Marks
			Marks	Duration				
BP101T	Human Anatomy and Physiology I- Theory	10	15	1 Hr	25	75	3 Hrs	100
BP102T	Pharmaceutical Analysis I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP103T	Pharmaceutics I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP104T	Pharmaceutical Inorganic Chemistry – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP105T	Communication skills – Theory *	5	10	1 Hr	15	35	1.5 Hrs	50
BP106RBT BP106RMT	Remedial Biology/ Mathematics – Theory*	5	10	1 Hr	15	35	1.5 Hrs	50
BP107P	Human Anatomy and Physiology – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP108P	Pharmaceutical Analysis I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP109P	Pharmaceutics I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP110P	Pharmaceutical Inorganic Chemistry – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP111P	Communication skills – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
BP112RBP	Remedial Biology – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
Total		70/75^{\$}/80[#]	115/125^{\$}/130[#]	23/24^o/26ⁿ Hrs	185/200^{\$}/210[#]	490/525^o/ 540[#]	31.5/33^o/ 35[#] Hrs	675/725^o/ 750[#]

[#] Applicable ONLY for the students studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology (RB)course.

^{\$} Applicable ONLY for the students studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics (RM)course.

* Non University Examination (NUE)

Semester II

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP201T	Human Anatomy and Physiology II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP202T	Pharmaceutical Organic Chemistry I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP203T	Biochemistry – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP204T	Pathophysiology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP205T	Computer Applications in Pharmacy – Theory*	10	15	1 Hr	25	50	2 Hrs	75
BP206T	Environmental sciences – Theory*	10	15	1 Hr	25	50	2 Hrs	75
BP207P	Human Anatomy and Physiology II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP208P	Pharmaceutical Organic Chemistry I– Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP209P	Biochemistry – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP210P	Computer Applications in Pharmacy – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
Total		80	125	20 Hrs	205	520	30 Hrs	725

* The subject experts at college level shall conduct examinations

Semester III

Course code	Name of the course	Internal Assessment			End Semester Exams		Total Marks	
		Continuous Mode	Sessional Exams		Total	Marks		Duration
			Marks	Duration				
BP301T	Pharmaceutical Organic Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP302T	PhysicalPharmaceuticsI –Theory	10	15	1 Hr	25	75	3 Hrs	100
BP303T	Pharmaceutical Microbiology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP304T	Pharmaceutical Engineering – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP305P	Pharmaceutical Organic Chemistry II – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP306P	Physical Pharmaceutics I – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP307P	Pharmaceutical Microbiology – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP308P	Pharmaceutical Engineering – Practical	5	10	4 Hr	15	35	4 Hrs	50
Total		60	100	20	160	440	28Hrs	600

Semester IV

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP401T	Pharmaceutical Organic Chemistry III– Theory	10	15	1 Hr	25	75	3 Hrs	100
BP402T	Medicinal Chemistry I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP403T	Physical Pharmaceutics II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP404T	Pharmacology I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP405T	Pharmacognosy I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP406P	Medicinal Chemistry I – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP407P	Physical Pharmaceutics II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP408P	Pharmacology I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP409P	Pharmacognosy I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
total		70	115	21 Hrs	185	515	31 Hrs	700

Semester V

Course code	Name of the course	Internal Assessment			End Semester Exams		Total Marks	
		Continuous Mode	Sessional Exams		Total	Marks		Duration
			Marks	Duration				
BP501T	Medicinal Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP502T	Industrial PharmacyI– Theory	10	15	1 Hr	25	75	3 Hrs	100
BP503T	Pharmacology II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP504T	Pharmacognosy II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP505T	Pharmaceutical Jurisprudence – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP506P	Industrial PharmacyI– Practical	5	10	4 Hr	15	35	4 Hrs	50
BP507P	Pharmacology II – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP508P	Pharmacognosy II – Practical	5	10	4 Hr	15	35	4 Hrs	50
Total		65	105	17 Hr	170	480	27 Hrs	650

Semester VI

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP601T	Medicinal Chemistry III – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP602T	Pharmacology III – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP603T	Herbal Drug Technology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP604T	Biopharmaceutics and Pharmacokinetics – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP605T	Pharmaceutical Biotechnology– Theory	10	15	1 Hr	25	75	3 Hrs	100
BP606T	Quality Assurance– Theory	10	15	1 Hr	25	75	3 Hrs	100
BP607P	Medicinal chemistry III – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP608P	Pharmacology III – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP609P	Herbal Drug Technology – Practical	5	10	4 Hrs	15	35	4 Hrs	50
Total		75	120	18 Hrs	195	555	30 Hrs	750

Semester VII

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP701T	Instrumental Methods of Analysis – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP702T	Industrial Pharmacy – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP703T	Pharmacy Practice – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP704T	Novel Drug Delivery System – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP705 P	Instrumental Methods of Analysis – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP706 PS	Practice School*	25	-	-	25	125	5 Hrs	150
Total		70	70	8Hrs	140	460	21 Hrs	600

* The subject experts at college level shall conduct examinations

Semester VIII

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP801T	Biostatistics and Research Methodology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP802T	Social and Preventive Pharmacy – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP803ET	Pharmaceutical Marketing – Theory	10 + 10 = 20	15 + 15 = 30	1 + 1 = 2 Hrs	25 + 25 = 50	75 + 75 = 150	3 + 3 = 6 Hrs	100 + 100 = 200
BP804ET	Pharmaceutical Regulatory Science – Theory							
BP805ET	Pharmacovigilance – Theory							
BP806ET	Quality Control and Standardization of Herbals – Theory							
BP807ET	Computer Aided Drug Design – Theory							
BP808ET	Cell and Molecular Biology – Theory							
BP809ET	Cosmetic Science – Theory							
BP810ET	Experimental Pharmacology – Theory							
BP811ET	Advanced Instrumentation Techniques – Theory							
BP812PW	Project Work	-	-	-	-	150	4 Hrs	150
Total		40	60	4 Hrs	100	450	16 Hrs	550

Table-XIII: Tentative schedule of end semester examinations

Semester	For Regular Candidates	For Failed Candidates
I, III, V and VII	November / December	May / June
II, IV, VI and VIII	May / June	November / December

Question paper pattern for end semester theory examinations

For 75 marks paper

I. Multiple Choice Questions(MCQs)	=	20 x 1	=	20
OR				OR
Objective Type Questions (10 x 2)	=	10 x 2	=	20
(Answer all the questions)				
II. Long Answers (Answer 2 out of 3)	=	2 x 10	=	20
III. Short Answers (Answer 7 out of 9)	=	7 x 5	=	35

Total	=			75 marks

For 50 marks paper

I. Long Answers (Answer 2 out of 3)	=	2 x 10	=	20
II. Short Answers (Answer 6 out of 8)	=	6 x 5	=	30

Total	=			50 marks

For 35 marks paper

I. Long Answers (Answer 1 out of 2)	=	1 x 10	=	10
II. Short Answers (Answer 5 out of 7)	=	5 x 5	=	25
Total	=			35 Marks

Question paper pattern for end semester practical

Examinations

I. Synopsis	=	5
II. Experiments	=	25
III. Viva voce	=	5

Total	=	35 marks

Vidarbha Youth Welfare Society's
INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH
Borgaon (Meghe), Wardha (M.S.)

Number of students applied for exam grievances: 01

Academic Year	Name of Grievances	Number of applicants		Status	Page no.
		UG	PG		
2020-21	Timing error in online examination	01	0	Resolved	52-54

Application

DATE / /

Date :- 31/05/2021

To,

The university of
Rashtreeya Sikshak
Maharaj Nagpur University,
Nagpur

Subject :- Timing error in online examination.


Respected sir,

I am Nayna Sheshrao Bhojar studying in
B. Pharm 2nd year (D.A. student), Institute of
Pharmaceutical Education & Research, Wardha.

I found technical problem during my online exam
of third semester in Pharmaceutical Engineering
& Pharmaceutical Organic Chemistry-II on 28/05/21
& 30/05/21 respectively. As you decided that
exam will be of 1 hour but unfortunately my
exam ended within an half hour on this
two subject paper.

When I told this matter to university, they
check my activity & after that they told me that
my finger place on camera for a moment, but
believe me sir I don't place my finger on camera
intentionally. It may be when I open my notification
shade to silent my mobile. By mistake I cover my
camera with finger for a moment to open noti-
fication shade.

आपका
डा. डी. बांगवी
को तब
को नीडसु।


31.05.2021

Therefore, I requested to you please kindly
notify the problem of error during my
online examination.

Thank you.

Yours truly,

Nayna Sheshrao Bhoyar



RASHTRASANT TUKODOJI MAHARAJ NAGPUR UNIVERSITY
Winter 2020 Online Examination Student Grievance Form

College name : INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH

Exam Name : THIRD SEMESTER B PHARM

Subject name : PHARMACEUTICAL ENGINEERING-THEORY

Sr. No	Roll No	Student Name	Email Id	Mobile No	Reason	Any Reason
1	183064	NAYNA SHESHRAO BHAYAR	nayanabhoyar25 @gmail.com	9757598136	Insufficient time for examination.	