

ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ
(1961 ਦੇ ਪੰਜਾਬ ਐਕਟ ਨੰਬਰ 35 ਤਹਿਤ ਸਥਾਪਤ)
(ਕਾਲਜ ਸੈਕਸ਼ਨ)

ਨੰ. 1316 / ਕਾਲਜ ਸ-3
ਮਿਤੀ 11/11/2011

ਪ੍ਰਿੰਸੀਪਲ,

ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ

ਪਟਿਆਲਾ

ਵਿਸ਼ਾ: - ਗੈਰ ਮਾਨ ਕੋਲ ਫਾਰਮੈਲਿਟੀ/ਬਲੈਕ ਕੋਲਿਜ਼ਨ ਪ੍ਰੋਗਰਾਮ

ਸ਼੍ਰੀਮਾਨ ਜੀ,

ਆਪ ਜੀ ਦੇ ਦਫਤਰ ਦੇ ਪੱਤਰ ਨੰ. 4822 ਮਿਤੀ 6-3-2011 ਦੇ ਹਵਾਲੇ ਵਿਚ ਸੂਚਿਤ ਕੀਤਾ ਜਾਂਦਾ ਹੈ ਕਿ ਵਾਈਸ-ਚਾਂਸਲਰ ਸਾਹਿਬ ਨੇ ਆਪ ਜੀ ਦੇ ਕਾਲਜ ਵਿਖੇ ਸੈਸਨ 2009-10 ਤੋਂ ਤੈਰੇ ਅਰ ਉਰੀਐਂਟਿਡ ਸਕੀਮ ਅਧੀਨ ਫਾਰਮੈਲਿਟੀ ਪੀਐਚ ਕੋਲਿਜ਼ਨ ਦਾ ਵਿਸ਼ਾ ਸ਼ੁਰੂ ਕਰਨ ਦੀ ਪ੍ਰਵਾਨਗੀ ਅਕਾਦਮਿਕ ਕੌਂਸਲ ਦੀ ਪ੍ਰਵਾਨਗੀ ਦੀ ਆਸ ਵਿਚ ਦਿੱਤੀ ਜਾਂਦੀ ਹੈ। ਇਥੇ ਇਹ ਸਪੱਸ਼ਟ ਹੈ ਕਿ ਕਾਲਜ ਯੂ.ਜੀ.ਸੀ. ਅਤੇ ਯੂਨੀਵਰਸਿਟੀ ਦੀਆਂ ਸ਼ਰਤਾਂ ਦੀ ਪਾਲਣਾ ਕਰਨ ਦਾ ਪਾਬੰਦ ਹੋਵੇਗਾ।

ਵਿਸ਼ਵਾਸਪਾਤਰ,

ਸਹਾਇਕ ਰਜਿਸਟਰਾਰ (ਕਾਲਜ)

Harjeet Arjhal

Principal
Sahibzada Arj Arjhal
Sahibzada Arj Arjhal Nagar

TRANSLATED VERSION

PUNJABI UNIVERSITY, PATIALA
(Established under Punjab Act No. 35 of 1961)
(College Section)

No. 1316/college/s-3

Date: 22/4/09

Principal
Government College
Mohali

Subject: Permission to start Add-on course in Pharmaceutical Chemistry

Respected Sir,

In response of this letter no. 9822, date: 6/3/09, it is said that the Vice- Chancellor has given the permission to start "Add-on course in Pharmaceutical Chemistry" under the career oriented scheme in our college from session 2009-10. The permission is given under the anticipatory approval of the Academic Council. Further, it is important to mention that college is bound to abide by the conditions and norms of university and UGC.

Yours faithfully,

Assistant Registrar
(colleges)

To,

The Principal

S.M.H.S. Government College

S.A.S. Nagar Mohali

Respected Ma'am,

We plan to start Add-on Course in Pharmaceutical Chemistry, UGC Sponsored course for B.Sc. (medical) and B.Sc. (non-medical) students. The duration of the course is one year which includes theory and practical classes. Kindly grant us permission to start this course from 1st September 2021.

Thanking you

Yours sincerely

Harjeet Arora

Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

SMHS Govt. College Mohali

Chemistry Department

NOTICE FOR STUDENTS

This is for the information of the students that the college is going to start Add-on course in Pharmaceutical Chemistry, UGC sponsored course for session 2021-22. B.Sc. (medical) and B.Sc. (non-medical) students are eligible. The course will be of one year. Students can apply from 15th August to 31st August 2021. Classes will commence from 1st September 2021 in Chemistry Lab.

COURSE OFFERED

- 1) Certificate course for B.Sc. 1st year
- 2) Diploma course for B.Sc. 2nd year
- 3) Advanced Diploma for B.Sc. 3rd year

ASSESSMENT CRITERIA

Maximum Marks- 100

Theory paper- 40

Theory Internal Assessment- 20

Practical Paper – 30

Practical Internal Assessment- 10

Certificates for this course will be awarded by Punjabi University, Patiala.

Harjeet Arjyal

Principal
SMHS Govt. College
S.M.H.S Government College, Mohali

LESSON PLAN FOR DIPLOMA COURSE (B.Sc 2nd year)

MONTH	TOPICS COVERED
6 TH sep-10 th sep	1.Photochemistry Introduction, consequences of light absorption.
12 th - 17 th sep	The Jablonski diagram, Lambert beer law.
19 th -24 th sep	Grothus draper law, Photochemical reactions
26 th -30 th sep	2.Biochemistry Transport processes across cell membrane.
1 st oct-8 th oct	enzymes: nomenclature, enzyme kinetics & mech. Of action.
10 th -15 th oct	Mech. Of inhibition, Isozymes, Co-enzymes
17 th -22 nd Oct	3.Name reactions Aldol condensation, Claisen Schmidt condensation.
24 th -31 st oct	Grignard reaction, wurtz reaction, wurtz-fittig reaction. Diazotization reaction, Cannizzaro's reaction
1 st nov- 5 th nov	4.Antiulcer drugs- Classification of drugs and structure of omeprazole, pantoprazole, cimetidine
7 th -12 th nov	5.NSAIDS- Classification of drugs and structure of Aspirin, Ibuprofen.
14 th -19 th nov	Paracetamol, Nimesulide, Indomethacin, Diclofenac.
21 st -26 th nov	6.Antihistamines- Classification of drugs and structure of Diphenhydramine, Chlorphenhydramine
28 th -30 th nov	7.General and local Anaesthetic- Classification of drugs and structure of thiopentone and propofol, benzocaine
1 st dec-3 rd dec	8.Antiseptics and disinfectants- Classification and structure of povidone-iodine, benzalkonium chloride
5 th -10 th dec	9.Antihypertensive- Classification of drugs and structure of Propranolol, verapamil
12 th -17 th dec	10.Chemotherapeutic agents- Classification of antibiotics and structure of tetracycline, amoxicillin
19 th -24 th dec	11.AntiTB- Classification of drugs and structure of nicotinamide, ethionamide, isoniazid
26 th -31 st dec	12.Chromatography
2 nd jan-7 th jan	Thin Layer Chromatography- Introduction, Principle and Application
9 th -14 th jan	Thin Layer Chromatography- Introduction, Principle and Application
16 th -21 st jan	Column Chromatography- Introduction, Principle and Application
23 rd -31 st jan	Column Chromatography- Introduction, Principle and Application
1 st feb-4 th feb	13.Advanced analytical techniques
6 th -11 th feb	1H NMR- General introduction, chemical shift, factors affecting chemical shift
13 th -18 th feb	X-Ray Crystallography- Principle
20 th -28 th feb	Bragg's law and application
1 st mar-4 th mar	IR spectroscopy- Principle
6 th -11 th mar	Characteristic absorption bands of some organic functional groups Carbonyl, C-C double bond, C-C triple bond, Phenyl ring
	1.To carry out synthesis of Chalcone from Acetophenone and Benzaldehyde
	2.Monitoring of Chalcone formation from TLC
	3.To carry out synthesis of formation of epoxide of Chalcone

Harjeet Singh

Principal
College
Dr. Singh Naga

	4. Monitoring of epoxychalcone formation from Chalcone by TLC
13 th -18 th mar	5. To carry out acid catalization of epoxychalcone and monitoring of reaction by TLC
20 th -25 th mar	6. To carry out base catalization of epoxychalcone and monitoring of reaction by TLC 7. To determine the calcium content by complexometric titration using EDTA
27 th -31 st mar	8. Synthesis of Schiff's bases from Amine and Benzaldehyde
1 st apr-8 th apr	9. Column chromatography of Dye and spinach
10 th -15 th apr	10. Introduction to soxhlet apparatus (Demonstation) 11. Introduction to Clevenger apparatus (Demonstation)
17 th -22 nd apr	12. Various stereochemical (E & Z, Cis & Trans, R & S. Boat and Chair conformations of Cyclohexane)
24 th -29 th apr	13. General NMR spectrum problems

SYLLABUS OF
DIPLOMA COURSE IN PHARMACEUTICAL CHEMISTRY
For 2016-17, 2017-18 and 2018-19 session
Continued for session- 2019-20, 2020-21, 2021-22, 2022-23

3hrs/Week
Max. Time: 3 hrs.
Max. Marks: 40
Internal Assessment: 20
Total Marks: 60

INSTRUCTIONS FOR THE PAPER SETTERS

The question paper will consist of three sections A, B and C. Section A and B each will have four questions from the respective sections of the syllabus. Each question shall carry 4 marks. Section C will consist of 8 short answer type questions which will cover the entire syllabus uniformly and will carry 16 marks in all.

INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt three questions each from section A and B. Section C is compulsory.

SECTION-A

1. Photochemistry

Introduction, consequences of light absorption, The Jablonski diagram, Lambert beer law, Grothus draper law, Photochemical reactions

2. Biochemistry

Transport processes across cell membrane, enzymes: nomenclature, enzyme kinetics & mech. Of action, Mech. Of inhibition, Isozymes, Co-enzymes

3. Name reactions

Aldol condensation, Claisen Schmidt condensation, Grignard reaction, wurtz reaction, wurtz-fittig reaction, Diazotization reaction, Cannizzaro's reaction

4. Antiulcer drugs- Classification of drugs and structure of omeprazole, pantoprazole, cimetidine

5. NSAIDS- Classification of drugs and structure of Aspirin, Ibuprofen, Paracetamol, Nimesulide, Indomethacin, Diclofenac.

6. Antihistamines- Classification of drugs and structure of Diphenhydramine, Chlorphenhydramine

SECTION-B

7. General and local Anaesthetic- Classification of drugs and structure of thiopentone and propofol, benzocaine

8. **Antiseptics and disinfectants**- Classification and structure of povidone-iodine, benzalkonium chloride
9. **Antihypertensive**- Classification of drugs and structure of Propranolol, verapamil
10. **Chemotherapeutic agents**- Classification of antibiotics and structure of tetracycline, amoxicillin
11. **AntiTB**- Classification of drugs and structure of nicotinamide, ethionamide, isoniazid
12. **Chromatography**
 - a. **Thin Layer Chromatography**- Introduction, Principle and Application
 - b. **Column Chromatography**- Introduction, Principle and Application
13. **Advanced analytical techniques**
 - a. **¹H NMR**- General introduction, chemical shift, factors affecting chemical shift
 - b. **X-Ray Crystallography**- Principle, Bragg's law and application
 - c. **IR spectroscopy**- Principle, Characteristic absorption bands of some organic functional groups Carbonyl, C-C double bond, C-C triple bond, Phenyl ring

LABORATORY

Practical Carries 30 marks +Internal assessment-10

1. To carry out synthesis of Chalcone from Acetophenone and Benzaldehyde
2. Monitoring of Chalcone formation from TLC
3. To carry out synthesis of formation of epoxide of Chalcone
4. Monitoring of epoxychalcone formation from Chalcone by TLC
5. To carry out acid catalization of epoxychalcone and monitoring of reaction by TLC
6. To carry out base catalization of epoxychalcone and monitoring of reaction by TLC
7. To determine the calcium content by complexometric titration using EDTA
8. Synthesis of Schiff's bases from Amine and Benzaldehyde
9. Column chromatography of Dye and spinach
10. Introduction to soxhlet apparatus (Demonstration)
11. Introduction to Clevenger apparatus (Demonstration)
12. Various stereochemical (E & Z, Cis & Trans, R & S, Boat and Chair conformations of Cyclohexane)
13. General NMR spectrum problems

Books Recommended

1. I.L. Finer, Organic Chemistry, Vol. I & II, The English Language Book Society, London and Longman Group Limited, London (Latest edition).
2. R.T. Morrison and R.N. Royd, Organic Chemistry, 6th Edition, Prentice Hall of India, Private Limited, New Delhi (Latest edition).
3. R. N. Acheson, An Introduction to the chemistry of Heterocyclic Compounds, Inter-Sciences Publishers, New York (Latest edition).
4. A. W. Martin, J. Swarbrick and A. cammarata, Physical Pharmacy, 4th Edition, Lea and Febiger, Philadelphia, 1993.
5. Remington: The Science and Practical of Pharmacy, Mack Publishing Co., USA, 2005.

Harjeet Arora
Principal
SMHS Govt. College
Sahibzada Ajit Singh

6. M.J. Pelczar, Reid and Chan Microbiology, 4th Edition, Tata Mc Graw Hill Publishing Co., New Delhi.
7. S. J. Carter, Cooper and Gunn's Dispensing for Pharmaceutical Students, Pitman Medical Publishing Co., 12th Edition, Chapters 20 to 28.
8. A. L. Gennaro, Remington: The Science and Practice of Pharmacy, Lippincott Williams and Wilkins, USA, 2000, 108.
9. S.J. Carter Cooper and Gunn, Tutorial Pharmacy, 6th Edition, Pitman Medical, 1972.
10. W.B. hugo and A.D. Russel Pharmaceutical Microbiology, Blackwell Scientific Publications, Oxford, 1987.
11. McCabe and Smith, Unit Operations for Chemical Engineering, 6th Edition McGraw Hill N.Y.
12. G. Gunn and S.J. Carter and Gunn's Tutorial Pharmacy, Pitman Medical Publishing Co., London, 1972.
13. L.A. Lachman, H.A. Liberman and J.L. Kanig. The Theory and Practice of Industrial Pharmacy, 3rd Edition Lea and Febigar, Philadelphia, USA.
14. Badger Introduction to Chemical Engineering McGraw Hill Co., Interracial Student Edition (Latest Edition).
15. E.A. Rowllins, Bentley's Text book of Pharmaceutics, Bailliere Tindall and Cox, London (Latest Edition).
16. K. Sambamurthy, Pharmaceutical Engineering New Age Int. Publishers, New Delhi, 2003.
17. T.E. Wallis, Textbook of Pharmacognosy, J & A Churchill Ltd. London, 1967.
18. W.C. Evans, Trease and Evans Pharmacognosy (15th Ed.), W.B. Saunders Limited, 2002.
19. V.E. Tyler, L.R. Brady & J.E. Robbers, Pharmacognosy (9th Edition) K.M. Varghese Company Bombay, India 1988.
20. C.R. Craig and R.E. Sttizal Modern Pharmacology, Little Brown and Company, 6th Edition (2003).
21. Goodman & Gilman's "The Pharmacological basis of Therapeutics", 9th edition, Eds. A.G. Gilman, J.G. Hardman, L.E. Limbird, P.B. Molinoff, R.W. Ruddon, Macmillian publishing Co., Inc (2001).
22. B.G. Katzung, Basic and Clinical Pharmacology, Lange Medical Publications, 8th Ed. (2000).

Harjeet Goyal
Principal
SMHS Govt. College
Sahibzada Ajit Singh Na

GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR, MOHALI
LIST OF STUDENTS WHO PAID FEES FOR EXAMINATION OF ADD-ON DIPLOMA COURSE IN PHARMACEUTICAL CHEMISTRY

S. NO.	REG. NO.	ROLL NO.	NAME	FATHER'S NAME	MOTHER'S NAME	CATEGORY	SEX	MEDIUM	COURSE	FEES
7001	1	612-20-350	666 Aarti Arya	Harish Ram	Kiran	General	F	English	Diploma course	600
7002	2	612-20-890	660 Ankita Kumari	Amol Kumar Verma	Chhavi Verma	General	F	English	Diploma course	600
7003	3	612-20-383	868 Gaganpreet Kaur	Satwant Singh	Sukhwinder Kaur	BC	F	English	Diploma course	600
7004	4	612-20-384	854 Gaganpreet Kaur	Randhir Singh	Baljet Kaur	BC	F	English	Diploma course	600
7005	5	612-20-388	855 Harpreet Kaur	Jasvir Singh	Gagandeep Kaur	SC	F	English	Diploma course	600
7006	6	612-20-391	855 Jaspal Singh	Joginder Singh	Paramjit Kaur	SC	M	English	Diploma course	600
7007	7	612-20-136	853 Jassmeen Kaur	Manpreet Singh	Manjit Kaur	General	F	English	Diploma course	600
7008	8	612-20-361	652 Juhi Kumari	Manoj Kumar	Indu Devi	General	F	English	Diploma course	600
7009	9	612-20-395	870 Komalpreet Kaur	Gurdeep Singh	Rekha	BC	F	English	Diploma course	600
7010	10	612-20-889	656 Kulbir Singh	Harnek Singh	Jaswinder Kaur	BC	M	English	Diploma course	600
7011	11	612-20-364	669 Manisha	Dalwinder Singh	Dharmjeet Kaur	OBC	F	English	Diploma course	600
7012	12	612-20-365	661 Manisha Sharma	Sanjeev Kumar	Anju Sharma	General	F	English	Diploma course	600
7013	13	612-20-400	873 Naina Sharma	Sanjeev Kumar	Kavita Rani	(EWS)Gener	F	English	Diploma course	600
7014	14	612-20-368	662 Navneet Kaur	Amarjit Singh	Jaspreet Kaur	SC	F	English	Diploma course	600
7015	15	612-20-373	668 Reet Kaur	Lakhvinder Singh	Harpreet Kaur	SC	F	English	Diploma course	600
7016	16	612-19-277	Rahulveer	Tarlok Chand	Lata Kumari	SC	M	English	Diploma course	600
7017	17	612-20-892	673 Satnam Singh	Harjeet Singh	Maya Devi	BC	M	English	Diploma course	600
7018	18	612-20-374	665 Shobha	Vijay Kumar	Seema Rani	General	F	English	Diploma course	600
7019	19	612-20-351	672 Amandeep Kaur	Nirmal Singh	Gurmeet Kaur	SC	F	English	Diploma course	600

Principal
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

2021-2022

7 2022

ਸੈਂਟਰ ਨੰਬਰ.....
ਪਰੀਖਿਅਕ ਦੁਆਰਾ ਛੇ ਮਹੀਨਿਆਂ ਲਈ
ਰੱਖਣ ਤੇ ਸੰਭਾਲਣ ਲਈ ਪ੍ਰਤਿ ਪਰਚੀ.

Diploma
Theory

ਪ੍ਰਤਿ-ਪਰਚੀ
ਪਰੀਖਿਆ BSc Indn/2022-2
ਵਿਸ਼ਾ.....
ਪਾਸੁ Diploma Course
(Theory) 40
ਅਧਿਕਤਮ ਅੰਕ.....
ਪਾਸ ਅੰਕ..... 14

ਰੋਲ ਨੰਬਰ	ਅੰਕ
7001	25
7002	25
7003	25
7004	28
7005	29
7006	28
7007	26
7008	29
7009	40
7010	29
7011	24
7012	37
7013	25
7014	28
7015	27
7016	28
7017	32
7018	34
7019	36

ਪਾਸ 18 ਫੋਲੋ.....

Harjeet Gajral
Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

ਪਰੀਖਿਅਕ ਦੇ ਪੂਰੇ ਹਸਤਾਖਰ

Harjeet Gajral
PH(0)-9095-25000 10-14

ਸੇਂਟਰ ਨੰਬਰ

ਪਰੀਖਿਅਕ ਦੁਆਰਾ ਦਿੱਤੀਆਂ ਗਈਆਂ ਲਈ
ਰੋਲ ਨੰਬਰਾਂ ਦੇ ਸੰਬੰਧ ਵਿੱਚ ਪ੍ਰਤਿ ਪਰਖਣੀ
Diploma Theory Int. Ass.
ਪ੍ਰਤਿ ਪਰਖਣੀ

ਪਰੀਖਿਆ BSc. II /201

ਵਿਸ਼ਾ Pharm. Chem.

ਪ੍ਰਕਾਰ Diploma course
(Theory Int. Ass.)
ਅਧਿਕਤਮ ਅੰਕ 20

ਪਾਸ ਅੰਕ 07

ਰੋਲ ਨੰਬਰ	ਅੰਕ
7001	16
7002	15
7003	15
7004	16
7005	17
7006	16
7007	15
7008	18
7009	Ab
7010	18
7011	14
7012	19
7013	17
7014	16
7015	14
7016	17
7017	18
7018	19
7019	18

ਪਾਸ 18 ਰੋਲ —

ਸੈਟ ਨੰਬਰ

ਪਰੀਖਿਅਕ ਦੁਆਰਾ ਦਿੱਤੀ ਮਹੀਨਿਆਂ ਲਈ
ਰਾਸ਼ਟਰੀ ਸੇਵਾਲਈ ਲਈ ਪ੍ਰਤਿ ਪਰਚੀ

Diploma Practical

ਪ੍ਰਤਿ-ਪਰਚੀ

ਪਰੀਖਿਆ BSc Indry 2022

ਵਿਸ਼ਾ Pharm Chem

ਪਰਚੀ Diploma (use
(Practical))

ਅਧਿਕਤਮ ਅੰਕ 30

ਪਾਸ ਅੰਕ 10

ਰੋਲ ਨੰਬਰ	ਅੰਕ
7001	26
7002	25
7003	25
7004	26
7005	27
7006	26
7007	25
7008	28
7009	Ab
7010	28
7011	24
7012	29
7013	27
7014	26
7015	24
7016	27
7017	28
7018	29
7019	28

ਪਾਸ 19 ਫੋਲ -

ਸੇਵਾ ਨੰਬਰ

ਪਰੀਖਿਅਕ ਦੁਆਰਾ ਛੇ ਮਹੀਨਿਆਂ ਲਈ
ਰੋਕਣ ਤੇ ਸੰਭਾਲਣ ਲਈ ਪ੍ਰਤਿ ਪਰਚੀ
Diploma Practical Int Ass.
ਪ੍ਰਤਿ-ਪਰਚੀ

ਪਰੀਖਿਆ BSc Indus / 2012

ਵਿਸ਼ਾ Pharm. Chem.

ਪਰਚਾ Dipl. course
(Practical Int. Asses.)
ਅਧਿਕਤਮ ਅੰਕ 10

ਪਾਸ ਅੰਕ 04

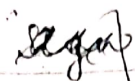
ਰੋਲ ਨੰਬਰ	ਅੰਕ
7001	07
7002	06
7003	06
7004	07
7005	07
7006	07
7007	06
7008	08
7009	Ab
7010	08
7011	05
7012	09
7013	07
7014	06
7015	05
7016	07
7017	08
7018	09
7019	08

ਪਾਸ 18 ਫੇਲ੍ਹ -

[Signature]

ਪਰੀਖਿਅਕ ਦੇ ਪ੍ਰਕਾਸ਼ਤਾਪਰ

Diploma course in Pharmaceutical Chemistry 2022

S.No.	Roll No.	Name	Signature	Sign
1.	7001	Aarti Arya		Aarti Arya
2.	7002	Ankita Kumari		Ankita Kumari
3.	7003	Gaganpreet Kaur		Gaganpreet Kaur
4.	7004	Gaganpreet Kaur		Gaganpreet Kaur
5.	7005	Harpreet Kaur		Harpreet Kaur
6.	7006	Jaspal Singh		Jaspal Singh
7.	7007	Jasmeen Kaur		Jasmeen Kaur
8.	7008	Juhi Kumari		Juhi Kumari
9.	7009	Komalpreet Kaur		Absent
10.	7010	Kulbir Singh		Kulbir Singh
11.	7011	Manisha		Manisha
12.	7012	Manisha Sharma		Manisha Sharma
13.	7013	Naina Sharma		Naina Sharma
14.	7014	Navneet Kaur		Navneet Kaur
15.	7015	Reet Kaur		Reet Kaur
16.	7016	Rahulveer		
17.	7017	Sabnam Singh		Sabnam Singh
18.	7018	Shobha		Shobha
19.	7019	Amandeep Kaur		Amandeep Kaur

Government College, S.A.S. Nagar, Mohali

Final Theory Examination

UGC Add on Course in Pharmaceutical Chemistry

Course: Diploma course in Pharmaceutical Chemistry

Subject: Pharmaceutical Chemistry

Session: 2021-2022

Max. Marks: 40

Max. Time: 2:00 hrs

SECTION A

This section carries 5 short answer type questions of 4 marks each and all are compulsory.

Q. 1) What are anti TB agents? Give any 2 examples of anti TB agents.

Q. 2) Explain Lambert's Beer law.

Q. 3) Explain the different types of transport processes across a cell membrane.

Q. 4) Explain Jablonski diagram.

Q. 5) What is chemical shift? What are the factors affecting chemical shift?

Section A, B, C, D and E carries 2 long answer type questions of 5 marks each. Attempt only one of them.

SECTION B

Q. 6) What are anti-ulcer drugs? Explain any two anti-ulcer drugs in detail.

OR

Q. 7) Explain in detail:

a) Thin layer chromatography

b) Column chromatography

SECTION C

Q. 8) What are NSAIDS? Explain any two NSAIDS agents in detail.

OR

Q. 9) Explain general and local anaesthetic drugs and classify them by giving examples of each with structure.

Harjeet Goyal
Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar
Sahibzada Ajit Singh Nagar

SECTION D

Q. 10) Explain X-Ray chromatography with principle and its applications. What is Bragg's law?

OR

Q. 11) Explain IR spectroscopy in detail.

SECTION E

Q. 12) Explain anti hypertensive agents and anti histamines by giving one example of each agents in detail.

OR

Q. 13) Explain the following named reactions: a) Claisen-Schmidt condensation

b) Cannizzaro's reaction

c) Grignard's reaction

d) Wurtz-Fittig reaction

Harjeet Arora
Principal
Sriyus Govt. College
Sambazda Aje Singh Nagar

BSc. 1st year 1st sem. (Diploma)

December 2021

	9/12/21	10/12/21	12/12/21	13/12/21	14/12/21	15/12/21	16/12/21	17/12/21	18/12/21	19/12/21	20/12/21	21/12/21
666 Aditi Arya	P	P	P	P	P	P	P	P	P	P	P	P
668 Gaganpreet Kaur	P	P	P	P	P	P	P	P	P	P	P	P
665 Jarpal	P	P	P	P	P	P	P	P	P	P	P	P
656 Kulbir Singh	P	P	P	P	P	P	P	P	P	P	P	P
672 Satnam Singh	P	P	P	P	P	P	P	P	P	P	P	P
663 Jaspreet Kaur	P	P	P	P	P	P	P	P	P	P	P	P
654 Gaganpreet Kaur	P	P	P	P	P	P	P	P	P	P	P	P
660 Anjali Kaur	P	P	P	P	P	P	P	P	P	P	P	P
668 Ravi Kaur	P	P	P	P	P	P	P	P	P	P	P	P
665 Anshika	P	P	P	P	P	P	P	P	P	P	P	P
662 Jishi	P	P	P	P	P	P	P	P	P	P	P	P
670 Komalpreet	P	P	P	P	P	P	P	P	P	P	P	P
661 Manvika Sharma	P	P	P	P	P	P	P	P	P	P	P	P
915 Rishika	P	P	P	P	P	P	P	P	P	P	P	P
662 Navneet Kaur	P	P	P	P	P	P	P	P	P	P	P	P
673 Aaina Sharma	P	P	P	P	P	P	P	P	P	P	P	P
655 Harjeet Kaur	P	P	P	P	P	P	P	P	P	P	P	P
669 Manisha	P	P	P	P	P	P	P	P	P	P	P	P
672 Anandap Kaur	P	P	P	P	P	P	P	P	P	P	P	P

~~Ganapathi~~

Harjeet Arora

Principal
MHS Govt. College
Jal Singh Nagar

Roll No. of the student

January 2022

Sl. No.	Name of the student	12/1/2022	13/1/2022	14/1/2022	15/1/2022	16/1/2022	17/1/2022	18/1/2022	19/1/2022	20/1/2022	21/1/2022	22/1/2022	23/1/2022	24/1/2022	25/1/2022	26/1/2022	27/1/2022	28/1/2022	29/1/2022	30/1/2022
660	Ankita Kaur	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
662	Namrata Kaur	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
665	Shobha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
672	Anurag Kaur	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
915	Rahul Kaur	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
855	Harpreet Kaur	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
868	Gaganpreet Kaur	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
855	Harpreet Singh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
673	Satnam Singh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
657	Juhi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
853	Jasmaria Kaur	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
854	Gaganpreet Kaur	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
656	Kulbir	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
661	Mamika Kaur	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
873	Naina Sharma	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
870	Konikpreet Kaur	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
669	Mamika	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
666	Hasti Singh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
673	Satnam Singh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
668	Rit Kaur	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Kanishk

Harjeet Arjial
Principal
Govt. College
Ajit Singh Nagar

Pharmaceutical Chemistry,
(Diploma Course)

February 2022

[illegible]

28/2/22

150000

Harper's original

Principal Colina
4112 Cor. Santa Rosa
Salvador, D. F.

BSc IInd year Add on course in
Pharmaceutical Chemistry
(Diploma Course)

प्रयोगशाला वि. क्र. 52

उपनसी तिथि: March 2022

वर्ग

		9/3/2022	10/3/2022	11/3/2022	14/3/2022	15/3/2022	17/3/2022	19/3/2022	21/3/2022	22/3/2022	26/3/2022	29/3/2022	30/3/2022	31/3/2022
666	Sarti	.	P	.	.	.	.	.	.	P	.	.	.	.
868	Gaganpreet	.	.	.	.	.	.	.	.	P	.	.	.	.
865	Jaspal	.	P	.	.	.	.	.	.	.	.	.	.	.
656	Kulbir	.	.	.	.	.	.	.	.	.	.	.	.	.
673	Satnam	.	.	.	.	.	.	.	.	.	.	.	.	.
853	Jasmeen	.	.	.	.	.	.	.	.	.	.	.	.	.
854	Gaganpreet	.	.	.	.	.	.	.	.	P	.	.	.	.
660	Ankita	.	.	.	.	.	.	.	.	P	.	.	P	P
668	Reet	P	P	P	.	.	P	P	P	P	.	.	P	.
665	Shobha	P	P	P	.	.	P	P	P	.	P	P	P	P
652	Juhi	.	.	.	.	.	.	.	P	.	P	.	.	P
820	Romalpreet	.	.	.	.	.	.	.	.	.	.	.	.	.
661	Manisha Sharma	P	P	P	.	.	P	.	P	.	P	P	P	.
915	Rahulvir	.	.	.	.	.	.	.	.	.	.	.	.	.
662	Narveet	P	P	.	.	.	P	P	P	P	P	.	P	P
813	Naina	P	P	.	.	.	.	.	.	P	.	.	.	.
855	Harpreet	P	P	.	.	.	P	P	.	P	.	.	.	.
669	Manisha	P	P	.	.	P	P	P	P	.	.	.	P	.
672	Anandeep	P	P	P	P	P	P	P	P	P	.	.	P	.

Foran

Harpreet Goyal
Principal
College
Mazhar

BSc Ind year

Add on course in Phas
Central Chemistry
(Diploma Course)

ਸ਼ਹੀਦੀ ਸਿ ਵਿ ਨੰ 52

April 2022

ਕਾਲਜ

ਦਸਤਖਤ

		1/4/2022	22/4/2022	26/4/2022	28/4/2022	29/4/2022	30/4/2022	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
666	Aarti	P	.	.	.	P	.																									
868	Gaganpreet	.	.	P	P	.	.																									
855	Taspal	.	.	.	.	.	.																									
656	Kulbir	.	.	.	.	.	.																									
673	Satnam	.	.	.	.	.	.																									
853	Tasmeen	.	.	.	.	.	.																									
854	Gaganpreet	.	.	.	.	.	.																									
860	Arkita	P	P	P	.	.	.																									
668	Reet	.	P	.	.	P	.																									
665	Shobha	P	P	P	.	.	.																									
652	Juhi	P	.	.	.	.	.																									
870	Komalpreet	.	.	.	.	.	.																									
661	Manisha Shaemg	P	P	.	.	.	.																									
715	Rahulveer	.	.	.	.	.	.																									
662	Nawneet	.	P	P	.	.	.																									
873	Naina	.	.	P	.	.	.																									
885	Harpreet	.	P	P	P	P	P																									
669	Manisha	P	P	P	.	.	.																									
672	Amandeep	P	P	P	.	P	.																									

Harjeet Goyal

Harjeet Goyal
Principal
Sri HS Govt. College
Sahibzada Ajit Singh Nagar

