ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ

(1961 ਦੇ ਪੰਜਾਬ ਐਕਟ ਨੰਬਰ 35 ਤਹਿਤ ਸਥਾਪਤ)

(ਕਾਲਜ ਸੈਕਸ਼ਨ)

ਨੰ. -1316------/ਕਾਲਜ/ਸ-3

ਮਿਤੀ 22/4/2---200 1

ਪ੍ਰਿੰਸੀਪਲ,

ਵਿਸ਼ਾ:- ---

ਸ੍ਰੀਮਾਨ ਜੀ,

ਆਪ ਜੀ ਦੇ ਦਫ਼ਤਰ ਦੇ ਪੱਤਰ ਨੰ. 4822 ਮਿਤੀ ---/---/--- ਦੇ ਹਵਾਲੇ ਵਿਚ ਸੂਚਿਤ ਕੀਤਾ ਜਾਂਦਾ ਹੈ ਕਿ ਵਾਈਸ-ਚਾਂਸਲਰ ਸਾਹਿਬ ਨੇ ਆਪ ਜੀ ਦੇ ਕਾਲਜ ਵਿਖੇ ਸੈਸ਼ਨ 2009-10 ਤੋਂ ਕੈਰੀਅਰ ਓਰੀਐਂਟਿਡ ਸਕੀਮ ਅਧੀਨ ----------- 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।

ਵਿਸ਼ਵਾਸ਼ਪਾਤਰ,

---/---/---

ਸਹਾਇਕ ਰਜਿਸਟਰਾਰ (ਕਾਲਜਾਂ)

Harjeet Gujral
Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

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 2018.

Thanking you

Yours sincerely

Harjeet Gujral

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 2018-19. 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 2018. Classes will commence from 1st september 2018 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.

Principal

Harjeet Gujral

S.M.H.S Government College, Mohali

Principal
SMHS Govt. College
Sahibzada Ajit Singh Naga.

LESSON PLAN FOR ADD-ON COURSE IN PHARMACEUTICAL CHEMISTRY

Session- 2018-2019,20,21,22,23

For B.Sc. 1st year (Medical and Non- medical) (sem 1 and 2)

Subject: Add on Certificate course in Pharmaceutical Chemistry

Start of course: 2nd week of September 2022 End of course: 1st week of May 2023

MONTH	TOPICS COVERED
6TH sep-10th sep	**1. Acids & Bases**: acid base theory, specification of acidity and basicity
12th- 17th sep	Official inorganic acids (Boric Acid, Hydrochloric Acid, Nitric Acid, Phosphoric Acid). Non-official inorganic acid (Sulphuric Acid),
19th-24th sep	Official inorganic bases (Strong Ammonia Solution, Calcium Hydroxide, Potassium Hydroxide, Sodium Carbonate, Sodium Carbonate, Soda lime).
26th-30th sep	**2. Buffers**: Theory and Mechanism
1st oct-8th oct	Pharmaceutical Buffer selection, Pharmaceutical buffer systems.
10th -15th oct	**3. Essential and Trace Ions**: Iron
17th -22nd Oct	Copper, Zinc, Chromium
24th-31st oct	**4. Gastrointestinal Agents:** Acidifying agents
1st nov- 5th nov	antacids (antacid products: Sodium Bicarbonate, Aluminium containing antacids.
7th -12th nov	Aluminium Hydroxide, Tribasic Calcium Phosphate, Magnesium containing Antacids
14th-19th nov	Magnesium Carbonate, Magnesium Hydroxide. **Practical-** 1.The student should be introduced to the main analytical through demonstrations. They should have a clear understanding of a typical analytical balance, the requirement of good balance, weights, care and use of balance methods of weighing and error on weighing. The student should also be acquainted with general apparatus required in various analytical procedures.
21st-26th nov	**5. Topical Agents:** Astringents: Official compounds of Aluminium and Zinc.
28th-30th nov	**6. Dental products Anticaries agents:** Fluorides, Phosphates
1st dec-3rd dec	**7. Nuclear Chemistry:** Nuclear composition **Practical-** 2. Standardization of analytical weights and calibrations of volumetric apparatus.
5th-10th dec	Force and stability, isotopes, radioactive emission, measurement of radioactivity,
12th-17th dec	model of decay, half-life period, artificial radioactivity, application in pharmacy
19th -24th dec	**8. Coordination Compounds and Complexation**: Theoretical consideration
26th-31st dec	8. Coordination Compounds and Complexation: Theoretical consideration **Practical-** 3. Acid Base Titrations: Preparation and standardization of acids and bases.
2nd jan-7th jan	8. Coordination Compounds and Complexation: Theoretical consideration

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Sahibzada Ajit Singh Nagar

	Practical- 4. Oxidation–Reduction Titrations: Preparation and standardization of some redox titrants e.g potassium permanganate, potassium dichromate, iodine, sodium thiosulphate
9th-14th jan	official products (Calcium Disodium EDTA). **Practical-** 5. Use of Gravimetric Analysis shall be covered like estimation Nickel and Copper
16th-21st jan	**9. Acid Base Titrations:** Acid base concept. Role of the solvent, Relative strengths of acids and bases
23rd-31st jan	Law of action. Common ion effect, ionic product of water, pH, Hydrolysis of salts, Handerson-Hasselbach equation.
1st feb-4th feb	Buffer and buffer capacity. Acid Base indicators, **Practical-** 6. The student should be introduced to the various laboratory techniques through demonstration involving single step synthesis of some selected organic compounds of medicinal importance.
6th-11th feb	Theory of Indicators, Choice of indicators. **Practical-** 7. Identification of Organic compounds having functional group: Acidic, Phenolic, Aldehyde, Ketone.
13th-18th feb	Neutralization curves (Strong acid strong base, strong acid weak base, weak acid strong base and weak acid weak base).
20th-28th feb	**10. Oxidation –Reduction titrations**: Concept of oxidation and reaction.
1st mar-4th mar	Redox reactions, equivalent weight of oxidizing and reducing agents, electrochemical cells
6th-11th mar	Reduction potential, standard reduction potential, Nernst equation
13th-18th mar	Cell representations, measurement of electrode potential **Practical-** 8. Introduction to the use of stereo models. 9. Limit test for Chloride, Sulphate, Lead, Iron
20th-25th mar	measurement of electrode potential and its application in determining the equilibrium constant of a reaction.
27th-31st mar	**11. Theoretical basis of qualitative detection of inorganic cations and anions.** **Practical-** 10. Quantitative Inorganic analysis.
1st apr-8th apr	**12. Stereochemistry:** Introduction, Stereoisomerism, Enantiomerism,
10th-15th apr	Diastereoisomerism, optical activity, chiral centre, Racemic modification
17th-22nd apr	Meso-structure, Configuration, Reaction involving stereoisomers, Stereospecific reactions.
24th-29th apr	**13. Add Structure nomenclature Preparation & Reaction of**: Alkane, Alkene,
1st may- 6th may	Alkynes and their cyclic analogs, Alkyl Halides Benzene

Lesson plan for B.Sc. 2nd year (Medical and Non- medical) (sem 3 and 4)

Principal
SGHS Govt. College
Sahibzada Ajit Singh Nagar

SYLLABUS

CERTIFICATE COURSE IN PHARMACEUTICAL CHEMISTRY

For 2018-19, 2019-20 and 2020-21,2021-22, 2022-23 session

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. Acids & Bases: acid base theory, specification of acidity and basicity. Official inorganic acids (Boric Acid, Hydrochloric Acid, Nitric Acid, Phosphoric Acid). Non-official inorganic acid (Sulphuric Acid), Official inorganic bases (Strong Ammonia Solution, Calium Hydroxide, Pottassium Hydroxide, Sodium Carbonate, Sodium Carbonate, Soda lime).
2. Buffers: Theory and Mechanism, Pharmaceutical Buffer selection, Pharmaceutical buffer systems.
3. Essential and Trace Ions: Iron, Copper, Zinc, Chromium.
4. Gastrointestinal Agents: Acidifying agents, anatacids (antacid products : Sodium Bicarbonate, Aluminium containing antacids. Aluminium Hydroxide. Tribasic Calcium Phosphate. Magnesium containing Antacids, Magnesium Carbonate, Magnesium Hydroxide.
5. Topical Agents:
   Astringents: Official compounds of Aluminium and Zinc.
6. Dental products
   Anticaries agents: Fluorides, Phosphates.
7. Nuclear Chemistry: Nuclear composition, Force and stability, isotopes, radioactive emission.

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SMHS Govt. College
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measurement of radioactivity, model of decay, half life period, artificial radioactivity, application in pharmacy.

8. Coordination Compounds and Complexation: Theoretical consideration and official products (Calcium Disodium EDTA).

SECTION B

9. Acid Base Titrations: Acid base concept. Role of the solvent, Realtive strengths of acids and bases, Law of action. Common ion effect, ionic product of water, pH, Hydrolysis of salts. Handerson-Hasselbach equation. Buffer and buffer capacity. Acid Base indicators, Theory of Indicators, Choice of indicators. Neutralization curves (Strong acid strong base, strong acid weak base, weak acid strong base and weak acid weak base).
10. Oxidation –Reduction titrations: Concept of oxidation and reaction. Redox reactions, equivalent weight of oxidizing and reducing agents, electrochemical cells. Reduction potential, Standard reduction potential. Nernst equation. Cell representations, measurement of electrode potential and its applicaton in determining the equilibrium constant of a reaction.
11. Theoretical basis of qualitative detection of inorganic cations and anions.
12. Stereochemistry: Introduction, Stereoisomerism, Enatiomerism, Diastereoisomerism, optical activity, chiral centre, Racemic modification, Meso-structure, Configuration. Reaction involving stereoisomers, Stereospecific reactions.
13. Add Structure nomenclature Preparation & Reaction of : Alkane, Alkene, Alkynes and their cyclic analogs, Alkyl Halides Benzene.

LABORATORY

3Hrs./Week
Max. Time: 3 Hrs.
Max. Marks: 40

1. The student should be introduced to the main analytical through demonstrations. They should have a clear understanding of a typical analytical balance, the requirement of good balance, weights, care and use of balance methods of weighing and error on weighing. The student should also be acquainted with general apparatus required in various analytical procedures.
2. Standardization of analytical weights and calibrations of volumetric apparatus.
3. Acid Base Titrations: Preparation and standardization of acids and bases.
4. Oxiadtion –Reduction Titrations: preparation and standardization of some redox titrants e.g potassium permanganate, potassium dichromate, iodine, sodium thiosulphate.

5. Use of Gravimetric Analysis shall be covered like estimation Nickel and Copper.
6. The student should be introduced to the various laboratory techniques through demonstration involving single step synthesis of some selected organic compounds of medicinal importance.
7. Identification of Organic compounds having functional group: Acidic, Phenolic, Aldehyde, Ketone.
8. Introduction to the use of stereo models.
9. Limit test forChloride, Sulphate, Lead, Iron.
10. Quantitative Inorganic analysis.

BOOKS RECOMMENDED

1. J.H.Block, E.Roche, T.O. Soine & C.O. Wilson, "Inorganic Medicinal and Pharmaceutical Chemistry". Lea & Febiger, Philadelphia, P.A.
2. L.M. Artherden, Benteley & Drivers, "Textbook of Pharmaceutical Chemistry". 8th edition.. Oxford University Press, Delhi.
3. Pharmacopoeia of India, Govt. of India, Ministry of Health.
4. A.H. Beckett and Stenlake, " Practical Pharmaceutical Chemistry", part 1, 3rd edition.
5. J.Bassett, R.C.Denny, G.H. Jeffery, J. Mendham, Vogels Textbook of Quantitative Inorganic Analysis including elemental instrumental/ Analysis, the ELBS and Longman, London (Latest edition).
6. F. G. Mann and B.C. Sunders , "Practical organic chemistry", The English Language Book Society and Longman Group London (Latest edition).
7. A.I. Vogel, "A textbook of practical Organic Chemistry", The English Language Book Society and Longman Group London (Latest edition).
8. E.I. Elien, " Streochemistry of Carbon Compounds". Mc GrawHill Book Company, inc.. New York (Latest Edition).

Harjeet Gujral
Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

2018 - 2019

Government College Sahibzada Ajit Singh Nagar Mohali

session 2018-19

List of the students who paid fees for examination add on course pharmaceutical chemistry (certificate course)

Sr No	regno	name	father's name	mother's name	gender	medium	paper	category	fees	
1		kiranpreet kaur	kanwaljit singh	mandeep kaur	female	english	certificate course		600	Kiranpreet kaur
2		kamalpreet kaur	bhupinder singh	rajinder kaur	female	english	certificate course		600	Kamalpreet Kaur
3		jasmeet kaur	sukhwinder singh	jasvir kaur	female	english	certificate course		600	Jasmeet kaur
		mehak								Mehak
		abhilasha Rathore								abhilashRathore
		ankita	ajay	neelam	female	english	certificate course			Ankita
		manpreet kaur	jaswinder singh	davinder kaur	female	english	certificate course	genral	600	Manpreet Kaur
		kamalpreet kaur	ramsaroop	bhupinder kaur	female	english	certificate course	sc	600	Kamalpreet Kaur
	Manisha								600	Manisha
10		kiranpreet kaur	sukhwinder singh	kuldeep kaur	female	english	certificate course		600	kirankepk aur1
11		jashanpreet kaur	karanvir singh	parminder kaur	female	english	certificate course	genral	600	Jashanpreet kaur.
12		sukhjot kaur	ravinder singh	parwinder kaur	female	english	certificate course	genral	600	Sukhjot kaur
13		jasmeen kaur	anoop singh	narinder kaur	female	english	certificate course	sc	600	Jasmine kaur
14		karanjot kaur kang	joga singh kang	kamaljit kaur	female	english	certificate course	genral	600	Karanjot kaur kang
15		simranjeet kaur	gurmeet singh	paramjeet kaur	female	english	certificate course	genral	600	Simranjeet kaur.
16		heena	roshanlal	kiran	female	english	certificate course	bc	600	Heena
17		prabhjot saroa	manmohan singh	manpreet kaur	female	english	certificate course	sc	600	prabhjot saroa
18		harmanpreet kaur	sohan singh	sarbjeet kaur	female	english	certificate course	genral	600	Harmanpreet kaur

Total Students :-

(1) Certificate course - 18

(2) Diploma course - 21

(3) Advanced Diploma course - 18

Harjeet Gill

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

ਸੰਨਾਖਤੀ ਨੰਬਰ .....

ਪ੍ਰੀਖਿਅਕ ਦੁਆਰਾ ਛੇ ਮਹੀਨਿਆਂ ਲਈ ਰੱਖਣ ਤੇ ਸੰਭਾਲਣ ਲਈ ਪ੍ਰਤਿ ਪਰਚੀ

ਪ੍ਰਤਿ-ਪਰਚੀ

ਪਰੀਖਿਆ ....July..../20[illegible]

ਵਿਸ਼ਾ ....Certificate Course....

ਪਰਚਾ ....Pharmaceutical Chemistry (Theory)....

ਅਧਿੱਕਤਮ ਅੰਕ ....40....

ਪਾਸ ਅੰਕ ....14....

ਰੋਲ ਨੰਬਰ	ਅੰਕ
7345	30
46	23
47	25
48	19
49	25
50	18
51	25
52	20
53	23
54	25
55	Ab
56	29
57	23
58	23
59	Ab
60	Ab
61	21
7362	22

ਪਾਸ ....15.... ਫੇਲ੍ਹ ....—....

Harjeet Singh
Principal
SMK[illegible] College
Sahibzada Ajit Nagar

ਪ੍ਰੀਖਿਅਕ ਦੇ ਪੂਰੇ ਹਸਤਾਖਰ

PUP(O)-8703-5,000/2-07

ਸਨਾਖਤੀ ਨੰਬਰ July 2019

ਪਰੀਖਿਅਕ ਦੁਆਰਾ ਛੇ ਮਹੀਨਿਆਂ ਲਈ ਰੱਖਣ ਤੇ ਸੰਭਾਲਣ ਲਈ ਪ੍ਰਤਿ ਪਰਚੀ

ਪ੍ਰਤਿ-ਪਰਚੀ

ਪਰੀਖਿਆ July /200

ਵਿਸ਼ਾ Internal Assessment

ਪਰਚਾ Certificate Course in Pharmaceutical Chem

ਅਧਿੱਕਤਮ ਅੰਕ 20

ਪਾਸ ਅੰਕ 07

ਰੋਲ ਨੰਬਰ	ਅੰਕ
7345	17
46	15
47	16
48	14
49	15
50	15
51	17
52	16
53	16
54	17
56	Ab
58	19
59	16
58	18
59	Ab
60	Ab
61	15
7362	16

ਪਾਸ 15 ਫੇਲ੍ਹ ——

Harjeet Gujral
Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

ਪਰੀਖਿਅਕ ਦੇ ਪੂਰੇ ਹਸਤਾਖਰ

PUP(O)-8703-5.000/2-07

ਸ਼ਨਾਖਤੀ ਨੰਬਰ .....

ਪ੍ਰੀਖਿਅਕ ਦੁਆਰਾ ਛੇ ਮਹੀਨਿਆਂ ਲਾ
ਰੱਖਣ ਤੇ ਸੰਭਾਲਣ ਲਈ ਪ੍ਰਤਿ ਪਰ

ਪ੍ਰਤਿ-ਪਰਚੀ

ਪਰੀਖਿਆ ..July../2019/20

ਵਿਸ਼ਾ Certificate Cours

ਪਰਚਾ Pharma Practice

ਅਧਿੱਕਤਮ ਅੰਕ ..40..

ਪਾਸ ਅੰਕ ..14..

ਰੋਲ ਨੰਬਰ	ਅੰਕ
7345	36
46	30
47	30
48	28
49	33
50	26
51	33
52	33
53	34
54	30
55	Ab
56	36
57	30
58	29
59	Pb
60	Ab
61	28
62	32

ਪਾਸ ..15.. ਫੇਲ੍ਹ .....

Harjeet Gujral
Principal
GMHS Govt. College
Sahibzada Ajit Singh Nagar

ਪ੍ਰੀਖਿਅਕ ਦੇ ਹਸਤਾਖਰ

PUP(O)-8703-5,000/2-07

2018 – 2019

Government College Sahibjada Ajit Singh Nagar Mohali

session 2018-19

List of the students who paid fees for examination add on course pharmaceutical chemistry (certificate course)

Sr.No.	reg.no.	name	father's name	mother's name	gender	medium	paper	category	fees
1	Kiranpreet Kaur	kiranpreet kaur	kanwaljit singh	mandeep kaur	female	english	certificate course	bc	600
2	Kamalpreet Kaur	kamalpreet kaur	bhupinder singh	rajinder kaur	female	english	certificate course	bc	600
3	Jasmeet Kaur	jasmeet kaur	sukhwinder singh	jasvir kaur	female	english	certificate course	bc	600
4	meha jc	mehak	satpal singh	krishna	female	english	certificate course	genral	600
5	Abhilasha Rathore	abhilasha rathore	kuldip singh	sonu	female	english	certificate course	genral	600
6	Ankita	ankita	ajay kumar	neelam	female	english	certificate course	bc	600
7	Manpreet Kaur	manpreet kaur	jaswinder singh	davinder kaur	female	english	certificate course	genral	600
8	Kamalpreet Kaur	kamalpreet kaur	ramsaroop	bhupinder kaur	female	english	certificate course	sc	600
9	Manisha	manisha shukla	satpal	banita	female	english	certificate course	genral	600
10	Kirandeep Kaur	kirandeep kaur	sukhwinder singh	kuldeep kaur	female	english	certificate course	bc	600
11	-	jashanpreet kaur	karanvir singh	parminder kaur	female	english	certificate course	genral	600
12	Sukhjot Kaur	sukhjot kaur	ravinder singh	parwinder kaur	female	english	certificate course	genral	600
13	Jasmeen Kaur	jasmeen kaur	anoop singh	narinder kaur	female	english	certificate course	sc	600
14	Karamjot Kaur Kang	karamjot kaur kang	joga singh kang	kamaljit kaur	female	english	certificate course	genral	600
15	-	simranjeet kaur	gurmeet singh	paramjeet kaur	female	english	certificate course	genral	600
16	-	heena	roshanlal	kiran	female	english	certificate course	bc	600
17	Prabjot Saroa	prabhjot saroa	manmohan singh	manpreet kaur	female	english	certificate course	sc	600
18	Harman	harmanpreet kaur	sohan singh	sarbjeet kaur	female	english	certificate course	genral	600

Total Students 8-

① Certificate course – 18

② Diploma course – 21

③ Advanced Diploma Course – 18

Harjeet Gi

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

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

Final Theory Examination

UGC Add on course in Pharmaceutical Chemistry

Course: Certificate Course in Pharmaceutical Chemistry

Session: 2018-2019

Max. Marks: 40 Max. Time: 3:00 hrs

SECTION A

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

Q.1)) What is optical activity? Explain it by giving examples.Explain radio-active decay. Mention units of radioactivity.

Q.2) Explain half- life in detail.

Q.3) Explain radio-active decay. Mention units of radioactivity.

Q.4) Explain the terms: a) Buffer solutions

b) Buffer Capacity

c) Standard Buffer Solutions

Q. 5) Explain the following acid-base concepts: a) Arrhenius Concept

b) Bronsted- Lowry Concept

SECTION B

Each section B, C, D and E carries 2 long answer type questions of 5 marks each. Attempt any one of them from each section.

Q. 6) Explain the following terms: a) Law of mass action

b) common-ion effect

c) Acid- Base indicators

d) pH

OR

Q. 7) Define anti caries agents? Explain the following compounds with method of preparation, properties and their uses: a) Stannous Fluoride b) Sodium Fluoride

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Sahibzada Ajit Singh Nagar

SECTION C

Q. 8) What are topical agents? Explain the followings: a) Aluminium chloride

b) Zinc Sulphate

c) Alum

Define anti caries agents? Explain the following compounds with method of preparation, properties and their uses: a) Stannous Fluoride b) Sodium Fluoride

OR

Q. 9) Explain the following: a) Lewis Concept

b) Conjugate Acid-Base pairs

c) Strong Ammonia solution

d) Phosphoric Acid

SECTION D

Q. 10) Explain the following in detail: a) Difference between Diastereomers and Enantiomers

b) Stereoisomerism

c) Meso- compounds

OR

Q. 11) What are gastrointestinal agent? Explain the following: a) Tribasic Calcium Phosphate

b) Magnesium Carbonate heavy

Explain the following terms with example: a) Essential elements

b) Any three reactions of Alkanes and Alkynes

SECTION E

Q. 12) Explain the following terms with example: a) Essential elements

b) Any three reactions of Alkanes and Alkynes

OR

Q. 13) Explain the following terms: a) Nernst Equation

b) Redox Reactions

c) Standard Electrode Potential

Harjeet Gujral

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SMHS Govt. College
Sahibzada Ajit Singh Nagar

Aug 2018

Certificate Course

ਪਟਿਆਲਾ ਡਾ. ਸੰਸ. ਵਿ. ਨੰ: 52

(1)

ਦਾਖਲਾ ਰਜਿਸਟਰ- Add on pharmaceutical Chemistry ---- G. C. Mehta

ਨੰ	ਨਾਂ	24/08	25/08	31/08	1/9	7/9	8/9	14/9	15/9	21/9	22/9	28/9	29/9
811	Jasmeet Kaur	P	P	P	P	P	P	P	P	P	P	P	P
814	Kiranpreet Kaur	P	P	P	P	P	P	P	P	P	P	P	P
815	Kiranpreet Kaur	P	P	P	P	P	P	P	P	P	P	P	P
818	Mehak	P	A	P	P	P	P	P	P	P	P	P	P
829		A	A	A	P	A	A	P	P	P	P	P	A
847		A	P	A	P	P	P	A	P	P	P	P	A
849		P	P	P	A	A	P	A	A	P	P	P	A
856	Harmanpreet K.	P	A	P	P	A	A	P	P	P	A	P	A
602	Ankita	P	A	A	P	A	A	A	P	A	P	A	A
607	Kathanpreet Kaur	A	A	P	P	A	P	A	A	P	A	A	A
618	Sukhjot Kaur	A	P	P	P	A	A	P	P	P	A	A	A
625	Simranjeet Kaur	A	P	P	P	A	A	P	P	P	P	A	A
634	Harshi	P	A	P	P	P	P	P	A	A	P	P	A
3650	Simranjeet K.	A	P	A	P	P	A	P	A	P	P	P	A
3652	Kiranjot Kaur	A	P	A	P	A	P	A	P	A	P	A	A
3654	Mandi Rani	P	A	P	A	A	A	P	P	A	P	A	A
3657	Jasmeen Kaur	A	A	A	A	A	P	P	P	P	A	P	A
3661	Jagmeet Kaur	P	A	P	P	P	A	P	P	P	A	P	A
3663	Heena	P	P	A	A	A	A	P	P	A	P	A	A
3658		P	P	A				P	P	A	P	A	A
3659		P	P	A				P	P	A	P	A	A

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Certificate Course

ਸਟੀਚਿਊ ਡਾ. ਸਿ. ਵਿ. ਨੰ: 52

(1)

ਹਾਜ਼ਰੀ ਰਜਿਸਟਰ- Add on pharmaceutical Chemistry ਅਧਿਆਪਕ- G. C. Mokedi

ਰੋਲ ਨੰ	ਨਾਂ	24/08	25/08	31/08	01/09	07/09	08/09	14/09	15/09	21/09	22/09	28/09	29/09	12	13	14	15	16
811	Jasmeet Kaur	P	P	P	P	P	P	P	P	P	P	P	P					
814	Kamaljeet Kaur	P	P	P	P	P	P	P	P	P	P	P	P					
815	Kiranpreet Kaur	P	P	P	P	P	P	P	P	P	P	P	P					
819	Mehak	P	A	P	P	P	P	P	P	P	P	P	P					
829		A	A	A	P	A	A	P	P	P	P	P	A					
847		A	P	A	P	P	P	A	P	P	P	P	P					
849		P	P	P	A	A	P	A	A	P	P	P	P					
856	Harmanpreet K.	A	A	A	A	A	A	P	P	P	A	P	A					
602	Ankita	P	A	A	A	A	A	A	P	A	P	A	A					
607	Jatharpreet Kaur	A	A	P	P	P	P	A	A	P	A	A	A					
618	Sukhjot Kaur	A	P	A	P	A	A	A	P	A	A	P	A					
625	Kirandeep Kaur	A	P	P	P	A	A	P	A	P	P	A	A					
634	Varsha	P	A	A	P	P	P	P	A	A	P	P	A					
3660	Simranjeet K.	A	P	A	P	P	A	P	A	P	P	P	A					
3652	Kawaljot Kaur	A	P	A	P	A	P	A	P	A	P	A	A					
3654	Mandi Rana	A	A	A	A	A	A	P	A	A	P	A	A					
3657	Jasmeen Kaur	A	A	A	A	A	P	P	A	P	A	A	P					
3661	Jayashree Kumari	P	A	P	P	P	A	P	P	A	P	P	A					
3663	Heena	P	P	P	A	A	A	P	P	P	P	P	A					
3658		P	P	A	A	P	P	A	A	A	P	P	A					
3659		P	P	A	A	A	A	P	P	A	P	P	A					

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ਸਟੋਰਿਉ ਡਾ. ਸ਼ਿ. ਵਿ. ਨੰ: 52

ਹਾਜ਼ਰੀ ਰਜਿਸਟਰ ---------- ਕਾਲਜ

ਰੋਲ ਨੰ	ਨਾਂ	5/10	6/10	12/10	13/10	26/10	27/20	7	8	9	10	11	12	13	14	15	16	17
811	Jasmeet Kaur	P	A	A	P	P	P											
814	Kamalpreet Kaur	P	P	P	P	A	A											
815	Kirandeep Kaur	P	P	A	P	P	P											
818	Mehak	P	A	P	P	P	P											
829		A	A	P	A	A	P											
847		A	P	P-	P	P	A											
849		P	A	P	P	A	A											
855	Harmanpreet Kaur	A	A	A	P	P	A											
602	Ankita	P	A	P	A	P	P											
607	Jashandeep Kaur	A	P	P	P	A	A											
618	Sukhjot Kaur	A	A	P	P	P	P											
625	Kirandeep Kaur	A	P	P	A	A	A											
634	Varsha	P	P	A	P	P	P											
3660	Simranjeet Kaur	A	P	P	A	P	A											
3659	Karanjot Kaur Kang	P	A	A	P	A	P											
3654	Jhansi Rani	P	P	A	P	A	P											
3657	Jasmeen Kaur	A	P	A	A	P	A											
3661	Jayashree Kumbhar	A	A	P	P	P	A											
3663	Heena	A	P	A	A	P	P											
3658	Rahul Kumar	A	P	A	P	P	P											
3659		P	A	P	A	P	A											

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ਸਟੋਰਿਉ ਡਾ ਸਿ. ਵਿ. ਨੰ: 52

ਹਾਜ਼ਰੀ ਰਜਿਸਟਰ---------- ਕਾਲਜ ----------

ਰੋਲ ਨੰ	ਨਾ	5/10	6/10	12/10	13/10	26/10	27/70	31/11	32/11	33/11	16/10	17/11	12	13	14	15
811	Jasmeet Kaur	P	A	A	P	P	P	P	P	A	A	P				
814	Kamalpreet Kaur	P	P	P	P	A	A	P	A	P	P	P				
815	Kiranpreet Kaur	P	P	A	P	P	P	P	A	A	P	A				
818	Mehak	P	A	P	P	P	P	A	A	P	A	P				
829		A	A	P	A	A	P	A	P	A	A	P				
847		A	P	P	P	P	A	A	P	P	P	A				
849		P	A	P	P	A	A	A	P	A	P	P				
856	Hemanpreet Kaur	P	A	A	P	P	A	A	P	A	A	P				
602	Ankita	P	A	P	A	P	P	P	A	P	P	A				
603	Jaspreet Kaur	A	A	P	P	A	A	A	A	P	P	P				
618	Sukhjot Kaur	A	A	P	P	P	P	P	P	P	A	P				
625	Kirandeep Kaur	A	P	P	A	A	A	P	A	A	P	A				
634	Vanshu	P	P	A	P	P	P	A	P	P	A	P				
3660	Simranjeet Kaur	A	P	P	A	P	A	P	P	A	P	P				
3652	Kiranjot Kaur Kang	P	A	A	P	A	P	A	P	A	A	P				
3654	Manvi Rana	A	P	A	P	A	P	A	A	P	P	A				
3657	Jasmeen Kaur	A	P	A	A	P	A	A	P	A	A	P				
3661	Jagjeet Kaur	A	A	P	P	P	A	P	A	P	P	A				
3663	Heena	A	P	A	A	P	P	A	A	P	P	A				
3658	Rahul Kumar	A	P	A	P	P	P	P	P	A	P	A				
3659		P	A	P	A	P	A	P	P	P	A	P				

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Feb 2019

Physics

ਸਟੈਟਿਸਟੀ ਡਾ ਸਿ ਵਿ ਨੰ 52

ਸਾਲਾ ਜਨਿਸਟਰ- of Certificate Course ਕਾਲਜ- Govt College

ਨੰ						5	6	7	8	9	10	11	12	13	14	15
815	Kiranpreet Kaur	P	P	P	P											
814	Kamalpreet Kaur	P	P	A	P											
811	Jaiveer Kaur	P	P	A	P											
818	Mehak	P	A	A	A											
601	Akshatha Pathania	P	P	A	P											
602	Anita	P	P	P	A											
624	Manpreet Kaur	P	P	P	P											
635	Navjeet Shella	P	P	P	P											
625	Kiranpreet Kaur	P	P	P	P											
607	Jashanpreet K	A	A	P	A											
618	Sukhjyot Kaur	A	A	P	A											
3657	Jasmeen Kaur	P	P	A	P											
3652	Kawaljit K. Kau	P	P	A	P											
3660	Simranjeet Kaur	P	P	A	A											
3663	Heena	A	P	A	A											
	Prabhjot Sarma	A	A	A	A											
	Kawaljeet Kaur	A	P	A	A											
624	Kamalpreet Kau	P	P	A	A											

Harjeet

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ਸਟੀਚਿਊ ਡਾ ਸ਼ਿ. ਵਿ. ਨੰ: 52

ਹਾਜ਼ਰੀ ਰਜਿਸਟਰ- Add on Certificate Course in Pharmaceutical ਕਾਲਜ- G.C. F...

ਰੋਲ ਨੰ	ਨਾ	01/03	02/03	05/03	09/03	19/03	20/03	7	8	9	10	11	12	13	14
615	Kiranpreet Kaur	P	A	P	A	P	A								
617	Kamalpreet Kaur	A	A	A	A	A	A								
611	Jasmeet Kaur	A	A	A	A	A	A								
618	Malik	A	A	A	A	A	A								
601	Abhilasha Rathee	A	A	A	A	P	A								
602	Ankita	P	P	A	A	A	P								
614	Manpreet Kaur	P	A	P	A	A	P								
635	Manisha Malik	P	A	P	P	A	P								
625	Kirandeep Kaur	P	P	P	P	P	A								
607	Jaibanpreet Kaur	A	P	A	A	A	A								
618	Sukhjot Kaur	A	P	A	A	A	P								
3657	Jaimeen Kaur	A	P	A	P	A	A								
3652	Kiranjot K. Kaj	P	P	A	A	A	A								
3660	Simranjeet Kaur	P	P	A	A	A	P								
3663	Heena	P	A	A	A	A	A								
3655	Prabhjot Saran	A	P	A	P	A	A								
	Harmanpreet Kaur	P	P	P	A	A	P								
624	Kamalpreet Kaur	P	P	A	A	A	P								

Harjeet Gujral
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SMHS Govt. College
Sahibzada Ajit Singh...

Principal
Govt. College,
S. A. S. Nagar, (MOHALI)

ਪੰ. ਸੁਣੌਰਿਸ਼ ਭਾ. ਸਿ. ਵਿ ਨੰ: 52

Ceatificate Course in Instrumentation

"April, 2019"

ਹਾਜ਼ਰੀ ਰਜਿਸਟਰ---Theory---ਕਾਲਜ---G.C. Mohali

ਲੜੀ ਨੰ:	ਨਾਂ	1/4	2/4	3/4	4/4	5/4	6/4	12/4	15/4	16/4	17/4	22/4	23/4	24/4	25/4	26/4	27/4	29/4	30/4
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
71121	Rohitash	P	P	P	P	P	A	P	P	P	P	P	P	P	A	A	P	P	
71122	Sajan Lal	P	P	P	P	P	P	A	P	A	P	P	P	P	P	P	P	P	
71123	Simranjit Kaur	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
71124	Sukhpal	A	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	A	
71125	Amandeep	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
71126	Navjot Singh	P	P	P	P	A	A	A	A	A	P	P	P	P	A	A	P	A	
71127	Sangina Devi	P	P	P	A	P	P	P	P	P	A	P	P	P	A	P	P	P	
71128	Muskan	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	
71129	Uday Singh	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
71130	Inderpreet	A	A	A	A	P	A	P	A	A	P	A	A	A	A	A	A	P	
71131	Tarvir	P	P	P	A	A	P	P	P	P	A	P	P	A	A	A	P	P	
71132	Sourav	P	P	P	P	P	A	A	A	A	P	P	P	P	A	A	P	P	
71133	Shivam	P	P	P	A	A	A	A	A	P	P	A	A	P	P	A	P	P	
71134	Kundan	A	A	A	A	P	P	P	A	A	A	A	A	A	A	P	A	A	
71135	Amrinder	A	A	A	A	P	P	P	A	A	A	A	A	A	A	P	A	A	
71136	Jaideep	P	P	P	P	P	A	P	P	P	P	P	A	A	P		P	P	A
71137	Harpreet Singh	P	P	P	P		A	A	A	A	P	P	P	A	P	P		P	A

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Principal
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S.A.S. Nagar (Mohali)

April 2019

ਪੰਜਾਬ ਸਰਕਾਰ ਪ੍ਰੈਸ,

ਲੜੀ---

ਸੈਕਸ਼ਨ/ਗਰੁਪ---

ਵਿਸ਼ਾ---

Practical

	6/4	8/4	20/4	21/4	22/4	23/4	24/4	25/4
	18	19	20	21	22	23	24	25
1.	P	P	A	P				
2	P	P	P	P				
3	A	A	A	A				
4	A	P	P	P				
5	A	A	A	A				
6	P	A	A	A				
7	A	A	P	P				
8.	P	P	P	P				
9		A	A	A	A			
10		A	A	A	A			
11		P	P	A	A			
12		P	P	A	P			
13		P	A	A	P			
14		P	A	A	A			
15		P	A	A	A			
16		P	P	P	P			
17		A	A	A	P			

Verified

Principal,
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