Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

ASSIGNMENTS

The assignments or Report writing should enable students to see the purpose for their study and some definite objectives to be achieved. The objectives of the lesson are essential in giving direction and definiteness to the pupils' thought and activities.

The procedure to be followed by the students in doing the work assigned must be explained by the teacher to make the study period effective. The purpose of the lesson assigned must be made known to the students and be recognized by them so that their interest may be stimulated. This refers to the integration of the past and the new lesson or to the principles of the appreciative learning. The psychological principle of apperception is thus given full recognition in the assignment function. Where the elements of appreciative experience are present, the teacher needs to direct the students in the use of such for interpretive purposes.

Another important function of the assignments or Report writing is the recognition of individual differences. All studies in mental measurements agree that among students there exist vast differences in intelligence, aptitudes, and temperaments. Even interests of students are found to be widely divergent. Students work with more vigour, ease, and pleasure when the things they do are in conformity with their interests. It is, therefore, exceedingly important that the assignment provides for these varied interest, aptitudes, and abilities of the pupils.

GRADING RUBRICS FOR REPORT WRITING/ASSIGNMENT

GRADING ⇨	EXCELLENT QUALITY (5)	CONSIDERABLE QUALITY (4)	ADEQUATE QUALITY (3)	INCONSISTENT QUALITY (2)	UNSATISFACTORY QUALITY (1)
FORMAT/ LAYOUT	Follows formal reportconventions, Follows formal report conventions, Prefatory parts, Parallel headings, Supplementary parts Demonstrates an effective layout.	Follows all but one of the formal report conventions, Demonstrates an Effective layout.	Reveals two format errors Applies convention incorrectly/ incompletely	Reveals three formaterrors, Applies conventionincorrectly / incompletely	Non-presentable because of numerous format errors, Applies convention incorrectly/ incompletely
CONTENT/STRUCTURE: INTRODUCTION	Exhibits all of following characteristic: Begins with background / definition, Explains purpose, Describes scope and limitations of report, Offers a preview of the findings	Exhibits two errors in content/ structure: Begins with back ground /definition, Explains purpose, Describes scope and limitations of report Offers a preview of the findings	Reveals three errors in content/ structure: Provides partial background/ definition, Omits the purpose, Does not establish scope and limitations of	Demonstrates four major weaknesses: Provides a weak background/ definition Omits the purpose Does not establish scope and limitations of report Omits preview of findings	Demonstrates the following multiple weaknesses: Provides an ineffective background/definitio n, Omits the purpose Does not establish scope and limitations of report, Omits preview of findings

			report, Provides only a partial preview of findings		
CONTENT / STRUCTURE: BODY	Discusses topic thoroughly and objectively, Use logical order to present information, Provides facts and figures, Uses appropriate length	Discusses topic adequately and objectively, Use logical order to present information, Provides facts and figures, Uses appropriate length	Discusses topic inconsistently Is sometimes vague Shows inconsistent organization Is too short/long	Does not discusses topic is vague, confusing Shows inconsistent organization Is too short/long	No discussion of topic Is cryptic, vague Shows no organization Is too short/long
CONTENT / STRUCTURE: CLOSING /RESULTS / CONCLUSION	Includes an effective summary of data presented, Draws conclusions, that are analytical, based on complete data, Recommends action, based on findings, Ends courteously, professionally Facilitates quick response based on need, data	Includes an effective summary of data presented, Draws conclusions, that are analytical, data somewhat complete Recommends action, partially based on findings Ends courteously Facilitates quick response based on need only	Includes a partial summary Draws partial conclusions, from data not presented Partial personalized ending Partial action close Partial facilitated response	Omits an effective summary Draws partial conclusions based on hearsay, not data Does not personalize ending Action close confusing Confusing facilitated response	Omits an effective summary of any kind Draws no conclusions Makes no recommendations No personalize ending Omits action close Does not facilitate response
GRAMMAR/ SPELLING	Shows effective use of proof-reading and editing: Eliminates all but a few minor errors in grammar, spelling, punctuation, acronym usage, and capitalization	Exhibits only six of the following errors: Spelling/word choice Mechanics: Sentence errors Pronoun errors Subject/verb Agreement, modifiers Parallel structure Punctuation Capitalization	Reveals seven of the following errors: Spelling/ word choice Mechanics: Sentence errors Pronoun errors Subject/verb agreement, modifiers Parallel structure Punctuation Capitalization	Affects credibility due to the following eight errors: Spelling/word choice mechanics: Sentence errors Pronoun errors Subject/verb agreement, modifiers Parallel structure Punctuation Capitalization	Is far too brief for adequate evaluation Affects credibility due to: Spelling/word choice Mechanics: Sentence errors Pronoun errors Subject/verb agreement, Modifiers Parallel structure Punctuation Capitalization
				TOTAL	1	25

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Sankar Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

DR. B.C.ROY COLLEGE OF PHARMACY & AHS, DURGAPUR

B. Pharm. 2nd Year 3rd Semester, AY: 2023-2024

COURSE: B.PHARM

CA: 1ST

PAPER: Pharmaceutical Organic Chemistry II Theory **CODE: PT 314** **Time: 35 mins**

Full Marks: 25

WRITE THE ASSIGNMENT IN AN A4 PAPER AND SUBMIT THE SCANNED COPY RENAMED WITH YOUR UNIVERSITY ROLL NO & NAME. LINK WILL BE GIVEN AT TIME.

Assignment Topics:	Map. CO	Marks
1. What isPolynuclear Aromatic Hydrocarbons (PAHs). Explain different preparations and reactions of Napthalene.	CO-1	25
Or,		
2. Compare the aromaticity and reactivity among three PAHs: Naphthalene, Anthracene and Phenanthrene. Write down few reactions of Anthracene and Phenanthrene.	CO-1	25
Or,		
3. Write a short note onthe applications of Polynuclear Aromatic Hydrocarbons (PAHs) in pharmaceutical technology.	CO-1	25

Assignment & CO MAPPING

CO	NO OF QUES.	MARKS
CO 1	3	75
Total	3	75

B. Pharm. 2nd Year 3rd Semester, AY: 2023-2024

COURSE: B. Pharm.
PAPER: Pharmaceutical Engineering
Time: 35 minutes

CA: 1ST
CODE: PT- 317
Full Marks: 25

Prof. (Dr.) Samir Kumar Samanta, Ph. D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B. C. Roy College of Pharmacy & AHS * Durgapur

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

WRITE THE ASSIGNMENT IN AN A4 PAPER AND SUBMIT THE SCANNED COPY RENAMED WITH YOUR UNIVERSITY ROLL NO & NAME. LINK WILL BE GIVEN AT TIME.

Assignment/Topic	Map. CO	Marks
1. State and explain Fourier's law of heat transmission with equation. 2. Compare the relation between moisture content, stickiness and toughness to size reduction. 3. Explain the importance of drying in the pharmaceutical industry with examples.	1 2 1	25

ASSIGNMENT AND CO. MAPPING

CO	NO OF QUES.	MARKS
CO. 1	2	50
CO. 2	1	25
CO. 3		
CO. 4		
CO. 5		
TOTAL	3	75

B. Pharm. 2nd Year 3rd Semester, AY: 2023-2024

Corse: B. Pharm. **CA: 1ST**
Paper: Pharmaceutical Microbiology **Code: PT 319.**
Time: 35 minutes **Full Marks: 25**

WRITE THE ASSIGNMENT IN AN A4 PAPER AND SUBMIT THE SCANNED COPY RENAMED WITH YOUR UNIVERSITY ROLL NO & NAME. LINK WILL BE GIVEN AT TIME.

Assignment/Topic	Map. CO	Marks
1. What solid plate indicator media will you prepare for identification and cultivation of *Escherichia coli*? Design its composition, method for preparation and its terminal sterilization before pouring in petri-dishes.	1 & 2	25
2. As far as your knowledge goes about the anatomy of bacteria, you have to interpret its impact to improve public health and pharmaceutical industry as well. Write it in a precise manner (within 250 words), step by step with suitable logic for every point.	2 & 3	25
3. Compare biogenesis vs. abiogenesis from historical point of view and justify the experiments carried out by Koch and Pasteur to develop germ theory of disease.	1	25

Dr. B. C. Roy College of Pharmacy & AHS * Durgapur

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

ASSIGNMENT AND CO. MAPPING	CO	NO OF QUES.	MARKS
	CO. 1	1.5	37.5
	CO. 2	1	25
	CO. 3	0.5	12.5
	CO. 4		
	CO. 5		
	TOTAL	3	75

B. Pharm. 2nd Year 3rd Semester, AY: 2023-2024

Corse: B. Pharm. **CA: 1ST**

Paper: Physical Pharmaceutics I Theory **Code: PT 316.**

Time: 35 minutes **Full Marks: 25**

WRITE THE ASSIGNMENT IN AN A4 PAPER AND SUBMIT THE SCANNED COPY RENAMED WITH YOUR UNIVERSITY ROLL NO & NAME. LINK WILL BE GIVEN AT TIME.

Q. No	Question	Map. CO	Marks
1	"Explain the application of surfactants to Pharmaceuticals and justify the role of surfactants".	CO-2	25
2	1. a. At 27°C, a solid is to be ground so that the final particle size is 0.021µm. Estimate the percentage increase in solubility. Assuming that the surface tension of the solid is 100 dynes/cm and the volume per mole is 50 cm3. b. It is noted that solubility of the above solute is decreasing with the addition of salt. Describe the phenomena that happened here. 2. a. The solubility of a drug X in a solvent mixture contains 10% by volume of solvent A and 90% by volume of solvent B is 1.8 mg/mL at 25◦C. Evaluate (a) molarity, (b) molality, and (c) mole fraction of X. Given, the density of the solvent A is 1.0313 g/ml, the solution is 1.0086 g/ml, solvent B is 0.9970 g/ml, the solvent mixture is 1.0082 g/ml. The molecular weight of drug X is 280.32 g/mole, that of solvent A is 88.10, and that of solvent B is 18.015. b. This drug X begins to separate out from the solution as the pH of the aqueous solution is lowered. Identify the kind of drug X and also justify your answer.	CO-3 CO-4 CO-3 CO-4 CO-3	3 3 9 5 5

	c. It is observed that A solvent blend made of 20% V/V of S1 (δ:13.0 H) and 80% V/V of S2 (δ:23.4 H) is used to obtain maximum solubility of drug X. Predict the ideal solubility parameter of Drug X.		
3	1. Oleic acid is insoluble in water and tartaric acid is more soluble in water than glycerol and propylene glycol. **Justify** the statement. 2. Oils and fats dissolve in carbon tetrachloride, benzene etc. **Explain** how these solute molecules interact with the solvent molecules in order to form solution. 3. Miscibility of tertiary butyl alcohol is better than normal and secondary butyl alcohol. **Explain** the reason behind the above phenomena. 4. **Describe** the characteristics of polar solvents and **discuss** about their mechanism of solvent action. 5. Suppose a drug is having solubility 10 mg/ ml in water at 25°C.**Designate** the drug according to the solubility definition mentioned in the United States Pharmacopoeia.	CO-4 CO-4 CO-4 CO-4 CO-2	6 5 4 7 3

Question paper and Mapping with course outcome

CO	NO OF QUES.	MARKS
CO. 1		
CO. 2	2	28
CO. 3	3	17
CO. 4	6	30
TOTAL	3	75

B. Pharm. 2nd Year 3rd Semester, AY: 2023-2024

Corse: B. Pharm. **CA: 1ST**
Paper: Computer Application in Pharmacy **Code: PT 381.**
Time: 35 minutes **Full Marks: 25**

WRITE THE ASSIGNMENT IN AN A4 PAPER AND SUBMIT THE SCANNED COPY RENAMED WITH YOUR UNIVERSITY ROLL NO & NAME. LINK WILL BE GIVEN AT TIME.

Assignment/Topic	Map. CO	Marks

1. Explain the Application of Computer in Pharmacy. 2. Explain different types of number system and sample inter conversion between them and also explain both binary and decimal complements. 3. Explain in details the database system and its advantages and disadvantages.	CO3 CO2 CO1	25

ASSIGNMENT AND CO. MAPPING

CO	NO OF QUES.	MARKS
CO. 1	1	25
CO. 2	1	25
CO. 3	1	25
CO. 4		
CO. 5		
TOTAL	3	75

Dr. B. C. Roy College of Pharmacy and Allied Health Sciences
Durgapur - 713206
B. Pharm. 2nd yr 3rd Semester' 2023-2024
GRADE SHEET CONTINUOUS EVALUATION 1 (CA1)

PAPER: Pharmaceutical Engineering **CODE: PT 317**

SL. NO	UNIVERSITY ROLL NO	NAME OF THE STUDENT	FORMAT / LAY OUT	CONTENT / STRUCTURE: INTRODUCTION	CONTENT / STRUCTURE: BODY	CONTENT/ STRUCTURE: CLOSING /RESULTS/ CONCLUSION	GRAMMAR/ SPELLING	TOTAL (25)
1	18901922001	MADHURIMA KUNDU	5	4	5	4	5	23
2	18901922002	MANOJ KUMAR	4	4	5	5	4	22
3	18901922003	TUTUN MANDAL	5	4	4	4	4	21
4	18901922004	SHAMPA GHOSH	5	4	5	4	5	23
5	18901922005	MD TOHID ANSARI	5	4	5	4	5	23
6	18901922006	JEET CHINA	5	4	4	4	4	21
7	1890192200	OINDRILA	5	5	5	4	5	25

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Sunil Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

	7	NAG						
8	18901922008	RAHULDEV MONDAL	4	4	4	3	3	18
9	18901922009	SOURAV GORAIN	4	4	3	4	4	19
10	18901922010	AKASH ROUTH	4	5	5	5	4	23
11	18901922011	NAYAN BISWAS	4	4	4	5	4	21
12	18901922012	TATHAGAT DHAL	5	5	5	4	4	23
13	18901922013	SURAJ KUMAR PANDIT	4	3	4	4	4	19
14	18901922014	PIYALI BEBARTTA	5	5	5	5	4	24
15	18901922015	SAMADRITA GHOSH	5	5	4	5	5	24
5	18901922016	AVINANDAN KHANDA	4	4	4	5	5	22
17	18901922017	SOUMEN KHANRA	4	4	5	4	4	21
18	18901922018	RAKHI DHUA	5	4	4	5	4	22
19	18901922019	SUBHADIP BANERJEE	5	4	5	4	5	23
20	18901922020	SAYAN BHATTACHARYAY	4	5	4	5	4	22
21	18901922021	RITRISHA ADHIKARY	5	5	5	4	4	23
22	18901922022	ARKA BEZ	4	4	4	4	4	20
23	18901922023	ARNAB SEN	4	4	3	3	4	18
24	18901922024	KASTURI PAL	4	4	4	5	5	22
25	18901922025	KOUSIK DUTTA	4	5	4	5	4	22
26	18901922026	SUBHADEEP NAYAK	A	A	A	A	A	A
27	18901922027	SUBHAM DEY	A	A	A	A	A	A
28	18901922028	SOMENATH PARAMANIK	5	5	4	4	5	23
29	18901922029	ANUSHKA PAN	5	4	4	4	4	21
30	18901922030	SANDIP MAITY	3	3	4	3	3	16
31	1890192203	YEADUL SK	3	4	4	4	4	19

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B.C. Roy College of Pharmacy & AHS Durgapur

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

	1							
32	18901922032	SHANKHA KARMAKAR	3	4	4	3	3	17
33	18901922033	SUBHAM DEY	5	5	5	4	4	23
34	18901922034	SPANDAN GHOSH	4	4	5	4	4	21
35	18901922035	ABHIJIT GHOSH	4	4	4	4	4	20
36	18901922036	MUNSHI AMAN SAHEIN	5	4	4	4	5	22
37	18901922037	ABHIJIT KHUTIA	5	4	5	4	5	23
38	18901922038	TANMOY DATTA	5	5	5	5	4	24
39	18901922039	AHON GHOSH	4	4	4	4	4	20
40	18901922040	ARYA ROY	5	5	4	4	5	23
41	18901922041	JYOTISHKA MONDAL	4	4	5	5	4	22
42	18901922042	SOURIK KARMAKAR	4	4	3	4	4	19
43	18901922043	GOURANGA ADHIKARI	5	4	4	5	4	22
44	18901922044	NAYAN DUTTA	3	4	4	4	4	19
45	18901922045	DEEP KARMAKAR	4	5	4	5	4	22
46	18901922046	ANISHA SEN	5	4	4	4	5	22
47	18901922047	ABHIK KUMAR BISWAS	4	5	5	4	4	22
48	18901922048	NEHA BERA	A	A	A	A	A	A
49	18901922049	ABHIK SARKAR	5	4	5	4	3	21
50	18901922050	HIMADRI SEKHAR MUKHERJEE	A	A	A	A	A	A
51	18901922051	ARNAB GORAI	A	A	A	A	A	A
52	18901922052	SAYAN KUMAR MISRA	3	3	3	3	3	15
53	18901922053	SOUVIK MONDAL	A	A	A	A	A	A
54	1890192205	PRITHWISH	5	5	5	5	4	24

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

	4	GHOSH						
55	18901922055	AKASH KUMAR HAZRA	A	A	A	A	A	A
56	18901922056	DIBYAJOTI PAL	4	4	4	4	4	20
57	18901922057	TRISHA CHATTERJEE	4	5	4	4	4	21
58	18901922058	AGNIK KHUTIA	5	4	5	5	4	23
59	18901922059	ARNAB FOUZDAR	A	A	A	A	A	A
60	18901922060	SURAJEET GHOSH	4	4	4	4	4	20
61	18901922061	SHIBAM DAS	4	4	5	4	4	21
62	18901922062	RAHUL GORE	3	3	3	3	3	15
63	18901922063	SHIB SANKAR KUMAR	4	4	5	4	4	21
64	18901922064	PRITAM MANNA	4	4	5	5	4	22
65	18901922065	ARPITA PARIA	A	A	A	A	A	A
66	18901922066	SAMPRATI MAITY	4	4	5	5	4	23
67	18901922067	SUBHAJIT SANTRA	4	4	3	4	4	19
68	18901922068	SWARNAVA DEY	A	A	A	A	A	A
69	18901922069	KOUSTAV JHA	A	A	A	A	A	A
70	18901922071	MD . NASRAT ALI	4	4	5	4	4	21
71	18901922072	SANDIP PARAMANIC K	A	A	A	A	A	A
72	18901922073	SANDIP METYA	4	4	5	4	4	21
73	18901922074	SOUMYADIP MAHATO	3	3	4	3	3	16
74	18901922075	DEBJIT CHAKRABARTI	4	4	5	5	4	22
75	18901922076	NILOY GUHA	3	3	3	4	2	15
76	18901922077	PRALAY KUMAR PAHARI	3	3	5	4	4	19

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B. C. Roy College of Pharmacy & AHS * Durgapur

77	18901922078	SAGNIK BANIK	4	4	4	4	4	20
78	18901922079	SAIKAT BISWAS	3	3	4	3	3	16
79	18901922080	SOUBHIK MONDAL	5	5	5	5	5	25
80	18901922081	SUMAN JANA	4	4	5	5	4	23
81	18901922082	RINTU PAL	5	4	5	5	5	24
82	18901922083	GOUTAM DUTTA	3	4	4	3	3	17
83	18901922084	BISHAL DAS	4	3	4	4	4	19
84	18901922085	ARPITA ROY	A	A	A	A	A	A
85	18901922086	SAUMYADIP KAYAL	A	A	A	A	A	A
86	18901922087	AYAN MONDAL	4	4	5	5	4	22
87	18901922088	KUSHAL SAHA	4	4	5	5	5	23
88	18901922089	PRITHA BANERJEE	4.5	4	5	5	5	23.5
89	18901922090	ANKIT DAS	4	4	5	5	5	23
90	18901922091	DEBLEENA GHOSH	4	4	5	5	5	23
91	18901922092	CHAYANIKA KUNDU	4	5	5	5	5	24
92	18901922093	SOUMYADIP PAL	4	4	5	4	4	21
93	18901922094	SHREYA ROUT	4	4	4	4	4	20
94	18901922095	SANDIPAN BARMAN	4	4	5	4	4	21
95	18901922096	ANIMESH MANDAL	5	4	5	5	5	24
96	18901922097	RAHUL GHOSH	A	A	A	A	A	A
97	18901922098	GOLAM MAULA	A	A	A	A	A	A
98	18901922099	SUBHADEEP HATI	A	A	A	A	A	A
99	18901922100	SOUVICK MAITY	4	4	5	5	5	23
100	18901922101	BRATIN ROY	4	4	5	5	5	23
101	18901922102	SUVAJIT BHUNIA	4	4	4	5	5	22

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Nabakumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

102	18901922103	SHREYASI MAITI	4	4	5	5	5	23
103	18901922104	SANTANU DAS	A	A	A	A	A	A
104	18901922105	JIT SINGHA	3	3	4	4	4	18

Dr. B. C. Roy College of Pharmacy and Allied Health Sciences
Durgapur - 713206
B. Pharm. 2nd yr 3rd Semester' 2023-2024
GRADE SHEET CONTINUOUS EVALUATION 1 (CA1)

PAPER:Pharmaceutical Microbiology(Theory) **CODE: PT 319**

SL. NO	UNIVERSITY ROLL NO	NAME OF THE STUDENT	FORMAT/ LAYOUT	CONTENT /STRUCTURE : INTRODUCTION	CONTENT / STRUCTURE: BODY	CONTENT/ STRUCTURE: CLOSING /RESULTS/ CONCLUSION	GRAMMAR/ SPELLING	TOTAL (25)
1	1.8902E+10	MADHURIMA KUNDU	5	4	4	4	4	21
2	1.8902E+10	MANOJ KUMAR	5	4	4	4	4	21
3	1.8902E+10	TUTUN MANDAL	4	4	4	4	4	20
4	1.8902E+10	SHAMPA GHOSH	5	5	5	4	4	23
5	1.8902E+10	MD TOHID ANSARI	5	5	5	4	5	24
6	1.8902E+10	JEET CHINA	5	5	5	4	3	22
7	1.8902E+10	OINDRILA NAG	5	5	5	4	5	24
8	1.8902E+10	RAHULDEV MONDAL	4	3	3	3	4	17
9	1.8902E+10	SOURAV GORAIN	4	4	4	4	4	20
10	1.8902E+10	AKASH ROUTH	5	4	4	4	4	21
11	1.8902E+10	NAYAN BISWAS	4	4	4	4	4	20
12	1.8902E+10	TATHAGAT DHAL	5	5	5	4	5	24
13	1.8902E+10	SURAJ KUMAR PANDIT	5	4	4	4	4	21
14	1.8902E+10	PIYALI	5	5	5	4	5	24

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

		BEBARTTA						
15	1.8902E+10	SAMADRITA GHOSH	5	5	5	4	4	23
16	1.8902E+10	AVINANDAN KHANDA	5	4	4	4	4	21
17	1.8902E+10	SOUMEN KHANRA	4	4	4	4	4	20
18	1.8902E+10	RAKHI DHUA	5	5	5	4	3	22
19	1.8902E+10	SUBHADIP BANERJEE	5	4	4	4	4	21
20	1.8902E+10	SAYAN BHATTACHARYAY	5	5	5	4	4	23
21	1.8902E+10	RITRISHA ADHIKARY	5	5	5	4	3	22
22	1.8902E+10	ARKA BEZ	5	5	5	4	3	22
23	1.8902E+10	ARNAB SEN	5	5	5	4	3	22
24	1.8902E+10	KASTURI PAL	5	5	5	4	3	22
25	1.8902E+10	KOUSIK DUTTA	5	5	5	4	3	22
26	1.8902E+10	SUBHADEEP NAYAK	A	A	A	A	A	A
27	1.8902E+10	SUBHAM DEY	A	A	A	A	A	A
28	1.8902E+10	SOMENATH PARAMANIK	5	5	5	4	3	22
29	1.8902E+10	ANUSHKA PAN	5	5	5	4	4	23
30	1.8902E+10	SANDIP MAITY	5	4	4	4	4	21
31	1.8902E+10	YEADUL SK	4	3	3	3	5	18
32	1.8902E+10	SHANKHA KARMAKAR	5	5	5	4	3	22
33	1.8902E+10	SUBHAM DEY	5	5	5	4	3	22
34	1.8902E+10	SPANDAN GHOSH	4	4	4	4	3	19
35	1.8902E+10	ABHIJIT GHOSH	5	5	5	4	3	22
36	1.8902E+10	MUNSHI AMAN SAHEIN	5	5	5	4	4	23
37	1.8902E+10	ABHIJIT KHUTIA	5	5	5	4	3	22
38	1.8902E+10	TANMOY DATTA	5	5	5	4	3	22
39	1.8902E+10	AHON GHOSH	5	4	4	4	4	21
40	1.8902E+10	ARYA ROY	5	4	4	4	4	21
41	1.8902E+10	JYOTISHKA MONDAL	5	5	5	4	3	22
42	1.8902E+10	SOURIK KARMAKAR	5	4	4	4	4	21

Dr. B.C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Subhankumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

43	1.8902E+10	GOURANGA ADHIKARI	5	4	4	4	4	21
44	1.8902E+10	NAYAN DUTTA	5	4	4	4	4	21
45	1.8902E+10	DEEP KARMAKAR	5	5	5	4	3	22
46	1.8902E+10	ANISHA SEN	5	5	5	4	4	23
47	1.8902E+10	ABHIK KUMAR BISWAS	5	4	4	4	4	21
48	1.8902E+10	NEHA BERA	A	A	A	A	A	A
49	1.8902E+10	ABHIK SARKAR	5	4	4	4	4	21
50	1.8902E+10	HIMADRI SEKHAR MUKHERJEE	A	A	A	A	A	A
51	1.8902E+10	ARNAB GORAI	A	A	A	A	A	A
52	1.8902E+10	SAYAN KUMAR MISRA	5	4	4	4	4	21
53	1.8902E+10	SOUVIK MONDAL	A	A	A	A	A	A
54	1.8902E+10	PRITHWISH GHOSH	5	5	5	4	3	22
55	1.8902E+10	AKASH KUMAR HAZRA	A	A	A	A	A	A
56	1.8902E+10	DIBYAJOTI PAL	4	4	4	4	3	19
57	1.8902E+10	TRISHA CHATTERJEE	5	5	4	5	5	24
58	1.8902E+10	AGNIK KHUTIA	5	4	4	4	4	21
59	1.8902E+10	ARNAB FOUZDAR	A	A	A	A	A	A
60	1.8902E+10	SURAJEET GHOSH	5	4	4	4	4	21
61	1.8902E+10	SHIBAM DAS	4	4	4	4	4	20
62	1.8902E+10	RAHUL GORE	4	4	4	4	3	19
63	1.8902E+10	SHIB SANKAR KUMAR	5	5	5	4	4	23
64	1.8902E+10	PRITAM MANNA	4	4	4	4	3	19
65	1.8902E+10	ARPITA PARIA	A	A	A	A	A	A
66	1.8902E+10	SAMPRATI MAITY	4	4	4	4	4	20
67	1.8902E+10	SUBHAJIT SANTRA	4	4	4	4	3	19
68	1.8902E+10	SWARNAVA DEY	A	A	A	A	A	A

Dr. B. C. Roy College of Pharmacy & AHS * Durgapur

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

9	18901922009	SOURAV GORAIN	4	4	3	4	4	19
10	18901922010	AKASH ROUTH	5	4	4	4	5	22
11	18901922011	NAYAN BISWAS	4	4	5	4	5	22
12	18901922012	TATHAGAT DHAL	5	4	4	4	5	22
13	18901922013	SURAJ KUMAR PANDIT	5	4	5	4	5	23
14	18901922014	PIYALI BEBARTTA	4	5	5	5	5	24
15	18901922015	SAMADRITA GHOSH	5	4	5	5	5	24
16	18901922016	AVINANDAN KHANDA	5	4	4	4	5	22
17	18901922017	SOUMEN KHANRA	4	5	5	3	4	21
18	18901922018	RAKHI DHUA	4	5	4	4	4	21
19	18901922019	SUBHADIP BANERJEE	4	5	3	5	4	21
20	18901922020	SAYAN BHATTACHARYAY	5	4	4	4	5	22
21	18901922021	RITRISHA ADHIKARY	5	4	5	4	5	23
22	18901922022	ARKA BEZ	4	5	3	4	4	20
23	18901922023	ARNAB SEN	3	4	3	3	3	16
24	18901922024	KASTURI PAL	3	3	3	3	3	15
25	18901922025	KOUSIK DUTTA	3	2	3	3	3	14
26	18901922026	SUBHADEEP NAYAK	A	A	A	A	A	A
27	18901922027	SUBHAM DEY	A	A	A	A	A	A
28	18901922028	SOMENATH PARAMANIK	4	5	4	4	4	21
29	18901922029	ANUSHKA PAN	5	4	5	4	5	23
30	18901922030	SANDIP MAITY	5	4	4	4	5	22
31	18901922031	YEADUL SK	3	2	3	3	3	14
32	18901922032	SHANKHA KARMAKAR	4	5	3	4	4	20

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

33	18901922033	SUBHAM DEY	4	4	3	5	4	20
34	18901922034	SPANDAN GHOSH	4	5	3	4	4	20
35	18901922035	ABHIJIT GHOSH	3	2	3	3	3	14
36	18901922036	MUNSHI AMAN SAHEIN	5	4	4	4	5	22
37	18901922037	ABHIJIT KHUTIA	5	4	5	4	5	23
38	18901922038	TANMOY DATTA	5	4	5	5	5	24
39	18901922039	AHON GHOSH	3	3	3	4	2	15
40	18901922040	ARYA ROY	5	4	5	4	5	23
41	18901922041	JYOTISHKA MONDAL	4	5	3	4	3	19
42	18901922042	SOURIK KARMAKAR	5	4	4	4	5	22
43	18901922043	GOURANGA ADHIKARI	5	4	4	4	5	22
44	18901922044	NAYAN DUTTA	5	4	5	5	5	24
45	18901922045	DEEP KARMAKAR	4	3	3	4	2	16
46	18901922046	ANISHA SEN	4	5	5	4	5	23
47	18901922047	ABHIK KUMAR BISWAS	5	4	5	4	5	23
48	18901922048	NEHA BERA	A	A	A	A	A	A
49	18901922049	ABHIK SARKAR	5	4	4	4	4	21
50	18901922050	HIMADRI SEKHAR MUKHERJEE	A	A	A	A	A	A
51	18901922051	ARNAB GORAI	A	A	A	A	A	A
52	18901922052	SAYAN KUMAR MISRA	4	5	4	4	4	21
53	18901922053	SOUVIK MONDAL	A	A	A	A	A	A
54	18901922054	PRITHWISH GHOSH	5	4	5	4	5	23
55	18901922055	AKASH KUMAR HAZRA	A	A	A	A	A	A

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

56	18901922056	DIBYAJOTI PAL	3	2	3	2	2	12
57	18901922057	TRISHA CHATTERJEE	4	5	4	4	4	21
58	18901922058	AGNIK KHUTIA	5	4	4	4	5	22
59	18901922059	ARNAB FOUZDAR	A	A	A	A	A	A
60	18901922060	SURAJEET GHOSH	4	5	5	5	5	24
61	18901922061	SHIBAM DAS	5	4	5	5	5	24
62	18901922062	RAHUL GORE	5	4	5	4	5	23
63	18901922063	SHIB SANKAR KUMAR	5	4	4	4	5	22
64	18901922064	PRITAM MANNA	4	5	5	5	5	24
65	18901922065	ARPITA PARIA	A	A	A	A	A	A
66	18901922066	SAMPRATI MAITY	5	4	5	5	5	24
67	18901922067	SUBHAJIT SANTRA	5	4	5	4	5	23
68	18901922068	SWARNAVA DEY	A	A	A	A	A	A
69	18901922069	KOUSTAV JHA	A	A	A	A	A	A
70	18901922071	MD . NASRAT ALI	4	5	4	4	4	21
71	18901922072	SANDIP PARAMANIC K	A	A	A	A	A	A
72	18901922073	SANDIP METYA	5	5	5	4	5	24
73	18901922074	SOUMYADIP MAHATO	4	5	3	4	4	20
74	18901922075	DEBJIT CHAKRABAR TI	5	4	4	4	5	22
75	18901922076	NILOY GUHA	2	1	2	1	1	7
76	18901922077	PRALAY KUMAR PAHARI	3	3	3	4	3	16
77	18901922078	SAGNIK BANIK	4	5	3	4	4	20
78	18901922079	SAIKAT BISWAS	5	4	5	4	5	23

Dr. B.C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

69	1.8902E+10	KOUSTAV JHA	A	A	A	A	A	A
70	1.8902E+10	MD . NASRAT ALI	4	4	4	4	3	19
71	1.8902E+10	SANDIP PARAMANICK	A	A	A	A	A	A
72	1.8902E+10	SANDIP METYA	4	4	4	4	4	20
73	1.8902E+10	SOUMYADIP MAHATO	5	4	4	4	4	21
74	1.8902E+10	DEBJIT CHAKRABARTI	4	4	4	4	3	19
75	1.8902E+10	NILOY GUHA	4	4	3	4	3	18
76	1.8902E+10	PRALAY KUMAR PAHARI	4	4	4	4	4	20
77	1.8902E+10	SAGNIK BANIK	5	4	4	4	4	21
78	1.8902E+10	SAIKAT BISWAS	5	4	4	5	4	22
79	1.8902E+10	SOUBHIK MONDAL	4	4	4	4	3	19
80	1.8902E+10	SUMAN JANA	4	4	4	4	3	19
81	1.8902E+10	RINTU PAL	5	5	5	4	4	23
82	1.8902E+10	GOUTAM DUTTA	4	3	3	3	4	17
83	1.8902E+10	BISHAL DAS	5	5	5	4	3	22
84	1.8902E+10	ARPITA ROY	A	A	A	A	A	A
85	1.8902E+10	SAUMYADIP KAYAL	A	A	A	A	A	A
86	1.8902E+10	AYAN MONDAL	5	5	5	4	5	24
87	1.8902E+10	KUSHAL SAHA	5	5	5	4	4	23
88	1.8902E+10	PRITHA BANERJEE	5	5	5	4	4	23
89	1.8902E+10	ANKIT DAS	5	5	5	4	3	22
90	1.8902E+10	DEBLEENA GHOSH	5	5	5	4	4	23
91	1.8902E+10	CHAYANIKA KUNDU	5	5	5	4	4	23
92	1.8902E+10	SOUMYADIP PAL	5	4	4	4	4	21
93	1.8902E+10	SHREYA ROUT	5	4	4	4	4	21
94	1.8902E+10	SANDIPAN BARMAN	4	3	3	3	5	18
95	1.8902E+10	ANIMESH MANDAL	4	3	3	3	5	18
96	1.8902E+10	RAHUL	A	A	A	A	A	A

Dr. B. C. Roy College of Pharmacy & AHS * Durgapur

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bangal-713206

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

		GHOSH						
97	1.8902E+10	GOLAM MAULA	A	A	A	A	A	A
98	1.8902E+10	SUBHADEEP HATI	A	A	A	A	A	A
99	1.8902E+10	SOUVICK MAITY	4	4	4	4	4	20
100	1.8902E+10	BRATIN ROY	4	4	4	4	4	20
101	1.8902E+10	SUVAJIT BHUNIA	4	4	4	4	4	20
102	1.8902E+10	SHREYASI MAITI	4	4	4	4	4	20
103	1.8902E+10	SANTANU DAS	A	A	A	A	A	A
104	1.8902E+10	JIT SINGHA	4	4	4	4	4	20

Dr. B. C. Roy College of Pharmacy and Allied Health Sciences

Durgapur - 713206

B. Pharm. 2nd yr 3rd Semester' 2023-2024

GRADE SHEET CONTINUOUS EVALUATION 1 (CA1)

PAPER: PHARMACEUTICAL ORGANIC CHEMISTRY II **CODE: 314**

SL. NO	UNIVERSITY ROLL NO	NAME OF THE STUDENT	FORMAT/ LAYOUT	CONTENT / STRUCTURE: INTRODUCTION	CONTENT / STRUCTURE : BODY	CONTENT/ STRUCTURE : CLOSING /RESULTS/ CONCLUSION	GRAMMAR / SPELLING	TOTAL (25)
1	18901922001	MADHURIMA KUNDU	4	4	3	4	3	18
2	18901922002	MANOJ KUMAR	4	5	4	5	4	22
3	18901922003	TUTUN MANDAL	4	5	4	4	4	21
4	18901922004	SHAMPA GHOSH	4	4	3	4	3	18
5	18901922005	MD TOHID ANSARI	5	4	5	4	5	23
6	18901922006	JEET CHINA	4	5	5	5	5	24
7	18901922007	OINDRILA NAG	5	4	5	5	5	24
8	18901922008	RAHULDEV MONDAL	4	4	3	4	3	18

Prof. (Dr.) Amir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

College of Pharmacy & AHS Durgapur

79	18901922080	SOUBHIK MONDAL	5	4	5	4	5	23
80	18901922081	SUMAN JANA	5	4	5	5	5	24
81	18901922082	RINTU PAL	5	5	5	4	5	24
82	18901922083	GOUTAM DUTTA	3	4	3	4	3	17
83	18901922084	BISHAL DAS	4	5	4	4	4	21
84	18901922085	ARPITA ROY	A	A	A	A	A	A
85	18901922086	SAUMYADIP KAYAL	A	A	A	A	A	A
86	18901922087	AYAN MONDAL	4	5	5	4	5	23
87	18901922088	KUSHAL SAHA	5	4	5	4	5	23
88	18901922089	PRITHA BANERJEE	5	4	4	4	5	22
89	18901922090	ANKIT DAS	5	4	5	4	5	23
90	18901922091	DEBLEENA GHOSH	5	4	3	4	3	19
91	18901922092	CHAYANIKA KUNDU	5	4	5	4	5	23
92	18901922093	SOUMYADIP PAL	3	3	3	4	3	16
93	18901922094	SHREYA ROUT	5	4	5	4	4	22
94	18901922095	SANDIPAN BARMAN	5	4	5	4	5	23
95	18901922096	ANIMESH MANDAL	5	4	4	4	5	22
96	18901922097	RAHUL GHOSH	A	A	A	A	A	A
97	18901922098	GOLAM MAULA	A	A	A	A	A	A
98	18901922099	SUBHADEEP HATI	A	A	A	A	A	A
99	18901922100	SOUVICK MAITY	4	5	5	4	5	23
100	18901922101	BRATIN ROY	5	4	5	4	5	23
101	18901922102	SUVAJIT BHUNIA	4	5	5	5	5	24
102	18901922103	SHREYASI MAITI	5	4	5	5	5	24
103	18901922104	SANTANU DAS	A	A	A	A	A	A

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Dr. Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

104	18901922105	JIT SINGHA	5	4	4	4	5	22

SAMPLE OF ASSIGNMENT

Dr. B. C. Roy College of Pharmacy and Allied Health Sciences
Durgapur – 713206

ASSIGNMENT

NAME : ARYA ROY

YEAR & SEMESTER : 2nd YEAR, 4th SEMESTER

UNIVERSITY ROLL NO : 18901922040

PAPER : PHARMACOGNOSY AND PHYTOCHEMISTRY – I THEORY

PAPER CODE : PT-412

DATE : 17-03-2024

Arya Roy
SIGNATURE OF THE STUDENT

24
19/3/24

P-01

Topic :- Illustrate and categorize natural allergens with specific examples.

Definition :- Allergen are inciting agents of allergy. i.e. the substances capable of sensitizing the body in such a way that an unusual response occurs in hypersensitive persons. Allergen may be biologic, chemical or of synthetic origin. The substances such as pollens, dandruff, dust etc. are natural allergens. Although the chemical identity of allergen is unknown but most known allergens are protein or glycoprotein and do not have much difference from other immunogen except perhaps being somewhat smaller in size. Most allergic substances are mixture in composition. Allergen from related sources often similar chemically and cross allergenic.

Allergy definition :-
The allergy may be defined as a specific immunologic reaction to an immunogen - a normally harmless substance. It is first defined in 1906 by von Pirquet who described allergy as changed or altered reaction in the body of individual, in response to a substance or condition that is harmless to others.

Symptoms :- Allergy symptoms, which depend on the substances involved, can affect your airways, sinuses and nasal passages, skin and digestive system. Allergic reactions can range from mild to severe. In some severe cases, allergies can trigger a life-threatening reaction known as anaphylaxis.

Hay fever, also called allergic rhinitis, can cause
- Sneezing
- Itching of the nose, eyes on roof of the mouth
- Runny, stuffy nose.
- Watery, red or swollen eyes.

P-1

A food allergy can cause
- Tingling in the mouth.
- Swelling of the lips, tongue, face, or throat.
- Hives or Anaphylaxis.

A drug allergy can cause
- Hives
- Itchy skin
- Rash
- Facial swelling
- Wheezing
- Anaphylaxis.

Following are predisposing factors which make the person hypersensitive to allergens.
1. Hereditary tendency to allergic response.
2. Dysfunction of the endocrine glands.
3. Increased excitatory of sympathetic and parasympathetic nervous system.
4. Absorption of metabolic and catabolic substances.
5. Hepatic dysfunction.
6. Psychic influences.

The allergens can be classified on the basis of types of symptoms, which depend on the shock organs affected by the particular allergens and its route of entry into the body :-
1. Inhalant allergens
2. Ingestant allergens
3. Injectant allergens
4. Contactant allergens
5. Infectant allergens

4) Types of Allergens :-

(1) Inhalant allergen :- Inhalant allergens are substances in the air that can trigger allergic reaction. They are of two forms particles like pollen, dust mites, pet dander, which we might inhale without realizing it.

How inhaled allergen cause allergies :- Inhalant allergens cause allergies by triggering your immune system. When these substances are inhaled the body mistakes them for invaders and responds by releasing chemicals that cause allergic symptoms.

P-2

Some common examples of inhalant allergens :-
Some common inhalant allergens include pollen from trees, grasses and weeds, dust mites, mold spores and animal dander, from pets such as cats and dogs.

Symptoms of allergies to airborne substances are following :-
1. Sneezing often accompanied by a runny or clogged nose.
2. Coughing and postnasal drip.
3. Itching eyes, nose and throat.
4. Watering eyes, conjunctivitis.

(2) Ingestant allergens :- Allergens which are present in food stuff and swallowed are termed ingestant (food allergy). A food allergy is an immune system response to a food. Once the immune system decides that a particular food is harmful, it creates specific antibody to it.

Symptoms of ingestant allergy :- The gastrointestinal symptoms are mainly affected by the food allergens but they also cause skin rash, puffed lips and tongue, migraines, vomiting or other symptoms like severe eczema of hand and feet. The effects of food allergens are not localized to one organ or area of the body, but it may transfer to other organs by the blood. Rash, an atopic dermatitis such as tomato rash, strawberry rash are that caused by eating oranges juice, cold liver oil or other vitamins containing fish liver oils.

Prevention :- Most satisfactory method of combating food allergens is elimination of the offending substance from the diet. Dairy milk allergy is a specific immunologic antibody-antigen reaction due to a lactoalbumin because healing and boiling often destroy protein. Milk allergy may result in severe

P-3

Prof. (Dr.) Sunil Kumar Samanta
M.Pharm, Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

dermatitis, recurrent rhinorrhoea, bronchitis and asthma. Its antigenicity can be avoided by the use of commercial milk substitutes that are prepared from soya bean isolates.

(3) Injectant Allergens :- Injectant allergens cause symptoms similar to those of the antibiotics e.g. penicillin, cephalosporin and semisynthetic.

Symptoms :-

1) Itching of the palms of the hands and the soles of the feet.
2) Erythema and
3) Peeling of the skin
4) In severe cases anaphylactic shock may occur.

The natural sources of injectable allergens are produced by the sting of bees, hornets and wasps. The allergens injected by the stings of such insects can induce severe local and constitutional reactions sometimes causing death.

In addition to penicillin products, other injectable that may cause allergies are liver extract, antitoxins and the glandular products.

(4) Contactant Allergens :- A number of plants and their products have been identified as the causes of contact dermatitis in North America belongs to the Anacardiaceae family, primarily the genus Toxicodendron and includes poison ivy, oak and sumac.

Symptoms :-

Common symptoms include skin irritation, redness itching, swelling, rash, blistering and in severe cases hives or eczema.

P.T.O.

(5) Infectant Allergen :- Allergy caused by the metabolic product of living microorganism in the human body such as the continual presence of certain types of bacteria, protozoa, moulds, helminthes and other parasites in the body of human being that are responsible for the chronic infection for which patients are not aware. Often the metabolic product of their growth causes some patient sensitized and the patient may exhibit allergic symptoms, which doesn't response positively to routine skin test for inhalant allergen.

Symptoms :- Common symptoms are –

1.) Sneezing
2.) Coughing
3.) Wheezing
4.) Nasal congestion
5.) Skin rashes
6.) Hives.

Conclusion :- In conclusion, understanding and managing allergens is crucial for promoting health and well-being. By identifying and avoiding allergens individuals can reduce the risks of allergic reactions and improve their quality of life. Additionally, continued research and education are essential to develop effective strategies for allergen detection prevention and treatment. Overall, prioritizing allergen awareness can lead to healthier communities and improved healthcare outcomes.

19/3/24

DR. B. C. ROY COLLEGE OF PHARMACY AND ALLIED HEALTH SCIENCES

M. Pharm / B. Pharm 2nd Year 3rd Semester 2023
Sessional Test No. CA-2 Date 28/4/23
Name Andrila Nag
Sl. No. / University Roll No. 18301922023
Paper Pharmaceutical Microbiology Code PT-3.9
Sl. No. 1/23/02/ 0577
Signature of Invigilator 28/04/2023

FOR EVALUATION ONLY
(Marks Obtained) [Full Marks 23]

Question Number	1	3	7	4	2								Total Marks	Examiner's Signature
Marks Obtained	4	4	5	4.5	5								22.5	

[START ANSWERING FROM THE SPACE BELOW]

Answers

1) i) The method that is not used in pure culture preparation is dish plate.
ii) Eosin is not a basic dye.
v) The dye that can bind covalently to the deoxy ribose sugar of the DNA is acridine III.
vi) Not true with respect to capsule staining – crystal violet (CV).
iv) The pressure required for sterilization in autoclave is 15 psi.

2) Initial population of bacterial culture medium = 50
Mean generation time = 20 minutes
Total time = 2 hours
= 120 minutes
Time of lag phase = 40 minutes

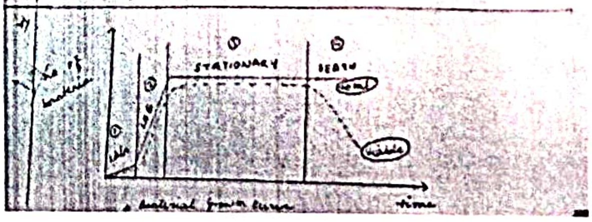
∴ Time taken for actual growth = total time – time of lag phase
= 120 – 40
= 80 minutes

No. of generations = $\frac{\text{time taken for actual growth}}{\text{mean generation time}}$
$= \frac{80}{20}$
$= 4$

∴ Final population, $N = N_0 (2)^n$
$= 50 \times (2)^4$
$= 50 \times 16$
$= 800$

Final population after 2 hours is 800

7)



Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

① Lag Phase
- In this phase, the bacteria starts to adapt itself with the new environmental conditions.
- Due to high resistance, most of the bacteria die, but its biological activity remains highly active in the living ones.
- The growth rate is maintained by reproduction in some bacteria and death in others.

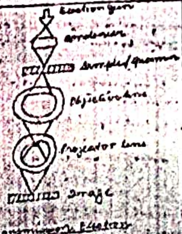
② Log Phase:
- After the bacteria gets adapted to the environmental conditions, the log period occurs.
- As the growth of bacteria increases exponentially, the phase can also be called exponential phase.
- The actual bacterial growth occurs during this period.
- Nutritional requirements of the bacteria are higher in log phase.
- The rate of growth, development and differentiation of bacteria are highest during log phase.

③ Stationary Phase
- When the rate of growth of bacteria becomes equal to the rate of death, the line of the graph becomes a straight line forming a plateau-like region. This condition is known as stationary phase.
- The nutritional requirements of bacteria are not met to greater extent during this phase due to their unavailability.
- Nutrition and gases like O_2 that helps in the growth of bacteria becomes limited and scarce.
- Waste product accumulation of bacteria increases.

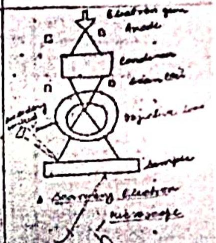
④ Death Phase
- The scarcity of the nutritional requirements of bacteria arising during the stationary phase leads to the decrease in the growth rate of bacteria leading to the death phase.

- The growth of bacteria almost reaches the end in death phase.

TEM	SEM
TEM stands for Transmission Electron Microscope	SEM stands for Scanning Electron Microscope.
Transmission Electron Microscope uses the electrons that pass through the specimen as their source of illumination.	Scanning electron microscope uses electrons (secondary) emitted from the surface of the specimen as source of illumination.
Transmission electron microscope is considered as an electron microscope analog of light microscope.	Scanning electron microscope is considered as the electron microscope analog of stereo light microscope.
Transmission electron microscope is used to view internal cell structures, structures of proteins, organisation of molecules, structure of molecules and their organisation and also the organisation of filaments.	Scanning electron microscope is used to view surfaces of cells and microorganisms.



Transmission Electron Microscope



Scanning Electron Microscope

⑤ Culture Media provides the nutritional requirements that are essential for the growth of the bacteria. Culture media can be solid, semi-solid or liquid depending upon the constituents.

Selective Culture Media :- Selective culture media is the type of culture media that allows the growth of a specific type of microorganisms and prevents the growth of all the other microorganisms.
eg - Whole Blood Serum Culture Media.

Differential Culture Media :- Differential culture media is a special type of culture media that helps to differentiate between the microorganisms growing in that culture media. Approach.
eg - MacConkey agar Culture Media.

— x —

Prof. (Dr.) Sajal Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

ACCREDITED BY NAAC (B++) & NBA (FOR UG PHARMACY) [2023-2026]

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

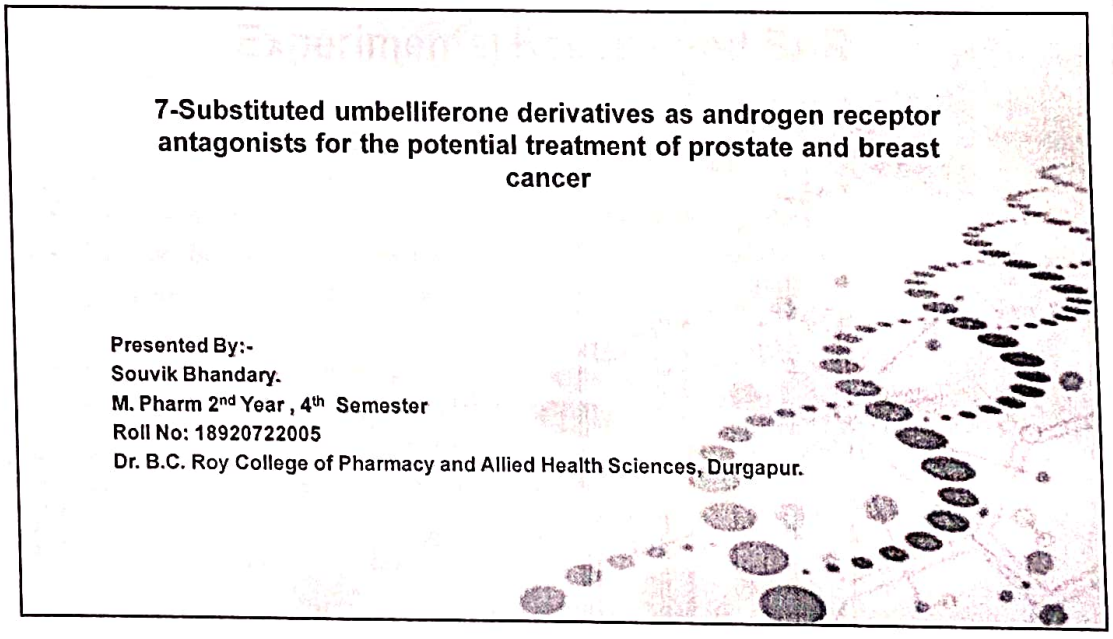
Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

POWER POINT PRESENTATION

PowerPoint presentations are a powerful tool for communication and have become an essential part of business, education, and many other fields. It allows to use visuals like images, graphs, and charts to make the topic more compelling. Visual aids can help to illustrate complex ideas, making them easier to understand and remember. At student level, power point helps to organize thoughts and structure presentation logically, helping to break down information into manageable portion. Moreover, power point presentations can be easily shared and collaborated on. This makes it easier for teams to work together on a project, ensuring that everyone is working in co-ordination contributing to the final product.

Nowadays students make presentations with interactive elements such as hyperlinks, embedded videos, animations together with charts, graphs, and tables. These features make their effort more dynamic and engaging, encouraging audience participation. We at our college encourage the students to represent data as per the university norms with such power point presentations and enhance the professionalism at the young level itself. So that with their deliverable they can put forward their work effectively leaving a lasting impression.

SAMPLE OF PRESENTATION



Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Sankar Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Contents:-

Experimental Results and SAR

- **Experimental Results & SAR:**
- Synthesis of compounds (7a–d)
- Tested on prostate cancer (22Rv1) and breast cancer (MCF-7) cell lines
- Two compounds (7a,7b) showed superior activity
- Compound 7a: highest potency with submicromolar inhibitory activity

- **Compound 7a – Key Findings**
- Enhanced activity due to 3,5-bis-trifluoromethyl group
- Likely causes steric interactions displacing helix 12 from the binding pocket
- Crucial for retaining activity in AR mutants [7-9]

Dr. B. C. Roy College of Pharmacy Durgapur

Prof. (Dr.) [illegible] Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Continuation:-

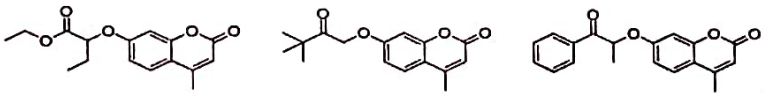
- **Breast Cancer (BC):**
  - ❖ AR is expressed in breast cancer, and its role is still under exploration.
  - ❖ The androgen signaling pathway is considered a potential target in breast cancer therapy.
  - ❖ The androgen receptor (AR) is prevalent in both estrogen receptor (ER) positive and negative breast cancers.[2,4]

Discovery and Optimization of AR Antagonists

❖ Use of computer-aided drug discovery

❖ Identification of new AR antagonists with pure antagonist activity

❖ Focus on modifying the terminal aromatic group and the 4-position of the coumarin ring



1
IC_{50} = 5 μM

2
IC_{50} = 3.76 μM

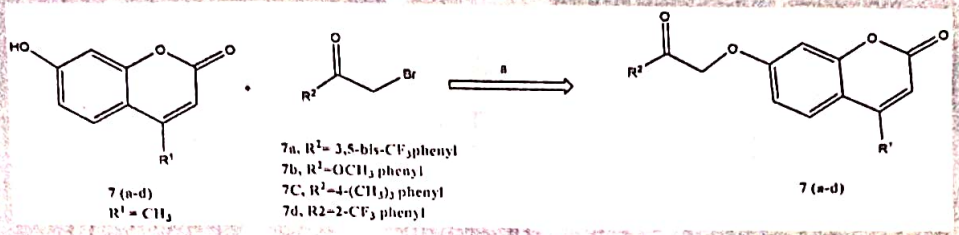
3
IC_{50} = 5.09 μM

Structures of chemotype A (represented by compound 1) and chemotype B (represented by compounds 2 and 3).

Dr. B. C. Roy College of Pharmacy & AHS * Durgapur

Prof. (Dr.) Bikash Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Synthetic Scheme:



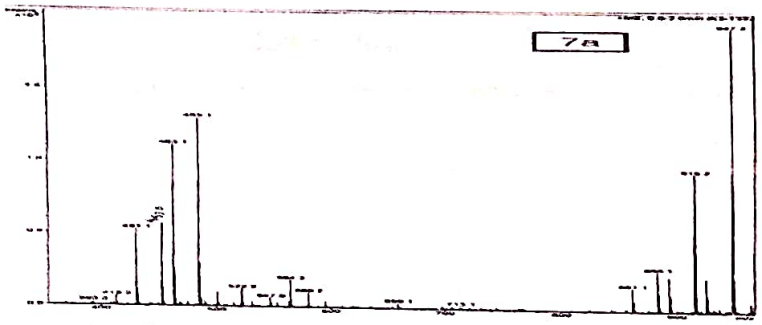
7 (a-d)
$R^1 = CH_3$

7a, R^2= 3,5-bis-CF_3phenyl
7b, R^2=OCH_3 phenyl
7C, R^2=4-$(CH_3)_3$ phenyl
7d, R2=2-CF_3 phenyl

7 (a-d)

Synthesis of beta keto ethers (7 (a-d)). Reagents and condition:(a) THF,Et3N,rt, 24 h

Spectral Data :



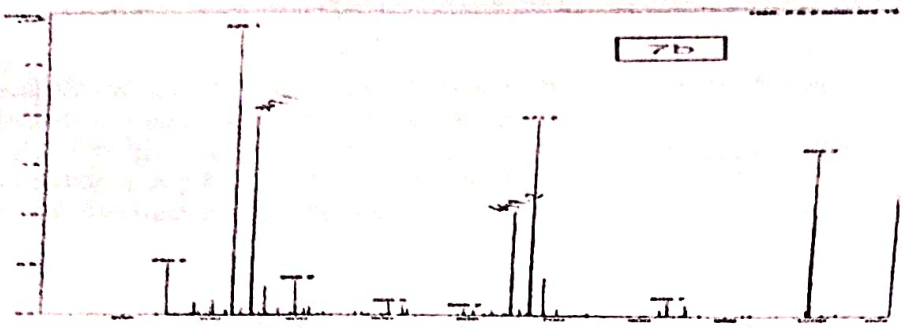
Mass Spectral Data of highest potency with submicromolar inhibitory activity compound(7a)

m/z 431.1 (M+H+):
This peak represents the molecular ion plus a proton (M+H+).
The observed m/z (mass-to-charge ratio) of 431.1 suggests that the molecular weight (MW) of the compound is 430.1 g/mol. This is because in electrospraionization (ESI) in positive mode, a proton (H+) is added to the molecule, increasing the mass by 1 unit.

m/z 453.1 (M+Na+):
This peak represents the molecular ion plus a sodium ion (M+Na+).
The observed m/z of 453.1 suggests the addition of a sodium ion (Na+) to the molecule. The molecular weight (MW) of the compound is again inferred to be 430.1 g/mol since the sodium ion adds approximately 23 units to the mass (430 + 23 = 453).

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Continuation:

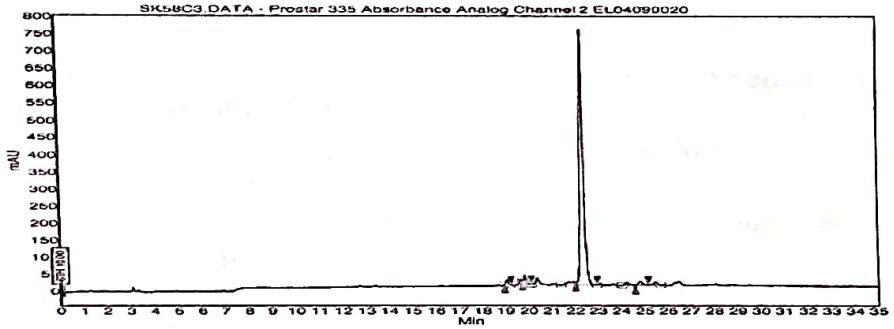


Mass Spectral Data of 7b

m/z 326.1 (M+H+):
This peak represents the molecular ion of the compound plus a proton (M+H+).
The observed m/z (mass-to-charge ratio) of 325.1 suggests that the molecular weight (MW) of the compound is 324.1 g/mol. This is because in electrospray ionization (ESI) in positive mode, a proton (H+) is added to the molecule, increasing the mass by 1 unit.

m/z 347.1 (M+Na+):
This peak represents the molecular ion plus a sodium ion (M+Na+).
The observed m/z of 347.1 suggests the addition of a sodium ion (Na+) to the molecule. The molecular weight (MW) of the compound is again inferred to be 324.1 g/mol since the sodium ion adds approximately 23 units to the mass (324 + 23 = 347).

Continuation:



HPLC Data of highest potency with submicromolar inhibitory activity compound(7a)

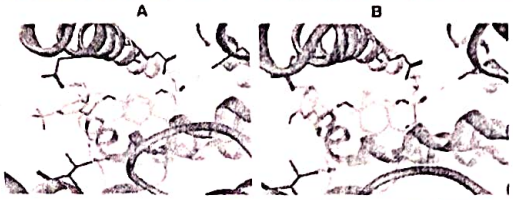
Peak Results:

Index	Name	Time[Min]	Quantity [%Area]	Height[Mau]	Area[Mau]	Area % [%]
4	UNKNOWN	19.07	1.17	13.0	1.6	1.168
3	UNKNOWN	19.84	1.41	19.4	2.0	1.412
1	UNKNOWN	22.37	95.78	747.1	133.7	95.781
2	UNKNOWN	24.81	164	11.3	2.3	1.639
Total			100.00	790.8	139.6	100.000

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B.C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Molecular Modelling:-

- Molecular docking studies were used to understand the interactions between the synthesized compounds and the androgen receptor.
- Most active compounds (7a,7b) interactions in AR ligand-binding domain (LBD).
- Hydrogen bonds: Arg 752, Gln 711, Thr 877, Asn 705.
- Hydrophobic interactions with the coumarin moiety.



Docking Images (A&B)

Conclusion:-

- Umbelliferone derivatives, specifically 7-substituted compounds, showed potential as AR antagonists.
- Compound 7a demonstrated significant inhibitory activity in both prostate and breast cancer cell lines.
- The findings provide a basis for further development of these derivatives for the treatment of AR-related cancers.

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Sanjay Kumar Samanta
M.Pharm, Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

References:-

1. Gronemeyer, H.; Gustafsson, J.; Laudet, V. Nat. Rev. Drug Disc. 2004, 3, 950.

2. Chang, C.; Lee, S.; Yeh, S.; Chang, T. M. Oncogene 2014, 33, 3225.

3. McEwan, I. J. Future Med. Chem. 2013, 5, 1109.

4. Proverbs-Singh, T.; Feldman, J. L.; Morris, M. J.; Autio, K. A.; Traina, T. A. Soc. Endocrinol. 2015, 22, R87.

5. Shen, H. C.; Shanmugasundaram, K.; Simon, N. I.; Cai, C.; Wang, H.; Chen, S.; Balk, S. P.; Rigby, A. C. Mol. Endocrinol. 2012, 26, 1838.

6. Voet, A.; Helsen, C.; Zhang, K. Y.; Claessens, F. ChemMedChem 2013, 8, 644..

7. Bajorath, J. Future Med. Chem. 2014, 6, 1545.

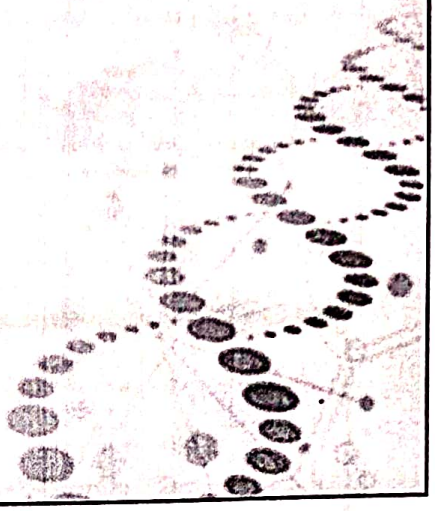
8. Dimova, D.; Heikamp, K.; Stumpfe, D.; Bajorath, J. J. Med. Chem. 2013, 56, 3339.

9. Stumpfe, D.; Bajorath, J. J. Med. Chem. 2012, 55, 2932.

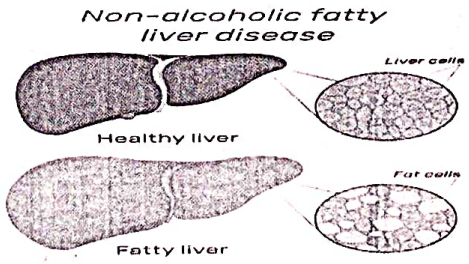
10. Pereira de Jesus-Tran, K.; Cote, P. L.; Cantin, L.; Blanchet, J.; Labrie, F.; Breton, R. Protein Sci. 2006, 15, 987.

11. Madauss, K. P.; Grygielko, E. T.; Deng, S. J.; Sulpizio, A. C.; Stanley, T. B.; Wu, C.; Short, S. A.; Thompson, S. K.; Stewart, E. L.; Laping, N. J.; Williams, S. P.; Bray, J. D. Mol. Endocrinol. 2007, 21, 1066.

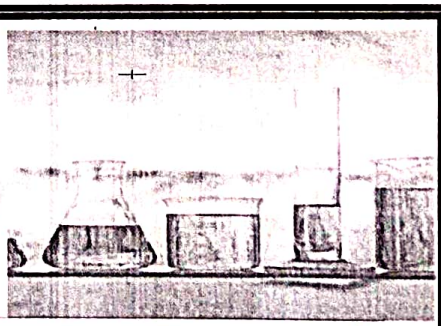
12. http://dx.doi.org/10.1016/j.bmcl.2016.02.088



Machine learning-structure-based discovery of a novel chemotype as FXR agonists for potential treatment of nonalcoholic fatty liver disease



Presented by
Arup Koley
M. Pharm , 2nd year, Pharmaceutical Analysis
Dr. B.C. Roy College of Pharmacy & AHS



Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

INTRODUCTION

- Non-alcoholic fatty liver disease (NAFLD) is defined as the accumulation of fat in the liver (hepatic steatosis) not related to alcohol consumption. NAFLD is basically metabolic syndrome's hepatic manifestation .
- NAFLD is a progressive disease, which begins with steatosis, develops into nonalcoholic steatohepatitis (NASH), then to fibrosis, and eventually to cirrhosis and hepatocellular carcinoma .
- Farnesoid X receptor (FXR) is a bile acid (BA)-activating nuclear receptor, which is highly expressed in the liver, gall bladder, intestines, and kidney. , FXR is widely acknowledged as a promising target for the treatment of liver disorders such as nonalcoholic fatty liver disease (NAFLD), primary biliary cholangitis (PBC).
- A number of research groups are now involved in the design and development FXR partial agonists and this proposal is thoughtfully crafted to exploit the advanced *in silico* modelling techniques coupled with intuitive design, synthetic medicinal chemistry and pharmacological screening to design and develop new lead molecules as FXR partial agonists.

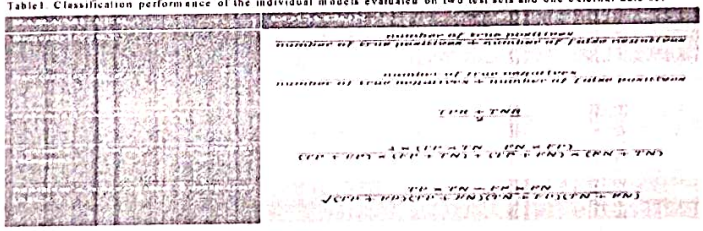
DESIGN STRATEGY

❑ Machine learning:-

- 1242 compounds with hFXR activity values (EC50) were downloaded from the ChEMBL26 database accessed in April 2020).
- Only the compounds with exact EC50 values were kept and the average value was used for every compound with more than one EC50 values. The compounds were classified as active or inactive, based on whether the EC50 values were below 1 μM.
- Five ML algorithms, i.e. KNN, SVM, RF, XGBoost and DNN, were applied and the classifiers were constructed with Scikit-learn (version 0.21.3) or Keras (version 1.0.8, for DNN).
- According to four models, i.e., MACCS:RF, MACCS:SVM, Morgan2 RF and Morgan2:SVM, showed excellent performance on both Test set 1 and Test set 2.
- According to Test set 1, their MCCs overpassed 0.6 and the AUCs were over 0.8. Though not as excellent as they performed on Test set 1, the models also showed fairly good classification performance on Test set 2, with the MCCs and AUCs greater than 0.5 and 0.7, respectively.
- The MCCs of the four models are all greater than 0.74, while the AUC values are bigger than 0.95.

Model Name	Test set 1*				Test set 2*				External data set				
	ACC	SEN	SPE	MCC	AUC	AC	SE	SP	MCC	AUC	AC	SE	SP	MCC	AUC
MACCS:KNN	0.806	0.850	0.727	0.577	0.819	0.734	0.810	0.671	0.488	0.731	0.911	0.958	0.891	0.810	0.942
MACCS:RF	0.823	0.875	0.727	0.609	0.880	0.708	0.925	0.552	0.527	0.703	0.873	0.958	0.836	0.744	0.953
MACCS:SVM	0.847	0.913	0.727	0.659	0.900	0.797	0.900	0.655	0.581	0.811	0.873	0.958	0.836	0.744	0.953
MACCS:XGBoost	0.806	0.825	0.659	0.507	0.863	0.690	0.850	0.483	0.362	0.762	0.855	0.958	0.782	0.685	0.908
MACCS:DNN	0.774	0.813	0.705	0.512	0.872	0.739	0.825	0.621	0.434	0.758	0.929	0.917	0.800	0.698	0.951
Morgan2:KNN	0.855	0.925	0.636	0.602	0.916	0.754	0.900	0.552	0.491	0.799	0.848	0.958	0.800	0.703	0.963
Morgan2:RF	0.834	0.963	0.705	0.671	0.894	0.783	0.975	0.586	0.598	0.815	0.873	0.958	0.836	0.744	0.972
Morgan2:SVM	0.871	0.938	0.750	0.714	0.876	0.768	0.925	0.552	0.527	0.824	0.901	1.000	0.800	0.741	0.953
Morgan2:XGBoost	0.798	0.850	0.705	0.557	0.893	0.783	0.875	0.655	0.549	0.824	0.785	0.958	0.709	0.614	0.947
Morgan2:DNN	0.774	0.888	0.568	0.489	0.903	0.768	0.900	0.586	0.522	0.809	0.722	0.958	0.618	0.534	0.947

Table1 Classification performance of the individual models evaluated on two test sets and one external data set

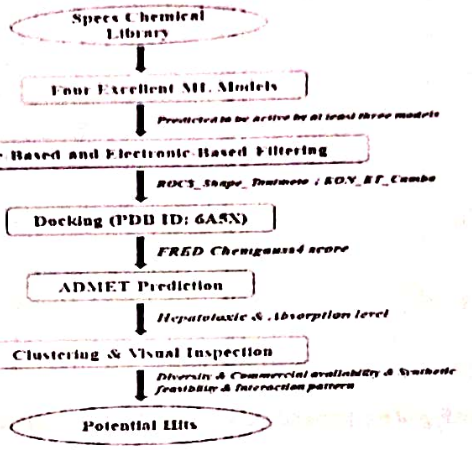


$$TPR + TNR$$

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

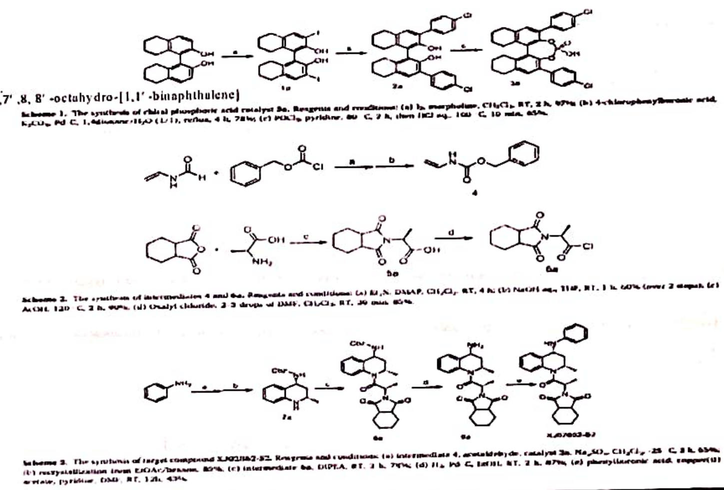
Dr. B.C. Roy College of Pharmacy & AHS * Durgapur

Multi-stage computational workflow for novel FXR agonist discovery



SYNTHETIC STRATEGY

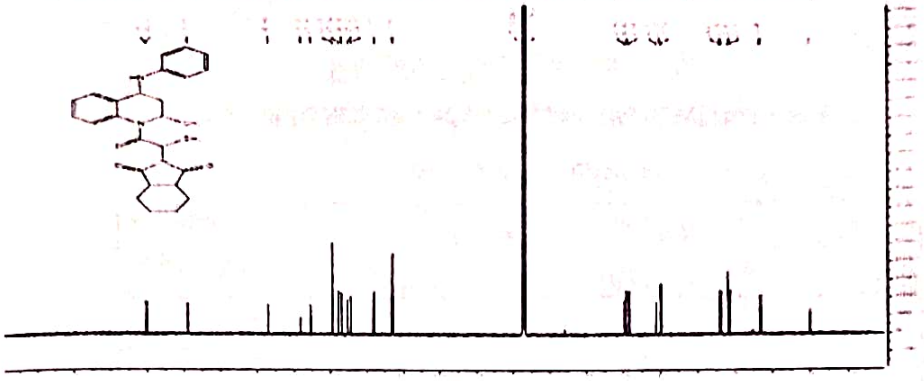
(S)-5,5',6,6',7,7',8,8'-octahydro-[1,1'-binaphthalene]-2,2'-diol



Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B.C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

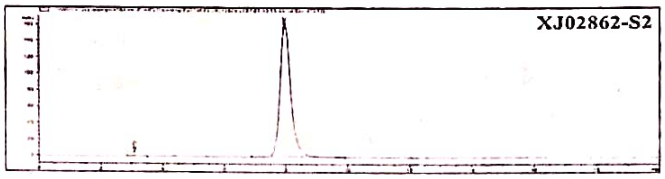
Dr. B.C. Roy College of Pharmacy & AHS * Durgapur

^{13}C NMR and Spectra of 2-((S)-1-((2S,4R)-2-methyl-4-(phenylamino)-3,4-dihydroquinolin-1(2H)-yl)-1-oxopropan-2-yl)hexahydro-1H-isoindole-1,3(2H)-dione (XJ02862-S2)



13C NMR (101 MHz, Chloroform-d) δ 180.17, 180.12, 169.00, 147.01, 138.22, 135.36, 129.50, 127.94, 126.94, 125.32, 124.37, 118.15, 113.07, 49.76, 49.11, 48.30, 41.13, 40.03, 39.74, 24.15, 23.60, 21.88, 21.30, 13.20

HPLC chromatograms of target compound (XJ02862-S2)



Column: CHIRALPAK AD-3 (250×4.6 mm, 3 μm); eluent: hexane/2-propanol: 75/25; flow rate, 1.0 mL/min; column temperature, 40 ° C; detection, 254 nm.
HPLC purity: 99.7%. RT = 7.942 min.

CONCLUSION

FXR plays a crucial role in bile acid, glucose and lipid homeostasis, which has become an attractive target to discover and develop drugs for NAFLD treatment. Due to the severe side effects of OCA as a representative semisynthetic BA derivative, nonsteroidal FXR agonists have received extensive attention from researchers in academia and pharmaceutical industry in recent years. Unfortunately, no FXR agonist has been approved for NAFLD so far. ML based computational approaches can identify potential hits rapidly and effectively, whereas they were rarely applied for the discovery of FXR agonists and the only application merely brought about weakly active chemotypes in vitro

Dr. B.C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Sahil Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B. C. Roy College of Pharmacy and AHS

Bidhannagar, Durgapur-06

GRADING RUBRICS FOR CONTINUOUS EVALUATION 3

For Multiple Choice Question

GRADING →	1	0
Q. NO: 1	Correct	Incorrect
Q. NO: 2		
Q. NO: 3		
Q. NO: 4		
Q. NO: 5		
Q. NO: 6		
Q. NO: 7		

For Short Answer Type

GRADING →	5	4	3	2	1	0
Q. NO: 2	Mentioned 5 key words	Mentioned 4 key words	Mentioned 3 key words	Mentioned 2 key words	Mentioned 1 key words	Incorrect answer
Q. NO: 3						
Q. NO: 4						
Q. NO: 5						
Q. NO: 6						
Q. NO: 7						

Shobhan Bose
(IC_Exam)
BCRCP

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Sudhir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 243 2678/79
e-mail : bcrcp_dgp@yahoo.co.in
: www.bcrcp.ac.in

Approved by PCI & Affiliated to MAKAUT, WB and WBSCT&VE&SD
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur-713206, West Bengal (India)

SEMINAR (PRESENTATION) EVALUATION RUBRICS (100 marks) - MPT1986/MPT391			
	Exemplary (17-20 marks)	**Proficient (13-16 marks)**	**Needs Practice (<=12 marks)**
Organization (20)	· The information is in logical, interesting sequence which audience can follow. · Uses an engaging beginning and/or thoughtful ending. · Moves smoothly from one idea to the next all of the time	· Student presents information in logical sequence which audience can follow. · Uses an appropriate beginning or ending. · Moves smoothly from one idea to the next some of the time.	· Sequence of information is difficult to follow. · Lacks beginning, middle, and end. · Does not move smoothly from one point to another
Language use and Delivery (20)	· Effectively uses eye contact. · Speaks clearly, effectively and confidently using suitable volume and pace. · Fully engages the audience. · Dresses appropriately. · Selects rich and varied words for context and uses correct grammar.	· Maintains eye contact. · Speaks clearly and uses suitable volume and pace. · Takes steps to engage the audience · Dresses appropriately. · Selects words appropriate for context and uses correct grammar.	· Some eye contact, but not maintained. · Speaks clearly and unclearly in different portions. · Occasionally engages audience. · Dresses inappropriately. · Selects words inappropriate for context; uses incorrect grammar
Content (30)	· Clearly defines the topic or synopsis and its significance. · Supports the synopsis and key findings with an analysis of relevant and accurate evidence · Provides evidence of extensive and valid research / review/review with multiple and varied sources. · Combines and evaluates existing ideas to form new insights	· Defines the topic or synopsis. · Supports the synopsis with evidence. · Presents evidence of research / review with sources. · Combines existing ideas	· Does not clearly define the topic or synopsis. · Does not support the synopsis with evidence. · Presents little or no evidence of valid research / review. · Shows little evidence of the combination of ideas
Question and Answer(20)	· Demonstrates extensive knowledge of the topic by responding confidently, precisely and appropriately to all audience questions and feedback.	· Demonstrates some knowledge of the topic by responding accurately and appropriately to questions and feedback.	· Demonstrates incomplete knowledge of the topic by responding inaccurately and inappropriately to questions and feedback.
Timeliness (10)	· Entire presentation was within 15 minutes of allotted time.	· Entire presentation exceeded 5 minutes of allotted time.	· Entire presentation was exceeded 10 minutes of allotted time.

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206