NAME REACTIONS OF ORGANIC CHEMISTRY

(VOLUME – 1.)

"Education is the manifestation of perfection already in man"

– Swami Vivekananda.

(12^{th}. January 1863 – 4^{th}. July 1902)

NAME REACTIONS OF ORGANIC CHEMISTRY (VOLUME – 1.)

XI, XII & B.Sc (Pass & Hons.)

CBSE, ISC, WBCHSE and all state boards (JEE-IIT/WBJEE/NEET)

DHRUBA KUMAR SENGUPTA

B.Sc. (Hons. in Chemistry.), M.Sc. (Chemistry.), B.Ed.,
Research Experience at NIT Durgapur, W.B.

SADANANDA PRAKASHANI

Publisher & book sellers
5\1, Ramanath Mazumder Street,
Kolkata : 700009
West Bengal

CONTENTS

SN.	SERIES.	NUMBER PAGE
01.	SERIES – A	1–18
02.	SERIES – B	19–75
03.	SERIES – C	76–113
04.	SERIES – D	114–153
05.	SERIES – E	154–176
06.	SERIES – F	177–212
07.	SERIES – G	213–244
08	SERIES – H	245–276

SERIES : "A"

SN.	NAME REACTIONS.	PAGE NO.
01.	Acyloin Condensation Reaction of Bouveault – Blanc Reaction	1–4
02.	Aldol Condensation Reaction or Borodine – Wurtz Reaction	4–8
03.	Algar –Flynn – Oyamada Reaction	9
04.	Allylic Rearrangement Reaction	10–11
05.	Anthrasteroid Rearrangement Reaction	11–13
06.	Appel Reaction	13–15
07.	Arbusov Reaction	15–16
08.	Arndt – Eistert Synthesis	16–18

SERIES : "B"

SN.	NAME REACTIONS.	PAGE NO.
01.	Bechmann Reaction	19
02.	Baeyer – Villiger Condensation Reaction	20–21
03.	Baeyer – Villiger Oxidation Reaction	22–24
04.	Baker – Ollis Synthesis	24–26
05.	Baker – Venkataram Synthesis	26–29
06.	Baker – Venkataraman Rearrangement Reaction	29–30
07.	Balz Reaction	30–31
08.	Bamberger Rearrangement Reaction	31–33
09.	Bamford – Stevens Reaction	33–35
10.	Bardhan – Sengupta Synthesis	35–36
11.	Barbier – Wieland Degradation Reaction	36–37
12.	Bart Reaction	38–39
13.	Barton Reaction	39–40
14.	Bechamp Reaction	41–44

15. Beckmann Rearrangement Reaction 44–46
16. Benzidine Rearrangement or Hofmann Benzidine Rearrangement Reaction 47–52
17. Benzil – Benzilic Acid Rearrangement or Liebig rearrangement 52-53
18. Benzoin Condensation Reaction or Liebig – Wohler Condensation Reaction 54-55
19. Birch Reduction Reaction 55–56
20. Birnbaum – Simonini Reaction 57
21. Bischler – Napieralsky Reaction 58–59
22. Bogert – Cook Synthesis 60–61
23. Boord Reaction 61–62
24. Borodine – Borodine – Hunsdiecker Reaction 63–64
25. Boulton – Katrizky Rearrangement 65
26. Bouveault Reaction 66
27. Bouveault – Blanc Reduction 67–69
28. Boyland – Sism Oxidation Reaction 70
29. Bradsher Reaction 71–72
30. Bredereck Synthesis 73
31. Bucherer Reaction 73–75

SERIES : "C"

SN. NAME REACTIONS. ..... PAGE NO.

01. Carbylamine Reaction. 76-77
02. Cannizzaro Reaction. 77-81
03. Chapmann Rearrangement Reaction. 82-84
04. Chichibabin Reaction. 85-87
05. Chugaeve Reaction. 87-89
06. Claisen Reaction. 89-91
07. Claisen Ester Condensation Reac tion. 91-93

08. Claisen Rearrangement Reaction. 93-96
09. Clemmensen Reduction Reaction. 96-99
10. Cope Reaction. 99-101
11. Cope Rearrangement Reaction. 102-104
12. Corey – House Synthesis. 104-105
13. Criegee Reaction. 106-108
14. Cristol Reaction. 108-109
15. Curtius Reaction. 109
16. Curtius Rectioms or Curtius Rearrangement 110-113

SERIES : "D"

SN. NAME REACTIONS. ..... PAGE NO.
01. Dakin Reaction. 114-117
02. Dakin – West Reaction. 117-119
03. Danilov – Venus Danilova Reaction. 119-120
04. Darapsky Rearrangement Reactikon. 120-122
05 Darzens Reaction. 122-125
06. Demzanov Rearrangement Reaction. 126-128
07. Diazo Coupling Reaction. 129-131
08. Diels – Alder Reaction. 131-138
09. Dieckmann Reaction. 138-141
10. Dienone – Phenol Rearrangement Reaction or
Auwers – Ziegler Rearrangement Reaction. 141-143
11. Dimroth Reaction. 143-146
12. Dimroth Rearrangement Reaction. 146-150
13. Doebner – Miller Synthesis. 151-153

SERIES : "E"

SN.	NAME REACTIONS.	PAGE NO.
01.	Eglinton Reaction.	154-155
02.	Ehrlich Reaction of Pyrrole.	155-157
03.	Einhorn – Brunner Reaction.	157-159
04.	Elbs Cyclodehydration Reaction.	159-161
05.	Elbs Persulphate Oxidation Reaction.	161-163
06.	Emde Dehydration Reaction.	163-164
07.	Ene Reaction.	164-166
08.	Erlenmeyer Azlactone Synthesis.	166-170
09.	Eschweiler – Clark Reaction.	170-173
10.	Etards Reaction.	173-176

SERIES : "F"

SN.	NAME REACTIONS.	PAGE NO.
01	Favorsky– Allen Acetylene Rearrangement Reaction.	177-178
02.	Favforsky Rearrangement Reaction.	178-182
03.	Favorsky Condensation Reaction.	182-183
04.	Feist – Benary Synthesis.	183-185
05.	Finkelstein Reaction.	186-187
06.	Fischer Esterification Reaction.	187-189
07.	Fischer Indole Synthesis.	190-192
08.	Fischer – Hepp Rearrangement Reaction.	192-194
09.	Fossek – Page – Contant Reaction.	194-195
10.	Fries Rearrangement.	196-199
11.	Friedlander Quinoline Synthesis.	199-201
12.	Friedel – Craft Reaction.	202-207

13. Fritsch – Buttenburg – Wiechell Rearrangement Reaction. 207-209
14. Furil – Furilic Acid Rearrangement or
Liebig Rearrangement Reaction. 209-210
15. Furoin Condensation Reaction or
Liebig – Wohler Condensation Reaction. 210-212

SERIES : "G"

SN. NAME REACTIONS. ..... PAGE NO.
01 Gabriels Phthalimide Synthesis. 213-215
02. Gassman Indole Synthesis. 216-217
03. Gattermann Formylation Reaction. 217-220
04. Gattermann Amide Synthesis. 221-222
05. Gattermann Halogenation Reaction. 222-223
06. Gattermann – Koch Reaction. 223-224
07. Gattermann Nitration Reaction. 224-225
08. Gattermann Reaction. 225
09. Gewald Thiophene Synthesis. 225-228
10. Glasser Reaction. 229-230
11. Gomberg Reaction. 230-231
12. Gomberg – Bachmann Pinacol Synthesis. 232-234
13. Griess Reaction. 234-238
14. Grignard Reaction. 238-239
15. Guareschi – Thorpe Pyridone Synthesis. 240-242
16. Guerbet Reaction. 242-244

SERIES : "H"

SN.	NAME REACTIONS.	PAGE NO.
01	Haloform Reaction or Lieben Reaction.	245-248
02.	Haller – Bauer Reaction.	248-249
03.	Hantzsch Pyridine Synthesis.	250-253
04.	Hantzsch Pyrrole Synthesis.	253-255
05.	Hantzsch Thiazole Synthesis.	255-257
06.	Haworth Synthesis.	257-258
07.	Hell – Volhard – Zelinsky Reaction.	259-261
08.	Henkel Reaction.	261
09.	Henri Reaction.	262-263
10.	Herz Reaction.	263
11.	Houben – Hoesh Reaction	263-265
12.	Hofmann Degradation Reaction.	265-268
13.	Hofmann Exhaustive Methylation Reaction.	268-271
14.	Hofmann – Loffer Reaction.	272-273
15.	Hofmann – Martius Reaction.	273-275
16.	Hofmann Mustard Oil Reaction.	275-276
	*Synopsis of Name Reactions. (Series :A-H)	277-283
	*Synopsis of Chemists and Chemical Scientist.	285-288
	*Organic Functional groups According to their priority.	289