

A.S.D.GOV.T.DEGREE COLLEGE FOR WOMEN(A)

JAGANNAICKPUR, KAKINADA

DEPARTMENT OF CHEMISTRY



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Bridge Course

2021-2022

BRIDGE COURSE

2021-2022

INDEX

OBJECTIVE TEST MARKS: 20

**TOPICS: 1. ORGANIC CHEMISTRY
2. PHYSICAL CHEMISTRY
3. INORGANIC CHEMISTRY**

➤ NUMBER OF STUDENTS BENEFITED : 60

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BRIDGE COURSE 2021-2022

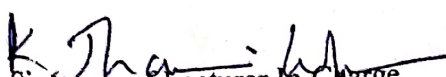
The Department of Chemistry has conducted Bridge Course for newly joined students of MPC,CBZ,CBMB.CZAqT & CBHC in the academic year 2021-2022. The course was conducted from

Syllabus covered during the course:

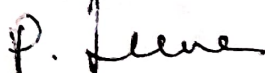
1. Basics in Chemistry
2. Scope and significance of Chemistry
3. Organic Chemistry
4. Physical Chemistry
5. Inorganic Chemistry

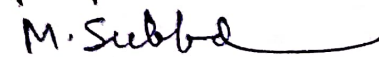
60 students were benefited from this course. This course was intended to bridge the gap between the knowledge they gained in their intermediate and the knowledge required to begin their UG students. A pre-bridge course test was conducted before the commencement of course to test the knowledge levels of students and a post-bridge course test was conducted after the completion of the course to assess the achievement of course objectives.

Mr.V.Mallikarjuna Sarma- HOD of Chemistry, Ms.Dr.K.Jhansi Lakshmi-Lecturer in Chemistry, Dr.S.Priya Darshini-Lecturer in Chemistry, Ms.P.Leena-Lecturer in Chemistry, Ms.M.Subbalakshmi-Contract Lecturer in Chemistry have conducted this course.



Signature of Lecturer In-Charge

**A.S.D. Govt. College for Women -
KAKINADA**

Signature of the Lecturers: 1. 

2. 

3.


Signature of the Principal

**PRINCIPAL
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AUTONOMOUS
KAKINADA**

Syllabus

Organic Chemistry

- Fundamental particles of an atom
- Bohr's atomic theory
- Quantum Numbers
- Basic rules for electronic Configuration
- Atomic number-Electronic configuration of Elements
- Valency of carbon
- Types of hybridization in carbon compounds
- Pi bond formation – bond polarisation
- Inductive effect
- Mesomeric effect
- Hyper conjugation effect
- Electronic configuration of Elements
- Sigma and Pi bond formation
- Valency bond theory
- Hybridisation of orbitals with examples

Physical Chemistry

- Definition of Lattice point, Space lattice, Unit Cell
- Bragg's Law
- Defects in Crystals
- Joule Thomson effect
- Liquid Crystals
- Nernst Distribution Law
- Common Ion Effect
- Solubility Product
- Colligative properties

Inorganic Chemistry

- Periodic Table
- Diborane Structure
- Oxidation states
- Magnetic Properties
- Lanthanide Contraction

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DEPARTMENT OF CHEMISTRY

BRIDGE COURSE QUESTIONNAIRE

1. Who introduced the electron ?
A) J.J.Thompson B) Rutherford C) Chadwick D) Newton
2. Which Quantum number determines the shape of the orbital.
A) Principal quantum number B) Angular Quantum Number
C) Magnetic Quantum Number D) None of these
3. Electronic configuration of inert gas is
A) $1S^2 2S^2$ B) $1S^2 2S^2 2P^3$ C) $1S^2 2S^2 2P^6$ D) $1S^2 2S^2 2P$
4. Which group is known as Alkali metal family ?
A) VII A B) IA C) IIA D) VIIIA
5. What is the valency of carbon atom ?
A) 2 B) 3 C) 4 D) None of these
6. Highest electronegative element
A) Cs B) F C) Cl D) Br
7. what is the Hybridisation in H_2O molecule?
A) SP^3 B) SP C) SP D) SP^3d
8. Which among the Following is a non metal
A) Potassium B) Chlorine C) Silicone D) Sodium
9. The Maximum number of electrons in a sub shell is given by
A) $2l+1$ B) $2(2l+1)$ C) $3n+1$ D) $2n^2$
10. Which of the following is not a Crystalline solid ?
A) Kcl B) Cscl C) Glass D) Rhombic Sulphur
11. Which substance will conduct the current in the solid state ?
A) Diomond B) Graphite C) Iodine D) Sodium
12. Which Defect causes in the density of the crystal ? Which
A) Frenkel B) Schotty C) F centre D) Interstial

13. Which of the following has no units ?
 A) Molarity B) Normality C) molality D) Mole Fraction
14. Which of the following is a colligative property
 A) Boiling Point B) Osmotic Pressure
 C) Vapour pressure D) Freezing Point
15. Lanthanoids and Actinoids together belong to
 A) S - Block B) P - Block C) D - Block D) F - Block
16. Electronic Configuration of Chromium.
 A) $(Ar^{18})3d^54s^1$ B) $(Ar^{18})3d^44s^2$ C) $(Ar^{18})3d^94s^2$ D) $(Ar^{18})3d^{10}4s^2$
17. Hybridisation of Carbon in Acetylene
 A) SP^3 B) SP^2 C) SP D) SP^3d
18. Oxidation state of Manganese in $KMnO_4$
 A) +2 B) +7 C) +6 D) 0
19. Bond length of Carbon - Carbon double bond.
 A) 1.54 \AA B) 1.34 \AA C) 1.30 \AA D) 1.20 \AA
20. Which one is not an inert gas.
 A) He B) Pt C) Ar D) Kr
21. King of chemicals is
 A) H_2SO_4 B) Oxalic acid C) HNO_3 D) NaOH
22. The weakest acid is
 A) $HOCl$ B) $HClO_2$ C) $HClO_3$ D) $HClO_4$
23. $HClO$ is []
 A) An oxide B) A chloride C) A Hydride D) An acid
24. Hybridisation of Sulphur in H_2SO_4 is
 A) SP B) SP^2 C) SP^3 D) SP^3d^2
25. Fuming sulphuric acid is commercially known as
 A) Caro's acid B) Marshel's acid C) Oleum D) Sulphurous acid
26. Which of the following is a reducing agent ?
 A) H_2SO_4 B) SO_2 C) ALL D) H_2S
27. Oil of Vitriol is
 A) SO_2 B) H_2SO_4 C) O_2 D) H_2S
28. Oxidising action increases from left to right in
 A) $Cl_2 < Br_2 < I_2 < F_2$ B) $Cl_2 < I_2 < Br_2 < F_2$
 C) $I_2 < F_2 < Cl_2 < Br_2$ D) $I_2 < Br_2 < Cl_2 < F_2$

29. Following least stable is
A) HCl B) HBr C) HI D) HF

30. Inter halogen compounds are
A) Ionic compounds
C) Molecular compounds

B) Co-ordinate compounds
D) Covalent compounds

KEY

1.A	4.B	7.A	10.C	13.D	16.A	19.B	22.A	25.C	28.D
2.B	5.C	8.B	11.D	14.B	17.C	20.B	23.A	26.D	29.C
3.C	6.B	9.B	12.B	15.D	18.B	21.A	24.C	27.B	30.D

Bridge Course Attendance 2021-2022

S.No	Roll.No	Name of the student	25/11/21	26/11/21	27/11/21	29/11/21	1/12/21	2/12/21	3/12/21	4/12/21	5/12/21	6/12/21	Signature of the student
1	2137001	K.Venkata Lakshmi	P	P	P	P	P	P	P	P	P	P	K.Venkata Lakshmi
2	2137002	B.Manasa	P	P	P	A	P	P	A	P	P	A	B.Manasa
3	2137003	Ch Malleswari	A	P	P	P	P	P	A	P	P	P	Ch.Malleswari
4	2137004	Ch.Satya	P	P	P	P	P	A	P	P	P	P	Ch.Satya
5	2137005	Ch.Ramya Sri	P	P	P	P	P	P	P	P	P	A	Ch.Ramya Sri
6	2137006	D.Lakshmi Keerthi	P	P	P	P	P	P	A	P	P	P	D.Lakshmi Keerthi
7	2137007	G.Navya	P	P	P	A	P	P	P	P	A	P	G.Navya
8	2137008	K.Devi	P	P	A	P	P	P	P	P	A	P	K.Devi
9	2137009	K.Sandhya	P	A	P	P	P	A	A	P	P	P	K.Sandhya
10	2137010	K.Asha Latha	P	P	P	A	P	P	P	P	A	P	K.Asha Latha
11	2137011	K.Reena	P	P	P	P	P	P	P	P	A	P	K.Reena
12	2137012	M.Malini	A	P	P	P	A	A	A	P	P	P	M.Malini
13	2137013	M.Sudha Sri	P	A	P	P	P	P	P	P	P	P	M.Sudha Sri
14	2137014	M.Navya Sri	P	P	A	A	P	P	P	P	P	P	M.Navya Sri
15	2137015	M.Keerthi	P	P	P	A	P	P	P	P	A	P	M.Keerthi
16	2138001	R.Dhana Lakshmi	A	A	P	P	P	A	P	P	P	P	R.Dhana Lakshmi
17	2138002	S.Prajyana Sri	P	P	P	P	P	P	P	P	P	P	S.Prajyana Sri
18	2138003	S.Sitha	P	P	P	P	P	P	P	P	P	P	S.Sitha
19	2138004	A.Vandana	P	P	P	P	P	P	P	P	P	P	A.Vandana
20	2138005	A.Sravani	P	P	P	A	P	P	P	P	P	P	A.Sravani
21	2138006	B.Vandana	A	P	P	P	P	A	P	P	P	P	B.Vandana
22	2138007	J.Srujana	P	P	P	P	P	P	P	P	P	P	J.Srujana
23	2138008	L.R.N.S Durga anasuya	P	P	P	P	P	P	P	P	P	P	L.R.N.S Durga
24	2138009	M.Sravani	P	P	P	P	P	P	P	P	P	P	M.Sravani
25	2138010	M.Vijaya lakshmi	P	P	P	A	P	A	P	P	P	P	M.Vijaya lakshmi
26	2138011	P.Sai Prasanna	P	A	P	P	P	P	P	P	P	P	P.Sai Prasanna
27	2138012	T.Ramalakshmi	P	P	P	A	P	P	P	P	P	P	T.Ramalakshmi
28	2138013	T.Devi	P	P	P	P	P	P	P	P	P	A	T.Devi
29	2138015	A.Sandhya	P	P	P	P	P	P	A	P	P	P	A.Sandhya

Ky Ky Ky A B B mmmmm mmm

30	2138016	A.Y.S.Naga Mounika	P	P	P	P	P	A	P	P	P	P	A. Naga mounika
31	2139001	A.Harisha	P	P	P	P	P	P	P	P	P	P	A. Harisha
32	2139002	B.Sujitha	P	P	P	A	P	P	P	P	P	A	B. Sujitha
33	2139003	G.Lakshmi Harika	P	P	P	P	P	P	P	P	P	P	G. Lakshmi harika
34	2139004	G.Prathiba	P	P	A	P	P	P	P	P	A	P	G. prathiba
35	2139005	G.Meghana	P	P	P	P	A	A	P	P	P	A	G. Meghana.
36	2139006	K.Sushma Sri	P	A	P	A	P	P	P	P	P	P	K. sushma sri
37	2139007	T.Aruna	P	P	P	P	P	P	P	P	P	A	T. Aruna.
38	2139008	B.Divya	P	P	A	P	P	P	P	P	A	P	B. Divya.
39	2139009	D.Bhavani	P	P	P	P	P	P	P	P	P	P	D. Bhavani
40	2139010	E.Sudha Rani	P	P	P	P	P	P	P	P	P	A	E. sudharani
41	2136001	G.Yamini	P	P	P	A	P	A	P	P	P	A	G. Yamini
42	2136002	Md.Rizwana	P	P	P	P	P	A	P	P	P	P	Md. Rizwana
43	2136003	M.Angel	A	P	P	P	P	P	P	P	A	P	M. Angel
44	2136004	M.Esteru Rani	P	P	P	P	P	P	P	P	P	A	M. Esther Rani
45	2136005	A.Satya Veni	P	P	P	P	A	P	P	P	P	P	A. Satya Veni
46	2136006	A.Bhavya Veera Deepika	A	P	A	A	P	P	P	P	P	P	A. BV Deepika.
47	2136007	B.Vinodini	P	P	P	P	P	P	P	P	P	P	B. Vinodini
48	2136008	B.Usha Rani	P	P	P	P	P	P	P	P	P	A	B. Usha Rani
49	2136009	Ch.Indraja	P	P	P	A	P	P	P	P	P	P	Ch. Indraja
50	2136010	D.Deepika	P	A	P	P	P	A	P	P	P	P	D. Deepika
51	2136011	E.Madhu sree	P	P	P	P	P	P	P	P	P	P	E. Madhu Sree.
52	2136012	G.Durga Bhavani	P	P	P	A	P	P	P	P	P	P	G. Durga Bhavani
53	2136013	G.Ramya	P	P	P	P	A	P	P	P	P	A	G. Ramya
54	2136014	J.Durga Bhavani	A	A	P	A	P	A	P	P	P	P	J. Durga Bhavani
55	2136015	K.Rishitha	P	P	P	P	P	P	P	P	P	P	K. Rishitha
56	2136016	K.Mercy Rani	P	P	P	P	P	A	A	P	P	P	K. Mercy Rani
57	2134001	A.Sandhya	P	P	P	P	P	P	P	P	P	P	A. Sandhya
58	2134002	M.A.Kowsar	P	P	A	A	P	A	P	P	P	A	M. A Kowsar
59	2134003	U.Sujana	P	P	P	P	P	P	P	P	P	P	U. Sujana.
60	2134004	B.Sri Durga	A	P	P	P	P	P	P	P	P	A	B. Sri Durga

K. K. K. B. B. B. m m m m m m m m m m

Pre and Post Bridge Course Test Marks

S.No	Name of the Student	Pre Bridge Course Test	Post Bridge Course Test
1	K.Venkata Lakshmi	15	28
2	B.Manasa	16	25
3	Ch Malleswari	12	26
4	Ch.Satya	16	25
5	Ch.Ramya Sri	10	24
6	D.Lakshmi Keerthi	15	23
7	G.Navya	16	22
8	K.Devi	17	19
9	K.Sandhya	20	22
10	K.Asha Latha	21	22
11	K.Reena	20	24
12	M.Malini	19	22
13	M.Sudha Sri	16	20
14	M.Navya Sri	18	20
15	M.Keerthi	19	21
16	R.Dhana Lakshmi	22	25
17	S.Prajyana Sri	21	26
18	S.Sitha	20	25
19	A.Vandana	16	18
20	A.Sravani	18	20
21	B.Vandana	19	22
22	J.Srujana	21	26
23	L.R.N.S Durga anasuya	22	24
24	M.Sravani	20	25
25	M.Vijaya lakshmi	19	21
26	P.Sai Prasanna	18	22
27	T.Ramalakshmi	17	26
28	T.Devi	16	27
29	A.Sandhya	18	28
30	A.Y.S.Naga Mounika	17	26
31	A.Harisha	19	25
32	B.Sujitha	20	26

33	G.Lakshmi Harika	23	26
34	G.Prathiba	20	22
35	G.Meghana	19	20
36	K.Sushma Sri	18	19
37	T.Aruna	15	16
38	B.Divya	16	18
39	D.Bhavani	18	20
40	E.Sudha Rani	20	22
41	G.Yamini	21	25
42	Md.Rizwana	22	25
43	M.Angel	16	20
44	M.Esteru Rani	18	25
45	A.Satya Veni	17	19
46	A.Bhavya Veera Deepika	16	18
47	B.Vinodini	10	16
48	B.Usha Rani	14	17
49	Ch.Indraja	15	17
50	D.Deepika	16	18
51	E.Madhu sree	17	20
52	G.Durga Bhavani	18	21
53	G.Ramya	20	22
54	J.Durga Bhavani	21	25
55	K.Rishitha	22	26
56	K.Mercy Rani	23	23
57	A.Sandhya	15	25
58	M.A.Kowsar	16	26
59	U.Sujana	17	20
60	B.Sri Durga	18	28