DTE Institute Code : 6217

Estd 2009

Shri Balasaheb Mane Shikshan Prasarak Mandal's

ASHOKRAO MANE GROUP OF INSTITUTIONS

Address : Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur - 416 112 (Maharashtra)

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Approved by : AICTE, New Delhi No. F-No. MS (NewInt) 2009 / 08, Higher & Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. Affiliated to : Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. & M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).

Accredited by NAAC

Ref. No. :

Date :

Criteria 2 :TEACHING-LEARNING AND EVALUATION

Summary Sheet

2.5 - Evaluation Process and Reforms

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time- bound and efficient

Sr. No.	Content
1	Sample Document of Grievance Redressal on Internal Examination in AY 2023-24

Chem.

141 to 174
= 34
FL - 11

Shri Balasaheb Mane Shikshan Prasarak Mandal, Ambap's
ASHOKRAO MANE GROUP OF INSTITUTIONS
Vathar tarf Vadgaon- 416 112
Faculty of Engineering
APPLIED SCIENCE & HUMANITIES DEPARTMENT

Student Attendance Sheet

UNIT TEST/MSE- I/II , SEM - Odd/Even	Class:- F.Y.B. Tech.
Academic Year: 2023-24	Subject: Engg. Chemistry.
Date- 11/10/2023	Time: 10.15 - 11.15am.

Roll No.	Name of Student	Sign	Marks
141	Ashutosh. P. Patil		18
142	Gaurav . P. Patil		14
143	PARTH D. PATIL		02
144	Parth M. Patil		15
145	Prafull. A. Patil		16
146	Rutuja. R. Patil		19
147	Samruddhi .S. Patil		20
148	Soham Rajaram Patil		20
149	Sushant subhash Patil		18
150	Vaishnavi Ravindra Patil		20
151	Yash Krishnat Patil		15
152	Yashvardhan Yuvraj Patil		20
153	Sharad Pandurang Powar		07
154	AB	Ab	
155	Aarya Pramod Rasal		20
156	Sairaj Shivaji Ghorpade		19
157	Shravani vishwanath Sankpal		20
158	Mohammadtajim Babasab Shaikh		18
159	Utkarsh N. Shelke		14
160	Vaibhav. T. Shinde		11
161	Suraj P. Lohar		16
162	Sayali S. Suryawanshi		19
163	Pranav P. Sutar		19

Roll No.	Name of Student	Sign	Marks
164	Sayali Vishvanath Thanekar	Sayali	19
165	Ankita Rajesh Utture	Ankita	20
166	Mansi Shivaji Varpe	Mansi	20
167	Nirgam Krupadan Wavdarde	Nirgam	11
168	Aryavardhan Anil Yadav	Aryavardhan	09
169	Guruprasad Bhagaji Zore	Zore	18
170		Ab	
171	Prerana Gurudev Pilare	Pilare	19
172	Riya Santosh Lalukar	Lalukar	16+1=17 Hohukar
~~173~~		Ab	
~~174~~		Ab.	

Total No. of Students : 34
Total No. of Student Present : ~~04~~ 30
No. of Student Absent : 04

Sign of Jr. Supervisor

Dr. Babasaheb Ambedkar Technological University, Lonere

ASHOKRAO MANE GROUP OF INSTITUTIONS

Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur. (M.S.) Pin 416 112.

(To be filled by the Candidate) Sr. No. 038292

Mid Sem Exam./Unit Test-I/Unit Test-II/POE

Course: FY. BTech Div- A

Exam Seat No.: 172

Subject: Engg chemistry

Code: BTBS 102 / 202

Semester: I , MSE

Examination Seat No. 172

Center: AMGOI

Date: 11/10/2023.

Time: 1 hr

B. R. Sokashe

Name of the Supervisor

Signature of the Supervisor

(To be filled in by the examiner)

Q. No.	1	2	3	4	5	6	7	8	Total Marks In Fig.	Signature
	04	12+1=13							16+1/20 = 17/20	

(Start writing from here)

Q1.

i] conc. ~~HCl~~. NaOH.

ii] super heated steam.

4

iii] Permanent

iv] starch

Q2.

(A) TEMPORARY HARDNESS:

The hardness which can be removed by simple process like boiling is called as Temporary Hardness.

Also know as carbonate system.

* Ion exchange method.

- Advantages:

1. It is a easy process.
2. It is highly superior.
3. In this method both cations and anions are removed.
4. There is no problem of ppt formation.

- Disadvantages:

1. It has high cost.
2. It can be used for turgid water
3. It can not be used for hard water.
4. It can not be used for acidic water.

3+1 = 4

* Hot lime soda.

- Advantages:

1. This process is easy to handle.
2.

- Disadvantages

1. There is problem of ppt and sludge formation.

c] CORROSION :

→ Distraction of any metal due to chemical reaction in surrounding environment.

ex: Formation of brown rust in iron
Formation of green film in copper
Formation of yellow film in sodium
Formation of Black film in silver

• CAUSES :

Any pure metal is unstable in nature hence it readially combined with atmospheric oxygen or any other chemical to form a stable compound

• EFFECT OF CORROSION :

1. Due to corrosion life of any metal get reduced
2. Due to corrosion design of any equipment get destroyed.
3. Due to corrosion color of any metal get change
4. Due to corrosion strength and toughness get reduced.
5. corrosion effect on hardness of metal.
6. Effect of physical and chemical properties of a pure metal.

E] PHASE RULE:

A

- PHASE:

A phase is defined as ~~am~~ "An homogeneous physically distinct and mechanically seperable portion of system which is seperated from other such part of the system by definite boundary surface.

eg: Ice $\rightleftharpoons$ Water $\rightleftharpoons$ water vapour
(s) (l) (g)

3

- DEGREE OF FREEDOM:

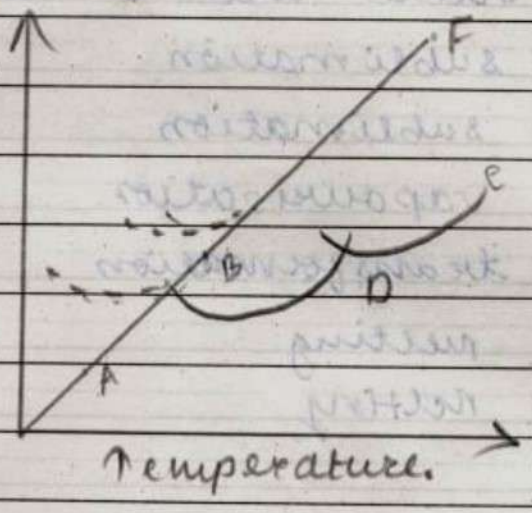
It is indepent variable factor (eg - Temperature, Pressure, concentration) which is required to express condition of a system.

- In this system there are two phase namely. Ice $\rightleftharpoons$ water $\rightleftharpoons$ W.V

① Ice $\rightleftharpoons$ water

P = 2

D]



- Sulphur System :

Sulphur system is two solid allotropes form at low Temperature in rhombic sulphur (SR) and high Temperature in monoclinic sulphur form Devides there liquid sulphur (SL) and SV. As the 4 phases are chemically sulphur it is one component system.

- Area - Sulphur system contains 4 areas namely -

① ABEF (SR) ② BCE (SM)
③ DEEF (SL) ④ ABCD (SV)

Thus each area contains only 1 phase.

$P = 1$ & $C = 1$

$F = C - P + 2$

$= 1 - 1 + 2$

$\boxed{= 2}$

Hence, it is bivarient.

c) Curve - There are 6 curve.

1. AB - sublimation
2. BC - sublimation
3. CD - vapourisation
4. BE - transformation
5. CE - melting
6. EF - melting

che.

401 - 440
=40
FL-03

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APPLIED SCIENCE & HUMANITIES DEPARTMENT

Student Attendance Sheet

UNIT TEST/~~MSE~~- I/II , SEM - ~~Odd~~/Even | Class: - FY. B.Tech (Div-D)

Academic Year: 2023-24 | Subject: Engineering Chemistry

Date- 06/03/2024 | Time :

Roll No.	Name of Student	Sign	Marks
401	Bagadi Sharada Krishna	Bagadi	19
402	Chavan Tanuja Babaso	Chavan.	11
403	Om kamlakar Ghadage	Ghadage	17
404	Harshvardhan Shivaji Ghalge		06
405	Viraj krishnath Ghorpade	Ghorpade	12
406	Tanishk Sagar Harugale		09
407	Pavithiraj Prakash Jadhav		01
408	Atharv Dilip Jondhale		09
409	Abhishek Pandurang Kadam		05
410	Pratiksha Arun Khade	Pakhe.	18
411	Prerana Santosh Khot	Khot	17
412	Yash Santosh Londhe.	Y.S.Londhe.	06
414	Sahil Laxman Mengane		19
415	Aarati Uttam Patil	Patil	20
416	Anuj Bhausa Patil.	Patil	05
417	Patil Asmita Arun	Patil.	19
418	Patil Srushti Jeevan	Patil	17
419	Suhas Anil Patil	Patil	01
420	Rohan Anil Pawar.		15
421	Yashvardhan Sudhakar Redij	Redij.	06
422	Avinash Ramchandra Shinde		08
423	Santosh Sangappa Siddhoroddi		17
424	Gayath° Ramdas Pati	Patil	19

Roll No.	Name of Student	Sign	Marks
425	Aniket khandappo Bandichode		03
427	Virendra Dattatray Dange		14
428	Paras Ramesh Desai		02
429	Sadyam Ramchandra Edake		08
430	Abhijit Ravindra Khutale		04
431	Virek Sanjay lohar		12+1=13
432	Mhabale Sanket Ananda		
433	Arif Dastgir Mullani		07
434	Ayush Jaydeep Patil		04
436	Dhanaji maruti Patil		04
437	Vipul Ravindra Patil		04
438	Sahil Sushant Sawardekar		04
439	Gurudev Gajanan Sawant		15
440	Saad Sameer Asab		15

Total No. of Students : 37
Total No. of Student Present : 37
No. of Student Absent : 00

Dr. P. R. Demanna.
Sign of Jr. Supervisor

Dr. Babasaheb Ambedkar Technological University, Lonere
ASHOKRAO MANE GROUP OF INSTITUTIONS
Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur. (M.S.) Pin 416 112.

(To be filled by the Candidate) Sr. No. 027470

Mid Sem Exam./Unit Test-I/Unit Test-II/PQE

Course: F.Y. B.Tech. Mech. Exam Seat No.: 431

Subject: Chemistry Code: BTBS 102

Semester: II, CA-I Examination Seat No.

Center: AMGOI, Vathar

Date: 6-03-2024 Time:

PRD	@maung.
Name of the Supervisor	*Signature of the Supervisor*

(To be filled in by the examiner)

Q. No.	1	2	3	4	5	6	7	8	Total Marks In Fig.	Signature
	02	10+1=11							$\frac{12+1}{20}=\frac{13}{20}$	

(Start writing from here) 13/3/2024

Q.1 i) b) lime & soda

ii) a) super heated steam.

iii) b) Wine red to sky blue

iv) b) OH^-

[2]

Q.2

Advantages of ion-exchange	Advantages of Hot-lime soda process
1) it can exchange of ions	it can not exchanged of ions
2) it is low cost	it is a high cost
Disadvantages ion-exchange	**Disadvantage Hot-lime soda**
1) this method can be not used for turmid water.	this method can be used for turmid water
2) this method can be not used for hot wather	this method can be used for hot water
3) this method can be not used for highly acidic water.	this method can be used for highly acidic water.

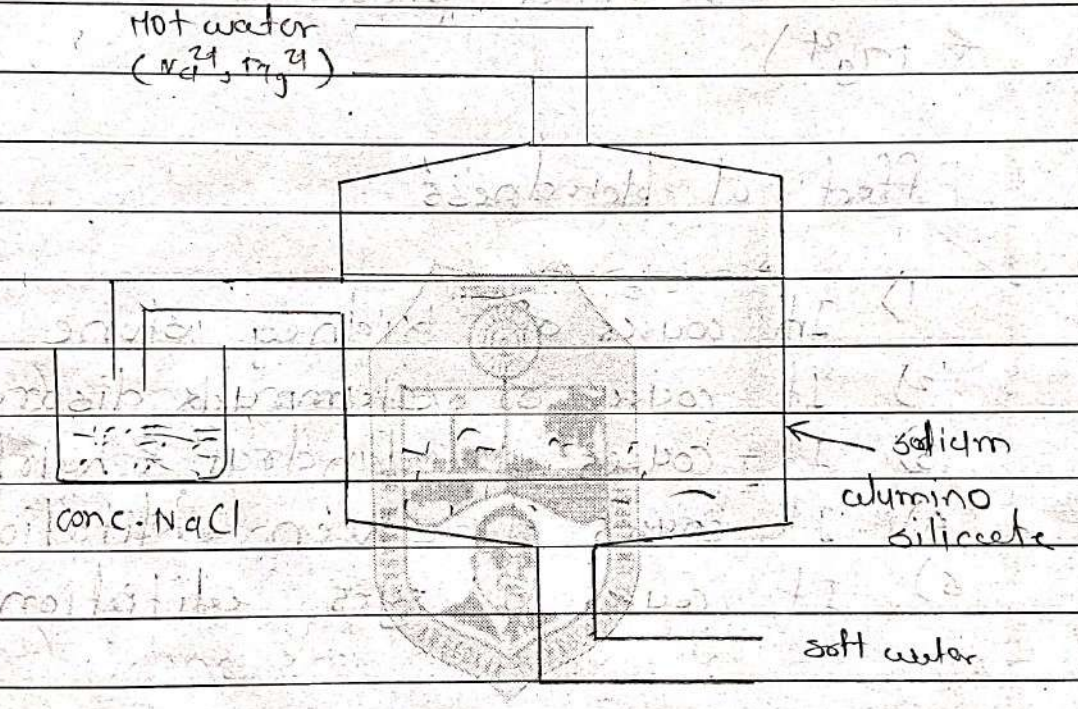
Q.3 Softning water :-

soft water it is a not resist to formition of foam which soap is called as soft water.

Zeolite Process

Principle :- it is a exchanged to hot water (Ca^{2+}, Mg^{2+}) to soft water (Na^{+})

Diagram :



Reaction :

1) $Na_2Ze + NaCl \longrightarrow 2ZeNa + 2NaCl^-$

2) $Na_2Ze + MgCl \longrightarrow ZeMg + 2NaCl^-$

c) Hardness

- It is a method of water due to resist of formition of foam which soap is a hardness of water.

Causes of hardness:

It is a presence of (Na^{2+}, & Mg^{2+})

Effect of Hardness -

1) It causes of kidney stone
2) It causes of stomach disorder
3) It causes of dandruf & hairfall
4) It causes of skeen edlitation
5) It causes of eyes edlitation.

E) Hardness

Hardness due to resist of formation of foam which soap. and it is Ca^{2+} & Mg^{2+} ions presence of hardness.

Types of hardness.

There are two types of hardness.

1) Temporary hardness (co-ordinate)
2) Permanent hardness (Non-co-ordinate)

ex- 1) $Mg(HCO_3)_2$

Permanent hardness

ex - 1)