

Shivaji University, Kolhapur

B.Sc. III Sem. V Paper XII

Industrial Chemistry
Examination Oct - 2020

Subject Code: 65826

Instructions:

- 1) Solve any 25 questions out of 30
- 2) Select the correct alternative for the given question
- 3) Each question carries 2 marks
- 4) Figures at right indicates marks

Date: Tuesday, 06th October, 2020

Time: 1.00 pm to 2.00 pm (1 hr)

* Indicates required question

1. Email *

2. Name of the Student *

3. Examination Seat Number or Roll Number of Students

4. Mobile Number of the student

Vivekanand College, Kolhapur (Autonomous)
Department of Chemistry
B. Sc. III Sem. V Chemistry
Theory Internal Examination Oct-2020

All the students of B.Sc. III are hereby informed that their theory Internal Examination of Chemistry will be conducted in online manner (Google Forms) on **02nd October, 2020 at 02.00 pm**. The Google form link will be communicated on departmental Google Classroom and What's-App group 10 min prior to examination time. The examination will be conducted only one time, students are directed to attend the examination without fail. Syllabus for examination will be as mentioned in following table.

Sr.No	Name of paper	Section	Name of section	Date	Time
1	Physical chemistry	I	Physical chemistry	02/10/2020	1.00 to 2.00pm
2	Inorganic chemistry	II	Inorganic chemistry	03/10/2020	1.00 to 2.00pm
3	Organic chemistry	I	Organic chemistry	04/10/2020	1.00 to 2.00pm
4	Industrial chemistry	II	Industrial chemistry	06/10/2020	1.00 to 2.00pm



for
S. Patil
Dr. D. B. Patil
Head
Dept. of Chemistry
Vivekanand College, Kolhapur

B.Sc. III, Sem-V Inorganic Chemistry

Oct-2020 (University)

Paper-X (Subject Code: 65824)

Instructions:

1. Solve any 25 question out of 30.
2. Each question carries 2 marks.
3. Figures to the right indicate marks.

Date: 03/10/2020
to 02 pm)

Time:1hr (01 pm

* Indicates required question

1. Email *

2. Full Name of Student

3. Exam Seat or Roll Number of Student *

4. PRN Number *

for S. D. Dixit
Head
Dept. of Chemistry
Vivekanand College, Kolhanur

5. 1. According to Irving Williams for any ligand, the stability of metal complexes is higher with dipositive metal ion _____.

2 points

Mark only one oval.

- Ba²⁺
 Zn²⁺
 Mn²⁺
 Cu²⁺

6. 2. The stereoisomers which do not show mirror image relation are called as _____.

2 points

Mark only one oval.

- Enantiomers
 Distereomers
 Sterioisomerism
 Polytopal isomers

7. 3. Complete the reaction. $n\text{PCl}_5 + n\text{NH}_4\text{Cl} \rightarrow \text{_____} + 4n\text{HCl}$

2 points

Mark only one oval.

- (PCl₂)_n
 (PCl₃)_n
 (PCl₃)_{2n}
 (PCl₂)_{2n}

for SP/2020
Head
Dept. of Chemistry
Vivekanand College, Kolhapur

8. 4. Free electron theory fails to explain_____.

2 points

Mark only one oval.

- Metallic character
- Quantitative calculations of specific conductance
- Metal is lattice with free electrons
- Positive charged metal ion is embedded in the sea of electrons

9. 5. Complete the reaction. $\text{AlH}_3 + 3 \text{C}_2\text{H}_4 \rightarrow$ _____

2 points

Mark only one oval.

- $\text{Al}(\text{C}_2\text{H}_5)_3 + 3\text{H}_2$
- $\text{Al}(\text{C}_2\text{H}_5)_3$
- $\text{Al} + 3\text{C}_2\text{H}_5$
- None of these

10. 6. In polynuclear metal carbonyls , carbonyls linked with _____ number of metal atoms.

2 points

Mark only one oval.


- 1
- 2
- More than 2
- Zero

11. 7. Superconductor carries electric current at _____resistance.

2 points

Mark only one oval.

- high
- zero
- Low
- infinite

for 
Head
Dept. of Chemistry
Vivekanand College, Kolhanur

12. 8. Which of the following is important fluorocarbon?

2 points

Mark only one oval.

- Terylene
- Teflon
- Nylon-6
- silane

13. 9. According to MOT $[\text{Ti}(\text{NH}_3)_6]^{3+}$ ion is _____

2 points

Mark only one oval.

- Monobasic
- Paramagnetic
- Diamagnetic
- Neutral

14. 10. The bonding between hard acids and hard bases are _____.

2 points

Mark only one oval.


- Covalent
- Metallic
- Neutral
- Ionic

15. 11. Why methyl mercury cation is used to determine hardness and softness of acids and bases ?

2 points

Mark only one oval.

- It is a typical soft acids
- It acts as an univalent ion like proton
- It makes easier calculations
- All of these

for 
Head
Dept. of Chemistry
Vivekanand College, Kolhanur

16. 12. The type of ionization isomerism in which coordinated ligand is replaced by water molecules called as _____.

2 points

Mark only one oval.

- Co-ordination isomerism
 Linkage isomerism
 Hydrate isomerism
 co-ordination position isomerism

17. 13. The polymerization in which two or more simple molecules joined together by eliminating small molecules such as water, ammonia, etc. called as _____.

2 points

Mark only one oval.

- Addition Polymerization
 Condensation Polymerization
 Co-ordination polymerization
 All of these

18. 14. According to valence band theory, semiconductor is a material in which _____ between valence band and conduction band.

2 points

Mark only one oval.

- no energy gap
 Very large energy gap
 Very small energy gap
 None of these

for
S. D. K.
Head
Dept. of Chemistry
Vivekanand College, Kolhanur

19. 15. The extent of polymerization of organoberyllium compounds _____ with increase in bulkyness of alky and aryl group. 2 points

Mark only one oval.

- Increase
 Decrease
 Remains same
 none of these

20. 16. In trialkyl aluminium dimer Al-C-Al bridging bond is _____. 2 points

Mark only one oval.

- (3C-2e)
 (2C-2e)
 (3C-1e)
 (3C-3e)

21. 17. _____ is responsible for conduction of electricity in n-type semiconductor. 2 points

Mark only one oval.

- Proton
 Neutron
 Hole
 Electron

for S. R. K. S.
Head
Dept. of Chemistry
Vivekanand College, Kolhanur

25. 21. In the determination softness and hardness of base by methyl mercury cation gets equation ($K=K_s \cdot K_a$). In this equation if K is less than one, then base is _____.

2 points

Mark only one oval.

- Soft
 Hard
 Borderline
 Can not predict

26. 22. Hexa-amide nickel (II) ion complex is _____ due to presence of two unpaired electrons.

2 points

Mark only one oval.

- Paramagnetic
 Diamagnetic
 Ferromagnetic
 All of these

27. 23. When the graphite is heated in the steam of fluorine at 420°C - 460°C _____ is formed.

2 points

Mark only one oval.

- Phosphor tri-fluoromethane
 Carbon monofluoride
 Chlorofluoro carbon
 None of these

for S. P. K. W.
Head
Dept. of Chemistry
Vivekanand College, Kolhanur

28. 24. Which method used for the preparation of high critical temperature superconductors on bulk scale? 2 points

Mark only one oval.

- Sintering method
 Chemical vapour deposition method
 Electro-deposition
 Chemical deposition

29. 25. What is the hybridization of $\text{Cr}(\text{CO})_6$ complex? 2 points

Mark only one oval.

- sp^3
 sp^3d^2
 d^2sp^3
 sp^2

30. 26. In methyl lithium, lithium atoms are situated at _____ . 2 points

Mark only one oval.

- Alternative corners of cube
 the faces of cube
 Middle of the cube
 None of these

for
Dr. R. K. S.
Head
Dept. of Chemistry
Vivekanand College, Kolhanur

34. 30. Ammonia is _____

2 points

Mark only one oval.

- Hard acid
- Soft acid
- Hard base
- Soft base

This content is neither created nor endorsed by Google.

Google Forms

for *gDiko*
Head
Dept. of Chemistry
Vivekanand College, Kolhanur

Shivaji University, Kolhapur

B.Sc. III Sem. V Paper XII

Industrial Chemistry

Examination Oct - 2020

Subject Code: 65826

Instructions:

- 1) Solve any 25 questions out of 30
- 2) Select the correct alternative for the given question
- 3) Each question carries 2 marks
- 4) Figures at right indicates marks

Date: Tuesday, 06th October, 2020

Time: 1.00 pm to 2.00 pm (1 hr)

* Indicates required question

1. Email *

2. Name of the Student *

3. Examination Seat Number or Roll Number of Students

4. Mobile Number of the student

for
Dr. D. S. D. D. D.
Head
Dept. of Chemistry
Vivekanand College, Kolhapur

9. 5) The optimum condition for best yield of ammonia w.r.t. concentration of * 2 points
 $N_2 : H_2 = \underline{\hspace{2cm}}$.

Mark only one oval.

- 1:2
 1:1
 1:3
 3:1

10. 6) Catalyst used in Haber process is _____ with promoter molybdenum. * 2 points

Mark only one oval.

- Fe
 V_2O_5
 Pt
 C

11. 7) If oxide film is removed by any means, passivated metal can be converted into _____ form. 2 points

Mark only one oval.

- active
 inactive
 inert
 soft

for Spike
Head
Dept. of Chemistry
Vivekanand College, Kolhanur

15. 11) A strong support was received to electrochemical passivity is due to the work of _____. 2 points

Mark only one oval.

- Faraday
- Ostwald
- Whitney
- Evans

16. 12) Self stifling corrosion. 2 points

Mark only one oval.

- prevents
- promotes
- decreases
- all of the above

17. 13) If impurities present in technical metals are less reactive than metal itself, then they _____ corrosion. 2 points

Mark only one oval.

- decreases
- promotes
- suppresses
- first increases and then decreases

SP210
For **Head**
Dept. of Chemistry
Vivekanand College, Kolhanur

18. 14) Passivity removing reagents are_____.

2 points

Mark only one oval.

- reducing agents
- oxidising agents
- Lewis acids
- buffers

19. 15) Nanocrystalline Zinc selenide (ZnSe) synthesized by sol-gel method improves resolution of _____.

2 points

Mark only one oval.

- methods
- analysis
- TV screens and Computer monitors
- data

20. 16) Nanocrystalline silicon carbide (SiC) is used for _____.

2 points

Mark only one oval.

- watches
- artificial heart valves
- mobile batteries
- all of the above

Spike
for **Head**
Dept. of Chemistry
Vivekanand College, Kolhanur

21. 17) Chemicals which are consumed on commercial scale called as _____.

2 points

Mark only one oval.

industrial

toxic

heavy

king

22. 18) In the year _____ Earnest Solvay successfully started the plant for manufacture of soda ash.

2 points

Mark only one oval.

1895

1865

1915

1774

23. 19) In corrosion at cathode _____ gas is evolved.

2 points

Mark only one oval.

O₂

H₂

N₂

CO₂

Splice
For Splice
Head
Dept. of Chemistry
Vivekanand College, Kolhanur

24. 20) _____ is essential for corrosion.

2 points

Mark only one oval.

solid

gas

water

liquid

25. 21) Bagasse is used for _____.

2 points

Mark only one oval.

seeding

extraction of juices

manufacturing of celotex

fermentation

26. 22) Carbonation is carried out with _____.

2 points

Mark only one oval.

magnesium carbonate

calcium carbonate

potassium carbonate

silicon carbonate

27. 23) Shaving soap is a mixed soap of Sodium and _____.

2 points


Mark only one oval.

Potassium

Calcium

Magnesium

Cesium


Head
Dept. of Chemistry
Vivekanand College Kolhanur

VIVEKANAND COLLEGE, KOLHAPUR
(AUTONOMOUS)

Department of Chemistry

Paper XII Industrial Chemistry Internal Examination Oct - 2020

Timestamp	Username	Total score	Name of the Student
2020/10/06 1:32:14 pm GMT+5:30	khadeshubham98@gmail.com	46.00 / 60	Shubham Chandrakant khade
2020/10/06 1:34:12 pm GMT+5:30	ksanket1498@gmail.com	48.00 / 60	Sanket Jagannath Kamble
2020/10/06 1:40:48 pm GMT+5:30	vdshinde19992016@gmail.com	54.00 / 60	Vinay Dilip Shinde
2020/10/06 1:44:03 pm GMT+5:30	misbamomin19@gmail.com	46.00 / 60	Misba Iliyas Momin.
2020/10/06 1:44:39 pm GMT+5:30	anmolpatil6464@gmail.com	46.00 / 60	Anmol Vijay Patil
2020/10/06 1:47:14 pm GMT+5:30	pr025ghungurkar@gmail.com	58.00 / 60	Pratik Rajaram Ghungurkar
2020/10/06 1:50:49 pm GMT+5:30	sh.amruta18@gmail.com	52.00 / 60	Amruta Anil shingare

Shirke

Head
Dept. of Chemistry
Vivekanand College Kolhapur