

Bs/CHEM.DSE-2(T) (AK)

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(CBCS)

(5th Semester)

CHEMISTRY

Paper : CHEM.DSE-2(T)

(Industrial Chemicals and Environment)

(PART : A—OBJECTIVE)

(Marks : 25)

KEY ANSWERS FOR OBJECTIVES

A. Put a Tick (✓) mark against the correct answer in the
brackets provided : 1×15=15

1. (a)

2. (c)

3. (c)

4. (c)

5. (b)

6. (c)

/48K

(2)

7. *(b)*
8. *(b)*
9. *(b)*
10. *(d)*
11. *(d)*
12. *(c)*
13. *(b)*
14. *(d)*
15. *(a)*

Subject Code :
Bs/CHEM.DSE-2(T)

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To be filled in by the Candidate

BA / BSc / BCom / BBA / BCA
5th Semester End Term
Examination, **2024 (CBCS)**

Subject

Paper

INSTRUCTIONS TO CANDIDATES

- 1. The Booklet No. of this script should be quoted in the answer script meant for descriptive type questions and vice versa.**
- 2. This paper should be ANSWERED FIRST and submitted within 1 (one) Hour of the commencement of the Examination.**
- 3. While answering the questions of this booklet, any cutting, erasing, overwriting or furnishing more than one answer is prohibited. Any rough work, if required, should be done only on the main Answer Book. Instructions given in each question should be followed for answering that question only.**

*Signature of
Scrutiniser(s)*

*Signature of
Examiner(s)*

Booklet No. A

Date Stamp

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Candidate**

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Examination, **2024 (CBCS)**

Roll No.

Regn. No.

Subject

Paper

DESCRIPTIVE TYPE

Booklet No. B

*Signature of
Invigilator(s)*



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Bs/CHEM.DSE-2(T)

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(CBCS)

(5th Semester)

CHEMISTRY

Paper : CHEM.DSE-2(T)

(Industrial Chemicals and Environment)

(PART : A—OBJECTIVE)

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The figures in the margin indicate full marks for the questions

A. Put a Tick (✓) mark against the correct answer in the brackets provided : 1×15=15

1. Which gas is commonly used in the large-scale production of ammonia?

(a) Nitrogen ()

(b) Oxygen ()

(c) Argon ()

(d) Chlorine ()

(2)

2. Which of the following gases is commonly used in welding due to its high energy content?
- (a) Helium ()
 - (b) Hydrogen ()
 - (c) Acetylene ()
 - (d) Neon ()
3. What is the primary hazard associated with the handling of chlorine gas?
- (a) Flammability ()
 - (b) Corrosiveness ()
 - (c) Toxicity ()
 - (d) Explosiveness ()
4. Which acid is commonly used to produce fertilizers and explosives?
- (a) Hydrochloric acid ()
 - (b) Sulphuric acid ()
 - (c) Nitric acid ()
 - (d) Acetic acid ()
5. What is the primary application of potash alum in industries?
- (a) Bleaching agent ()
 - (b) Water purification ()
 - (c) Fertilizer ()
 - (d) Antiseptic ()

(3)

6. Which source of energy is considered renewable?
- (a) Coal ()
 - (b) Natural gas ()
 - (c) Solar energy ()
 - (d) Petrol ()
7. What is the primary hazard in handling sulphur dioxide?
- (a) Radioactivity ()
 - (b) Toxicity ()
 - (c) Explosiveness ()
 - (d) Corrosiveness ()
8. Which process is used to prepare ultrapure metals for semiconductor technology?
- (a) Electrolysis ()
 - (b) Zone refining ()
 - (c) Blast furnace ()
 - (d) Smelting ()
9. The depletion of ozone is mainly due to
- (a) oxygen gas ()
 - (b) CFC gas ()
 - (c) nitrogen gas ()
 - (d) carbon dioxide gas ()

(4)

10. Which of the following organic substances make up the abiotic component of an ecosystem?

- (a) Protein ()
- (b) Carbohydrate ()
- (c) Lipid ()
- (d) All of the above ()

11. The lowest region of the atmosphere is

- (a) thermosphere ()
- (b) mesosphere ()
- (c) stratosphere ()
- (d) troposphere ()

12. Which of the following is not a primary air pollutant?

- (a) Sulphur dioxide ()
- (b) Nitrogen dioxide ()
- (c) Smog ()
- (d) Carbon monoxide ()

(5)

13. Mercury vapour is
- (a) major gaseous pollutant ()
 - (b) minor gaseous pollutant ()
 - (c) particulate pollutant ()
 - (d) secondary pollutant ()
14. The process of forcing a solvent to the region of low soluble concentration from a high solute concentration region through a semipermeable membrane by applying pressure is called
- (a) ion exchange ()
 - (b) membrane filtration ()
 - (c) electrodialysis ()
 - (d) reverse osmosis ()
15. Dissolved oxygen (DO) comes under which category?
- (a) Physical characteristics ()
 - (b) Chemical characteristics ()
 - (c) Biological characteristics ()
 - (d) All of the above ()

(6)

B. Answer *all* questions : 2×5=10

1. Explain the primary use of argon in the industrial sector.

(7)

2. What are the environmental hazards associated with nuclear waste disposal?

(8)

3. Write a note on the greenhouse effect.

(9)

4. What is photochemical smog?

(10)

5. What is a hydrological cycle?

★ ★ ★