

**UG-AS-284**      **BCHES-11**

**U.G. DEGREE EXAMINATION –  
JULY, 2022.**

**Chemistry**

**[From CY–2020 onwards]**

**First Semester**

**CHEMISTRY – I**

Time : 3 hours

Maximum marks : 70

**PART A — (3 × 3 = 9 marks)**

Answer any **THREE** questions out of Five questions in  
100 words

All questions carry equal marks.

1. What is Mesomerism?
2. What are Resonance structures?
3. What is Period and Group in the modern periodic table?
4. What are the types of Chemical bonds?
5. What is relationship between Van der waal's constant and critical constant.

PART B — ( $3 \times 7 = 21$  marks)

Answer any THREE questions out of Five questions in  
200 words

All questions carry equal marks.

6. Explain about the factors inductive effect and electromeric effect.
7. Describe about the conditions for resonance structure.
8. What are the general properties of Noble gases?
9. Describe Octet rule.
10. Explain about an ideal gas law.

PART C — ( $4 \times 10 = 40$  marks)

Answer any FOUR questions out of Seven questions in  
500 words.

All questions carry equal marks.

11. Describe Hyperconjugation.
12. Explain in detail about naming of heterocyclic compounds.
13. Discuss in detail about Lanthanides.
14. Describe Pauling's and Mulliken scales of electronegativity.

15. Explain about Van der waal's equation.
  16. Discuss about surface energy and capillary rise.
  17. Explain Born-Haber cycle.
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**UG-AS-285    BZOOSA-11**

**U.G. DEGREE EXAMINATION —  
JULY 2022.**

**Zoology**

**(From CY – 2020 onwards)**

**First Semester**

**ANIMAL DIVERSITY – I**

**Time : 3 Hours**

**Maximum marks : 70**

**PART A — (3 × 3 = 9 Marks)**

**Answer any THREE questions out of five questions in  
100 words.**

**All questions carry equal marks.**

- 1. Explain Binominal Nomenclature.**
- 2. Highlight contractile vacuoles in paramecium.**
- 3. What is Organ of Bojanus?**
- 4. Short note on types of scale.**
- 5. Draw a neat sketch on brain of pigeon.**

PART B — (3 × 7 = 21 Marks)

Answer any THREE questions out of five questions in  
200 words.

All questions carry equal marks.

6. Write short notes on classification of Annelida.
7. Describe the structure of obelia colony.
8. Give an account on respiratory system of Lamellidens.
9. Present a brief account on male reproduction of Calotes.
10. Illustrate and describe the venous system of Pigeon.

PART C — (4 × 10 = 40 Marks)

Answer any FOUR questions out of Seven questions in  
500 words.

All questions carry equal marks.

11. Classify the phylum Chordata up to classes.
12. Write an essay on parasitic adaptations of *Fasciola hepatica*.
13. Give an account on appendages of Prawn.

14. Illustrate and describe the respiratory system of Frog.
  15. Elaborate on urinogenital system of Rabbit.
  16. Classify the phylum arthropoda with suitable example.
  17. Explain the circulatory system of Calotes with a diagram.
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**UG-AS-286**

**BCAS-13**

**U.G. DEGREE EXAMINATION –  
JULY 2022**

(From CY – 2020 onwards)

**First Semester**

**OFFICE AUTOMATION**

Time : 3 hours

Maximum marks : 70

**PART A — (3 × 3= 9marks)**

Answer any **THREE** questions. Out of Five questions in  
100 words.

All questions carry equal marks.

1. What is a computer?
2. How to save a file in Word document?
3. Write about Orientation?
4. What is a Menu?
5. How to Create an email –ID?

PART B— (3 × 7=21 marks)

Answer any THREE questions. Out of Five questions in  
200 words.

All questions carry equal marks.

6. Explain the Evolution of computer?
7. Explain Formatting Text?
8. Briefly Explain Paragraph Indents?
9. Write about opening Spreadsheet?
10. Explain about the sorting data?

PART C— (4 × 10 = 40 marks)

Answer any FOUR questions out of Seven questions in  
500 words.

ALL questions carry equal marks.

11. Describe in detail about Generation of Computers?
12. Explicate in detail about working with documents?
13. What is Toolbar and explain in detail about adding and deleting features to the toolbar?
14. Discuss about Shortcut Keys in Excel?



15. Discuss about the working with slides in detail.
  16. Describe formatting a presentation?
  17. Explain Google Gmail in detail?
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**UG-AS-285    BZOOSA-11**

**U.G. DEGREE EXAMINATION —  
JULY 2022.**

**Zoology**

**(From CY – 2020 onwards)**

**First Semester**

**ANIMAL DIVERSITY – I**

**Time : 3 Hours**

**Maximum marks : 70**

**PART A — (3 × 3 = 9 Marks)**

**Answer any THREE questions out of five questions in  
100 words.**

**All questions carry equal marks.**

- 1. Explain Binominal Nomenclature.**
- 2. Highlight contractile vacuoles in paramecium.**
- 3. What is Organ of Bojanus?**
- 4. Short note on types of scale.**
- 5. Draw a neat sketch on brain of pigeon.**

PART B — (3 × 7 = 21 Marks)

Answer any THREE questions out of five questions in  
200 words.

All questions carry equal marks.

6. Write short notes on classification of Annelida.
7. Describe the structure of obelia colony.
8. Give on account on respiratory system of Lamellidens.
9. Present a brief account on male reproduction of calotes.
10. Illustrate and describe the venous system of Pigeon.

PART C — (4 × 10 = 40 Marks)

Answer any FOUR questions out of Seven questions in  
500 words.

All questions carry equal marks.

11. Classify the phylum chordata upto classes.
12. Write an essay on parasitic adaptations of *Fasciola hepatica*.
13. Give an account on appendages of Prawn.

14. Illustrate and describe the respiratory system of Frog.
  15. Elaborate on urinogenital system of Rabbit.
  16. Classify the phylum arthropoda with suitable example.
  17. Explain the circulatory system of Calotes with a diagram.
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**UG-AS-287      BCHES-21**

**U.G. DEGREE EXAMINATION —  
JULY 2022.**

**Chemistry**

**(From CY – 2020 onwards)**

**Second Semester**

**CHEMISTRY – II**

**Time : 3 hours**

**Maximum marks : 70**

**PART A — (3 × 3 = 9 marks)**

**Answer any THREE questions out of five questions in  
100 words.**

**All questions carry equal marks.**

- 1. What is Hund's rule? Give an example.**
- 2. What is Markovnikov's Rule? Give an example.**
- 3. What is the viscosity of a molecule? Explain.**
- 4. Give the application of lead arsenate.**
- 5. Compare the stability of carbocations and carbanions.**

PART B — ( $3 \times 7 = 21$  marks)

Answer any THREE questions out of five questions in 200 words.

All questions carry equal marks.

6. What is Pauli's exclusion principle? Explain the principles with appropriate examples.
7. What is Michael addition? Explain the application of Michael addition with a suitable example and mechanism.
8. Explain the nature of different cohesive forces present in the liquid.
9. What is fertilizer? Explain the advantages and disadvantages of both natural fertilizers and chemical fertilizers.
10. What is homolysis? Explain with suitable examples.

PART C — (4 × 10 = 40 marks)

Answer any FOUR questions out of seven questions in 500 words.

All questions carry equal marks.

11. Compare VB theory and MO theory by discussing the following aspects:
  - (a) Central themes of both the theories
  - (b) Molecular shapes
  - (c) VESPER theory
12. Explain the following organic transformations with suitable examples.
  - (a) Hydroxylation
  - (b) Hydroboration
  - (c) Hoffman degradation
  - (d) Chugaev reaction.
13. What are Elimination reactions? Write two examples for each E1 and E2 elimination reaction with a suitable mechanism.
14. What are liquid crystals? Write the properties of different types of liquid crystals.

15. Give a detailed report on refining the different products from petrochemicals.
  16. Explain the following with examples
    - (a) Repellants
    - (b) Insecticides
    - (c) Fungicides
    - (d) Gammexane
  17. What is cycloaddition reaction? Write the importance and mechanism of the cycloaddition reaction with suitable examples.
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**UG-AS-288    BZOOSA-22**

**U.G. DEGREE EXAMINATION —  
JULY 2022.**

**Zoology**

**(From CY – 2020 onwards)**

**Second Semester**

**ECONOMIC ZOOLOGY**

**Time : 3 hours**

**Maximum marks : 70**

**PART A — (3 × 3 = 9 marks)**

**Answer any THREE questions out of five questions in  
100 words.**

**All questions carry equal marks.**

- 1. Enlist a few Beneficial insects.**
- 2. Define exotic fishes and their demerits.**
- 3. Write about Indian Bee.**
- 4. Mention the processing of cocoon.**
- 5. What is Layers with example?**

PART B — (3 × 7 = 21 marks)

Answer any THREE questions out of five questions in  
200 words.

All questions carry equal marks.

6. Write the general characteristic features of sugarcane pests.
7. Give an account on freshwater prawn culture.
8. Comment on development of Apiary in India.
9. Briefly discuss about life history of *Bombyx mori*.
10. Elucidate the different rearing methods of Fowl.

PART C — (4 × 10 = 40 marks)

Answer any FOUR questions out of seven questions in  
500 words.

All questions carry equal marks.

11. Comment on the parasitic adaptations of Mosquito.
12. Write an essay on basic principles of different aquaculture system.

13. Enumerate the modern methods of Apiary management.
  14. Give an account on rearing of *Bombyx mori*.
  15. Explain disease of poultry and their management.
  16. Describe the types of honey bees and add note on it bionomics.
  17. Present a detail account on sericulture in India
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