

PGIIS-N 1546 B-14
M.Sc. IIIrd Semester (CBCS) Degree Examination
Zoology
(Biology of Reproduction)
Paper - HCT-3.1
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

- i) Answer all questions.
- ii) Illustrate your answer wherever necessary.

1. Answer the following in brief **(8×2=16)**

- a) Delayed implantation
- b) Vas deferens
- c) Luteogenesis
- d) Milk ejection
- e) Surrogate pregnancy
- f) Cumulus oophorus
- g) Prostaglandins
- h) Coagulatory gland

2. a) Describe histo architecture of ovary and functions. **(16×1=16)**

OR

- b) Hormonal regulation of male reproductive organs.

3. a) Explain sequence of events during implantation. **(16×1=16)**

OR

- b) Discuss the various models of parturition and factors involved in the process.

4. Write explanatory notes on any two of the following (2×8=16)
- a) Biology of spermatozoa.
 - b) Physiological role of androgens.
 - c) Estrous cycle.
5. Write short notes on any **four** of the following (4×4=16)
- a) IVF
 - b) Decidual cell reaction
 - c) Mammary glands.
 - d) Gestational carrier.
 - e) Progesteron.
 - f) Growth factors.
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PGIIS-N 1550 B-14
M.Sc. IIIrd Semester (CBCS) Degree Examination
Zoology
(Environmental Biology)
Paper - SCT-3.1
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

- i) Answer all questions.
- ii) Illustrate your answer wherever necessary.

1. Answer the following in brief (8×2=16)
 - a) Solar flux
 - b) BOD
 - c) Bioaccumulation
 - d) Stratosphere
 - e) Micro-nutrients
 - f) II Law of thermodynamics
 - g) Biome
 - h) Primary producers.
2. a) Explain how energy flow take place in an ecosystem (16×1=16)

OR

 - b) Write detail account on source of air pollution & comment on control measures.
3. a) "Over population is the main cause for all environmental problems in recent times". Discuss. (16×1=16)

OR

 - b) Solid waste management.

4. Write explanatory notes on any two of the following (2×8=16)
- a) Thermal pollution
 - b) Acid Rain
 - c) Hydrological cycle.
5. Write short notes on any **four** of the following (4×4=16)
- a) Green house effect
 - b) Biogas
 - c) Smog
 - d) Ozone layer
 - e) Earth quake
 - f) Biological indicators.
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PGIIS-N 1548 B-14
M.Sc. IIIrd Semester (CBCS) Degree Examination
Zoology
(Animal Physiology)
Paper - HCT-3.2
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

- i) Answer all questions.
- ii) Illustrate your answer wherever necessary.

1. Answer the following in brief (8×2=16)

- a) Respiratory organs
- b) Homeostasis
- c) Allosteric enzymes
- d) Sorting of sensory information
- e) Hibernation
- f) Bore effect
- g) Problems of Diving
- h) Uricotelic animals.

2. a) What is Respiration? Explain the mechanism of Respiration in eggs. (16×1=16)

OR

- b) Explain types and mechanics of nitrogen excretion in animals.

3. a) Discuss the general principles of circulation with reference to vertebrates. (16×1=16)

OR

- b) Explain the transmission of nerve impulses in nerves and across synapses.

4. Write explanatory notes on any two of the following (2×8=16)
- a) Enzymes Kinetics
 - b) Methods of feeding & Digestion
 - c) Transmission of nerve impulse.
5. Write short notes on any **four** of the following (4×4=16)
- a) Types of sense organ
 - b) Respiration in birds
 - c) Problems associating with diving
 - d) Chemical defense
 - e) Effect of high altitude
 - f) Air breathing vertebrates.
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PGIIS-N 1552 B-14
M.Sc. IIIrd Semester (CBCS) Degree Examination
Zoology
(Applied Zoology)
Paper - OET-3.1
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

- i) Answer all questions.
- ii) Illustrate your answer wherever necessary.

1. Answer the following in brief

(8×2=16)

- a) Muga silk
- b) White leghorn
- c) Operation flood
- d) Vermi protein
- e) Bivolatine
- f) Drone
- g) Rangeeni
- h) Murrah

2. a) Discuss the commercial practice of sericulture.

(16×1=16)

OR

b) Write detail account on different types of cow breeds & importance.

3. a) Explain breeds of poultry and economic importance

(16×1=16)

OR

b) Write account on practice of Lac culture.

4. Write explanatory notes on any two of the following (2×8=16)
- a) Fur industry
 - b) Api culture
 - c) Importance of fisheries
5. Write short notes on any **four** of the following (4×4=16)
- a) Swap buffaloes
 - b) Artificial insemination
 - c) Products of Dairy industry.
 - d) Artificial hatching
 - e) Pearl culture.
 - f) Mori culture.
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