

PGIIS 1544 B - 15
M.Sc. IIIrd Semester (CBCS) Degree Examination
Zoology
(Biology of Reproduction)
Paper : HCT 3.1

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

Answer all questions and illustrate your answers wherever necessary

1. Answer the following in brief. (8×2=16)
- a) Gonads
 - b) Biogenesis
 - c) Stem cell
 - d) Vas deferens
 - e) Luteolysis
 - f) Ovary
 - g) Implantation
 - h) Pregnancy
2. a) Explain the physiological role(s) of androgen. (16)
- (OR)
- b) Describe Biochemistry of semen and biology of spermatozoa.
3. a) Explain Estrous cycle in mammals and its hormonal regulation. (16)
- (OR)
- b) Explain Types of implantation, sequence of events during implantation.
4. Write explanatory note on any **two** of the following. (2×8=16)
- a) Decidual cell reaction
 - b) Delayed implantation
 - c) Milk ejection

5. Write short note on any **four** of the following.

(4×4=16)

- a) Growth factors
 - b) Surrogate pregnancy
 - c) Placental hormones
 - d) Corpus luteum
 - e) Oxytocin
 - f) Folicular atresia.
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PGIIS 1545 B - 15
M.Sc. IIIrd Semester (CBCS) Degree Examination
Zoology
(Animal Physiology)
Paper : HCT 3.2

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

Answer all questions and illustrate your answers wherever necessary.

1. Answer the following in brief. (8×2=16)
 - a) Diffusion
 - b) Lungs
 - c) Blood
 - d) Metabolism
 - e) Metabolic rate
 - f) Temperature
 - g) Hibernation
 - h) Osmoregulation.

2. a) Explain the physiology of acid base balance regulation. (16)

(OR)

 - b) Explain the physiological time and effect of high altitude.

3. a) Explain structure of Neuron and transmission of Nerves impuls (16)

(OR)

 - b) Describe Body temperature of birds and mammals heat transfer.

4. Write explanatory note any **two** of the following. (2×8=16)
 - a) Enzyme kinetics
 - b) Nitrogen excretion
 - c) 'Cold blooded' animals.

5. Write short note on any **four** of the following.

(4×4=16)

- a) Air breathing fish
 - b) Facilitated diffusion
 - c) Specific nutritional needs
 - d) Marine air - breathing vertebrates
 - e) Enzyme regulation
 - f) Iso - enzymes.
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PGIIS 1546 B - 15
M.Sc. IIIrd Semester Degree Examination
Zoology
(Environmental Biology)
Paper : SCT 3.1

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

1. Answer all questions
2. Illustrate your answer wherever necessary.

1. Answer the following in brief. (8×2=16)
 - a) BOD
 - b) Smog
 - c) Bio accumulation
 - d) Micronutrients
 - e) Troposphere
 - f) Carbon cycle.
 - g) Soil erosion
 - h) Pyramid
2. a) What is air pollution? Explain its sources and control measures. (16)

(OR)

 - b) Explain natural resources of India.
3. a) Explain biomedical waste management in India. (16)

(OR)

 - b) Explain biogeochemical cycles
4. Write explanatory note any **two** of the following. (2×8=16)
 - a) Thermal pollution.
 - b) Energy flow in ecosystem.
 - c) Hydrosphere

5. Write short note on any **four** of the following.

(4×4=16)

- a) Food chain
 - b) Floods
 - c) Land degradation
 - d) Nuclear hazards
 - e) Fertilizer problems.
 - f) Desertification.
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PGIIS 1547 B - 15
M.Sc. IIIrd Semester Degree Examination
Zoology
(Applied Zoology)
Paper : OET 3.1

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

1. Answer All questions
2. Illustrate your answer wherever necessary.

1. Answer the following in brief. (8×2=16)
 - a) Multivoltine
 - b) Chawki
 - c) endoparasite
 - d) Drone
 - e) Edible bivalve
 - f) Out breeding
 - g) Riverine Buffaloes
 - h) Hatching.
2. a) Describe vermiculture practices in India and its importance in agriculture. (16)

(OR)

 - b) Explain in detail on dairy products.
3. a) Explain marine fish culture practices in India. (16)

(OR)

 - b) Write account on poultry diseases and their control measures.
4. Write explanatory notes on any **two** of the following. (2×8=16)
 - a) Pearl culture
 - b) Products of apiculture and their use
 - c) Lac culture

5. Write short note on any **four** of the following.

(4×4=16)

- i) Nutritive value of meat
 - ii) Grading of wool
 - iii) Poultry breeds
 - iv) Inbreeding
 - v) Swap buffaloes
 - vi) Artificial hatching.
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