

UNIVERSITY OF EDUCATION

"UExam" Semester-II, 2019

BS (Hons) Chemistry/BS Botany/BS Zoology, Session:2018-2022

Course Code: ZOOL1112

Subject: Principles of Animal Life-II

SECTION: I (MCQ's)

Time Allowed: 15 Minutes

Max. Marks: 12

NOTE: Encircle the correct/ best answer in each of the followings. Each Question carries 1 mark. Use of remover carries zero mark. Cutting and Overwriting is not allowed.

No. 420

Roll No. (in fig.) _____

Roll No. (in words) _____

Candidate's Signature. _____

Signature of Addl. Supdt. _____

Q1.

- Chromatin consists of
 - a) RNA and DNA b) DNA and Histone proteins c) RNA and Histone proteins d) cDNA and Histone
- The scientist known as 'Father of genetics' is:
 - a) Thomas Hunt Morgan b) Carl Correns c) Gregor Johan Mendel d) bateson and punnett
- When subpopulations become geographically isolated from one another, it is called as _____ speciation.
 - a) Allopatric b) Parapatric c) Sympatric d) Both a and b
- Recombinant genotypes are produced because of -----during-----
 - a) Crossing over, prophase 1 b) Linkage, prophase 1 c) Crossing over, anaphase 1 d) Linkage, anaphase
- Genes existing in three or more forms are known as,
 - a) Replicates b) Co-dominant alleles c) Duplicate alleles d) Multiple alleles
- When Two Alleles Produce an Intermediate Phenotype, is called.
 - a) Co-dominance b) Dominance of characters c) Incomplete dominance d) recessive expression
- Adinine and guanine are:
 - a) Double ring Purine b) Double ring Pyrimidine c) single ring Purine d) single ring Pyrimidine
- Recessive alleles are those,
 - a) whose expression Can be masked b) Which require homozygous condition to appear phenotypically c) Which are not apparent if genotypically heterozygous d) All of the above
- During chiasmata formation, homologous chromosomes pair up
 - a) Length wise b) Width wise c) Obliquely d) None of these
- Theory of Natural Selection was presented by
 - a) Lamarck b) Darwin c) Wallace d) Mendal
- A character which is expressed in a hybrid is called
 - a) Dominant b) Recessive c) Codominant d) Epistaltic
- The tetrad consists of :
 - a) 2 adjacent chromosomes b) 2 sister chromosomes c) isochromosomes d) 2 homologous chromosomes

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“UEXAM” Semester-II, 2019
BS (Hons) Chemistry/BS Botany/BS Zoology, Session:2018-2022

Course Code: ZOOL1112
Subject: Principles of Animal Life-II
Time Allowed: 75 Minutes

Max. Marks: 33

Section II (Short Answer)

Q.2- Write short answers of the following.

3x5 = 15

- i. Neatly draw and label all events of mitosis.
- ii. What is sex linked inheritance? Give an example.
- iii. Define Mendelian patterns of inheritance What is meant by Genetic Drift?
- iv. What is meant by social behavior of animals?
- v. Define mutation and its types.

Section III (Essay Type)

Answer the following Questions

6x3 = 18

Q.3:- What is meant by speciation? Describe its three types.

Q.4:- Give detailed account on Hardy-Weinberg Theorem?

Q.5:- Describe the Modes of selection for certain traits in a population, when there is a range of phenotype.

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"UExam" Semester-IV, 2019

BS Zoology Session:2017-21

Course Code: ZOOL2113
Subject: Animal Diversity-II

SECTION: I (MCQ's)

Time Allowed: 15 Minutes

Max. Marks: 12

NOTE: Encircle the correct/ best answer in each of the followings. Each Question carries 1 mark. Use of remover carries zero mark. Cutting and Overwriting is not allowed.

No. 80

Roll No. (in fig.) _____

Roll No. (in words) _____

Candidate's Signature. _____

Signature of Addl. Supdt. _____

Q1.

- Amphibians depend upon external heat source to maintain their body functions, so they are:
 - a) Ectothermic
 - b) Endothermic
 - c) Variable in thermoregulation
 - d) Unable to survive on land
- Order Sephanodontida of class reptilia is also known as
 - a) Testudines
 - b) Rhynchocephalia
 - c) Squamata
 - d) Crocodylia
- Organisms belonging to Order Carnivora, who feed on a variety of Plants and animals is:
 - a) Lion
 - b) Bear
 - c) Tiger
 - d) Sea lion
- hkidney known as:
 - a) Collecting duct
 - b) Glomerulus
 - c) Loop of henle
 - d) Convoluted tubule
- The most obvious feathers are..... which cover the body, wings, and tail
 - a) Down feathers
 - b) Filoplume
 - c) Contour feathers
 - d) Hair-like
- Young birds who are completely dependent on their parents for food and are helpless at hatching are known as:
 - a) Precoceal
 - b) Polyandrous
 - c) Monogamous
 - d) Altricial
- Cocoons open only at the nares or the mouth and in experimental situations, reduce water loss ----- over non cocooned individuals.
 - a) 20 to 50%
 - b) 20 to 30%
 - c) 40 to 50%
 - d) 10 to 30%
- The ventral portion of the shell in testudines is the
 - a) Belly
 - b) Carapace
 - c) Plastron
 - d) All
- The development of sexual maturity in a larval body form is called
 - a) Parthenogenesis
 - b) Coevolution
 - c) Paedomorphosis
 - d) Morphogenesis
- Tunicates or sea squirts are members of the chordate subphylum
 - a) Urochordata
 - b) Cephalochordata
 - c) Enteropneusta
 - d) Pterobranchia
- Sharks skin is covered with
 - a) Ctenoid scales
 - b) Placoid scales
 - c) Dermal scales
 - d) Cycloid scales
- Members of the Agnathans class include ----- and hagfishes.
 - a) Myxini
 - b) Cephalaspidomorphi
 - c) Placodermi
 - d) Chondrichthyes

UNIVERSITY OF EDUCATION
“UEXAM” Semester-IV, 2019
BS Chemistry Session:2017-21

Course Code: CHEM2113
Subject: Industrial Chemistry

Time Allowed: 100 Minutes.

Max. Marks: 42

Section II (Short Answer)

Q.2- Write short answers of the following.

3x6 = 18

- (i) What is meant by raw materials?
- (ii) Give a brief description of fuel industry.
- (iii) Define unit operations with examples.
- (iv) What are the applications of hydrochloric acid?
- (v) Describe in short the industrial processes for caustic soda.
- (vi) Write a short note on industrial chemistry.

Section III (Essay Type)

Answer the following Questions

6x4 = 24

- Q – 3: a) Explain the manufacturing processes of sulphuric acid with the help of a flow sheet diagram.
b) What are the applications of sulphuric acid in daily life?
- Q – 4: Describe the manufacturing of cement in industry along with flow sheet diagram. Write the applications of cement in daily life also.
- Q – 5: How the oxalic acid can be manufactured? Draw the flow sheet diagram also. Write the applications of oxalic acid.
- Q – 6: Write a comprehensive note on petroleum industry.