From: THE REGISTRAR

To
Isarapu Satyavathi,
Chairperson,
Board of Studies in Zoology,
Govt. Degree College,
V.Madugula,
Visakhapatnam

Sir,

Sub: Approval of Model Question Papers – Reg.

Ref: Email dated 05-05-2021 along with Model Question Papers.

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With reference to the above, I am by direction to inform that the Revised Choice Based Credit System, U.G. Courses (w.e.f. 2020-2021) Model Question Papers of I,II,III,IV,V Semesters 1) Animal diversity Biology of Non-chordates 2) Animal diversity-Biology of chordates 3)Cell biology, Genetics, Molecular biology & evolution 4)Animal Physiology, Cellular Metabolism & Embryology 5) Immunology & Animal Biotechnology have been approved.

Hence, I request to arrange to circulate the same among the Teaching Staff and Students concerned and placed in A.U. website.

Yours faithfully,

(B. RAMACHANDER)
ASSISTANT REGISTRAR (ACADEMIC)

Copies to:
1. The Dean of Academic Affairs, A.U., VSP.
3. The Dean, CDC, A.U., Vsp.
4. The Dean, Confidential, A.U., Vsp.
5. All Principals, A.U. Affiliated Colleges Offered in U.G. courses.
7. The Superintendent S.I Section for taking necessary further action.
8. The Secretary to V.C., Rector Table, P.A. to Registrar, A.U., Vsp.
9. The Director, Computer Centre, A.U., Vsp.
10. O.C. & O.O.F.
Give an account on DNA fingerprinting.

Write an essay on various methods of manipulation of transgenic animals (or) structure and importance of primary lymphoid tissues (or)

Explain in detail the production of antibodies in detail (or) basis role of cancer and its treatment.

Write an essay on various types of antibodies (or) role of cancer and its treatment.

Draw labelled diagram of the following:

- Section A: following
- Throat labelled bio-

5 x 5 = 25
Zoology model paper for semester IV

Zoology paper IV
Animal physiology, Cellular metabolism & Embryology
Mode Marks: 75

Time: 3 hours

Section A:

Answer any FIVE of the following. Draw labelled diagrams wherever necessary.

1. Transport of O2
2. Carbon cycle
3. Pancreas
4. Polysaccharides
5. RNA cycle
6. Types of cleavages
7. Infection
8. Enzymatic inhibition

Section B:

Answer any FIVE of the following. Draw labelled diagrams wherever necessary.

9. Describe Urine formation (or)
10. Explain the process of digestion of carbohydrates & proteins (or)
11. Explain the sliding filament theory of muscle contraction (or)
12. Write an account on hormonal control of reproduction (or)
13. Explain the classification of proteins (or)
14. Classify enzymes with suitable examples (or)
15. Explain β-oxidation of palmitic acid (or)
16. Write an account on Kreb's cycle (or)
17. Describe the process of fertilization (or)
18. Explain the development of frog up to gastrulation

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Zoology Model Paper for Senior II
Zoology paper II
Cell biology, Genetics, Molecular biology & Evolution
Time: 2 hrs

Section A
Answer any FIVE of the following. Draw labelled diagrams wherever necessary.
(1) Mitochondria
(2) Lethal genes
(3) Pedigree analysis
(4) Translation
(5) Genetic drift
(6) Lamarckism
(7) Genomics & proteomics
(8) Genetic balance

Section B
Answer any FIVE of the following. Draw labelled diagrams wherever necessary.
(9) Explain the structure and functions of Endoplasmic reticulum.
(10) Write an account on chromosomes.
(11) Write an account on human karyotype.
(12) Write notes on Central Dogma (OR)
(13) Write an account on DNA replication.
(14) Explain the modern synthetic theory of Evolution.
(15) Write an account on speciation.

[X]
Section A
Answer any FIVE of the following: Draw labelled diagrams wherever necessary.
1. Urochordata
2. placoid scales
3. Crocodilia
4. Air sacs
5. Protobranchia
6. tadpole larva
7. Apoda
8. Archaeopteryx

Section B
Answer any FIVE of the following: Draw labelled diagrams wherever necessary.
9. What are the characters of chordata? (OR)
Describe the life cycle of Herdmania.
10. Mention the differences between Petromyzon & Myxine.
Write an account on migration of fishes.
11. Describe the structure and functions of brain of frog (OR)
Classify Reptiles upto orders.
12. Mention flight adaptations in Aves (OR)
Describe the structure and functioning of heart in cow.
13. Write an account on general characters of mammals.
Give an account on Dentition in mammals.
Zoology Model paper for semester 1

Zoology Paper - I

Animal Diversity - Biology of Non-chordate

Max Marks: 75

Time: 3 hrs

Section - A

1. Answer any FIVE of the following. Draw labelled diagrams wherever necessary.

(a) Binomial nomenclature
(b) Metagenesis
(c) Pathogenesis of Fasciola
(d) Verminocompost
(e) Peripatus
(f) Bipinnaria larva
(g) Conjugation
(h) Cleidophora

5 x 5 = 25

Section - B

2. Answer any FIVE of the following. Draw labelled diagrams wherever necessary.

(i) Write an account on nutrition in protozoa. (or)
   Describe the life cycle of Elphidium.
(ii) Give an account on characters & classification of.
   (or)
   Write an account on canal system in sponges.
(iii) What are the parasitic adaptations? (or)
   Describe the life cycle of Ascaris.
(iv) Describe the social life of Bees & Termites.
(v) Write notes on classification of phylum Annelid.
(vi) Describe water vascular system in Echinoderm.
(vii) Give an account on affinities of Balanoid.