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B5N18327

(Pages : 2)

Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester B.Sc Zoology Degree Examination, November 2018

ZO5B06T – Environmental Biology, Wildlife conservation & Toxicology

(2015 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

I. Answer *all* questions. Each question carries one mark

1. Define Habitat.
2. What is biological magnification?
3. What is Autecology?
4. What is species diversity?
5. What is toxicity?
6. Differentiate home range and territory?
7. What is predation?
8. What is remote sensing?
9. What are CITES?
10. What is antagonism?

(10 x 1 = 10 Marks)

II. Answer *all ten* questions. Each question carries *two* marks

11. Explain different types of sampling methods.
12. State laws of thermodynamics.
13. Differentiate between Wildlife sanctuary and national park.
14. Describe growth curves.
15. Explain Shelford's law of tolerance.
16. What is meant by age distribution? Explain.
17. Explain IUCN categories and red data book.
18. Comment on drugs and cosmetics act.
19. What is meant by 'in situ' conservation..
20. Describe different levels of toxicity.

(10 x 2 = 20 Marks)

III. Short essay. Answer *any five* questions. Each question carries *six* marks

21. Describe briefly the characteristics of an ecosystem.
22. Describe the methods of marking of animals.
23. Explain major conservation projects implemented in India.
24. Briefly explain wildlife protection act.
25. Explain sulphur cycle.
26. Explain briefly the role of organizations in biodiversity conservation?
27. Explain ecological succession.
28. What are natural resources? Classify.

(5x 6 = 30 Marks)

IV. Answer *two essay* questions. Each question carries *ten* marks

29. Explain the major characteristics of a population.
30. Explain carbon cycle.
31. Describe briefly population interactions.
32. Describe the major threats to biodiversity?

(2 x10 = 20 Marks)

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE
Fifth Semester B.Sc Zoology Degree Examination, November 2018
ZO5B07T – Ethology, Evolution & Zoogeography
(2015 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

I. Answer all questions. Each question carries one mark.

1. Golden age of reptiles is.....
2. India belongs torealm.
3. is an example for living fossil.
4. Biogenetic law was proposed by
5. The boundary that separates the ecozone of Asia and ecozone of Australia is called
6. Germ plasm theory was proposed by
7. The natural selection working at the level of family is called
8. Summer sleep is known as
9. Highly reduced and functionless organs, which were of great importance in ancestors are called
10. The death of hybrids, before attaining sexual maturity is called.....

(10 x 1 = 10 Marks)**II. Answer all ten questions. Each question carries two marks.**

11. Give an account on Darwin's finches.
12. What is dating of fossil?
13. Give an account of phyletic speciation.
14. What is a living fossil? Give an example.
15. Describe natural selection.
16. Ontogeny recapitulates phylogeny- Explain.
17. What is pre adaptation? Give an example.
18. What is F2 breakdown isolation?
19. Explain conditioned reflex.
20. Give an account on Gangetic plain zone.

(10 x 2 = 20 Marks)

III. Short essay. Answer any five questions. Each question carries six marks.

21. Elucidate Oparin- Haldane Theory.
22. Give an account of embryological evidences of evolution.
23. Describe Cosmopolitan & Bipolar distribution.
24. Explain the role of hormones in behaviour.
25. Explain briefly on zoogeographical realms.
26. Describe on Lamark's theory.
27. What is speciation? Which are the types of speciation?
28. What is genetic drift? What are the effects on population?

(5 x 6 = 30 Marks)

IV. Answer any two essay questions. Each question carries ten marks.

29. Explain the important postulates of Darwin's Theory. Give an account on the criticism against Darwinism.
30. What are different mechanisms in reproductive isolation?
31. Give an account of learned behaviour patterns.
32. Explain physiological and biochemical evidences of evolution with examples.

(2 x 10 = 20 Marks)

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE
Fifth Semester B.Sc Zoology Degree Examination, November 2018
ZO5B08T – Cell Biology & Genetics
(2015 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

I. One word questions (Answer all the questions)

1. Give two examples for vital stains.
2. Name the disease caused by Trisomy-18
3. Who discovered apoptosis
4. Which organism shows ZZ, ZW type of sex determination mechanism
5. Give an example for sex influenced inheritance
6. Which stage of interphase shows chromosome tetraploidy
7. Who is considered as the father of human genetics
8. Name the enzyme responsible for the disease alkaptonuria
9. Which macromolecule is the major component of plasma membrane
10. What is the formula for nucleocytoplasmic index

(10 x 1 = 10 Marks)

II. Short answers questions. Answer all

11. Distinguish between secondary lysosomes and cytosomes
12. Write short notes on female heterogamety with examples
13. Distinguish between fixatives and stains
14. What are the functions of endoplasmic reticulum
15. What is environmental sex determination mechanism
16. Describe Bombay phenotype
17. Write notes on centrioles
18. What is endomitosis? Give its significance
19. Give an account on structure of Endoplasmic reticulum.
20. What are the functions of Golgi complexes

(10 x 2 = 20 Marks)

III. Short Essay questions. Answer any five

21. Comment on histochemical technique
22. Briefly explain the components of prokaryotic and eukaryotic ribosomes
23. Explain Polymorphism in lysosomes
24. Write an account on lampbrush chromosomes
25. Explain fluid mosaic model of plasma membrane.
26. Comment on eugenics, eugenics and euphenics
27. Briefly explain cytoskeleton structures in a cell
28. Write an account on cytogenetics of cancer

(5 x 6 = 30 Marks)

IV. Essay Questions (Answer any two questions)

29. Write an essay on various events in meiosis
30. Explain the working of electron microscope? Give its advantages
31. Describe different disorders due to gene mutations
32. Write an essay on multiple allelism. Give suitable examples

(2 x 10 = 20 Marks)

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester B.Sc Zoology Degree Examination, November 2018

ZO5B09T – General Methodology in Science, Biostatistics & Informatics

(2015 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

I. Answer all questions. Each question carries one mark.

1. Define *ad hoc* hypothesis.
2. Which is the most widely used invertebrate species in classical genetics research?
3. ----- is the method of scientific inference in which conclusions are drawn by reasoning from general principle to a particular case.
4. ----- is the expert scrutiny of the results of a scientific investigation or hypothesis formulated to make work perfect and flawless.
5. A circle divided into sectors proportional to the frequency of items shown is called -----
6. The most frequently occurring value of a data set is called the
7. Name the variable spaced by equal intervals without true zero point.
8. What is open access?
9. What is DSL?
10. ----- is an autonomous inter university centre of UGC.

(10 x 1 = 10 Marks)

II. Answer all ten questions. Each question carries two marks.

11. What are simulations?
12. Write the basic structure of a scientific paper.
13. Differentiate between inductive and deductive empirical methods.
14. What is significance test? Cite an example.
15. What is standard error?
16. Compare between histogram and bar diagram.
17. Explain digital divide.
18. What is meant by cyber ethics? Explain cyber bulling.
19. Differentiate between BRNET and NICNET.
20. Give an account on copyright and trademark.

(10 x 2 = 20 Marks)

III. Short essay. Answer *any five* questions. Each question carries six marks.

21. Write on the role of significance test in statistics.
22. Write a short essay on the principles of an experimental design.
23. Explain the steps in formulating a hypothesis.
24. Give an account on search engines.
25. Explain the methods practised to protect privacy in internet.
26. Write a short essay on measures of central tendency and its role in biostatistics.
27. Comment on types of variables in statistics?
28. What is e-waste? Explain green computing.

(5 x 6 = 30 Marks)

IV. Answer *any two* essay questions. Each question carries ten marks

29. Write an essay on scientific method.
30. Write an essay on diagrammatic and graphical strategies to represent data.
31. What is malicious software? Describe different types of malicious softwares. How computers are protected from them.
32. What is cyber addiction? Give a detailed account on health issues connected with IT and the guidelines for proper usage to reduce health problems.

(2 x 10 = 20 Marks)

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester B.Sc Zoology(Open Course) Degree Examination, November 2018

ZO5D01 – Reproductive Health & Sex Education

(2015 Admission onwards)

Max. Time: 2 hours

Max. Marks: 40

A. Answer all questions. Each carries 1 mark

1. Name a technique to monitor the functioning of brain.
2. Gonorrhoea is caused by.....
3. Expand ZIFT
4. Name a tests used for the detection of AIDS.
5. Name the male phenotype imparting gene on Y-Chromosome.
6. Give the chromosome number in normal human sperm.
7. Write an example for environmental control of sex determination.
8. Intentional or voluntary termination of pregnancy before full term is called.....
9. The inactive and condensed X chromosome of a human female is called.....
10. Name the term used for female homosexuality.

(10 x1=10 Marks)

B. Answer any five questions in two or three sentences each. Each carries 2 marks.

11. What are the major reproductive rights?
12. Give an account on sex determination in man.
13. Write short note on sexual myths and misconceptions.
14. Describe the importance of keeping healthy relationship with opposite sex.
15. Explain the mode of transmission of HIV.
16. Mention the impacts of sexual abuse and rape?
17. What is meant by monozygotic twins?

(5 x 2=10 Marks)

C. Answer any two questions in not more than a paragraph each. Each carries 5 marks

18. Write briefly on artificial methods of birth control.
19. Write an essay on symptoms, mode of transmission, and treatment of any three sexually transmitted diseases
20. Explain any three assisted reproductive techniques (ART).

(2 x 5 =10 Marks)

D. Write an essay on any one of the following. Each carries 10 marks.

21. Explain any four imaging techniques and their purposes
22. Discuss the common prenatal diagnostic techniques. Add a note on PNDT act.

(1x 10=10 Marks)

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(Pages : 2)

Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester (Open Course) Degree Examination, November 2018

PE5D03 - Physical Activity Health & Wellness

(2015 Admission onwards)

Max. Time: 2 hours

Max. Marks: 40

PART-A

Answer all the questions

1. Ability to execute movement with greater range is known as strength
a)Agility b) strength c)Flexibility d)speed
2. The exercise is done in the presence of oxygen is called
a)Anaerobic exercise b)Aerobic exercise c)Weight training d) Yogasanas
3. The pressure in the arteries as the heart contracts and pumps blood forward into the arteries.
a)Hypertension b)systolic blood pressure c)diastolic blood pressure d)Pulse
4. The asana which give the appearance of Cobra, when performed is known as...
a)Halasana b)Padmasana c)Bhujangasana d)Dhanurasana.
4. The exaggerated anterior convexity in the lumbar region is -----
a)Kyoposis b)Lordosis c)Flat foot d)Scoliosis
5. The Clinical term used for pores bone is.....
a)Osteoporosis b)CHD c)flatfoot d)Diabetes
6. The capacity of the body to perform exercise over an extended period of time with out undue fatigue is known as.....
7. The expanded form of SRPF is.....
8. The formula to determine BMI is.....
9. National sports day celebrated on
10.vitamin is synthesized with the help of sunlight

(10 x 1=10 Marks)

PART-B

Answer any five questions

11. What is cosmetic fitness ?
12. Define balanced diet?
13. What is pranayama?
14. Elaborate the term RICE ?
15. What are the types of physical fitness ?
16. What is scoliosis?
17. Define physical Education?

(5 x 2 =10 Marks)

PART-C

Answer any two questions

18. Define Asana and explain two meditative asanas?
19. What are the benefit of physical exercise?
20. Write the components of health related physical fitness?

(2 x 5 =10 Marks)

PART-D

Answer any one question

21. What is life style diseases and explain causes, symptoms and management of diabetes and obesity?
22. Define the word ' Physical education' and explain the Aim, objective and scope of physical education and sports in the current world?

(1 x 10 =10 Mark)