

1B3N18227

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE
Third Semester B.Sc Degree Examination, November 2018
BASC3C03 – Life Contingencies and Principles of Insurance
(2017 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

PART – A

Answer all questions. Each question carries one mark

1. In _____ insurance there is no surrender provision.
2. Write Equation for net premium?
3. Reserve means
4. Write down the form of log utility function?
5. Assurance contracts are ones where the insurer makes a payment on _____
6. Which contracts make a payment on survival to a given age?
7. Define policyholder?
8. For risk seeking investor $U(W) = ?$
9. Define single premium?
10. An endowment assurance is a combination of _____
11. As the age increases risk on the life _____.
A. Increases. B. Decreases. C. does not change. D. Moderate.
12. Under fire insurance, loss of profit policy is also called
a. Average policy b. Consequential loss policy c. Specific policy
d. Adjustable policy

(12 x 1 = 12 Marks)

PART – B

Answer any seven questions. Each question carries two marks

13. Write type of life assurance contracts?
14. Define commutation function?
15. Define reserve and prospective reserve?
16. Write Thiele's differential equation?
17. Define aviation insurance?
18. What is the meaning of pecuniary interest?
19. What do you meant by a risk-averse investor?
20. Define log utility function?

(7 x 2 = 14 Marks)

PART - C

Answer any six questions. Each question carries five marks

21. Why premiums are paid in advance?
22. Difference between deterministic & stochastic approach in Life Insurance Company?
23. Why do you think we split up the required probability so that we need to approximate only over single years of age?
24. Explain benefit reserve under fully continues endowment insurance.
25. State and prove Jensen's Inequalities?
26. Calculate the annual premium for a term assurance with a term of 10 years to a male aged 30, with a sum assured of £500,000, assuming AM92 Ultimate mortality and interest of 4% *pa*. Assume that the death benefit is paid at the end of the year of death.
27. Discuss expected utility theorem and utility functions?
28. Explain premium under *n* year deferred whole life?
29. Discuss : Liability Insurance, Miscellaneous Insurance, engineering insurance

(6 x 5 = 30 Marks)

PART - D

Answer any three questions. Each question carries eight marks

30. Explain Utility Theory.
31. What are the main claim risks to General & Life Insurance Company?
32. A life aged exactly 50 buys a 15-year endowment assurance policy with a sum assured of £50,000 payable on maturity or at the end of the year of earlier death. Level premiums are payable monthly in advance. Calculate the monthly premium assuming AM92 Ultimate mortality and 4% *pa* interest. Ignore expenses.
33. State and prove Thiele's differential equation.
34. Explain benefit reserve under *n* year discrete endowment insurance and derive its variance.

(3 x 8 = 24 Marks)

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Degree Examination, November 2018

BZOL3B03 : Animal Diversity - Chordata Part - 1

(2017 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

Part A**Answer ALL the following questions: Each question carries 1 Marks**

1. What is the excretory organ of Amphioxus ?
2. Give protective covering for Ascidia ?
3. What is corpus striatum ?
4. Name the order which belongs to *Latimeria* ?
5. What is gubernaculum cordis ?
6. What is carapace?
7. Give the scientific name of Tiger Salamander ?
8. What is Jacobson's organ ?
9. What is conus papillaris?
10. Give the characters of Apoda.

(10 x 1=10 marks)

Part B**Answer any TEN questions: Each question carries 2 Marks**

11. Give the characters of Chordata .
12. What are Chondrichthyes ?
13. Mention about Chamaeleon .
14. What is cycloid scale ? mention its function .
15. Give the characters of *Doliolum* .
16. Give characters of *Axolotl*.
17. Mention about *Nasibatrachus* .
18. Differentiate between Alligator and Crocodile ?
19. What is *Hylonomus*?
20. Write notes on *Sphenodon*.
21. Mention the accommodation of lens in *Mullet* .
22. What are the characters of Agnatha.

(10 x 2=20 marks)

Part C

Answer any FIVE question. Each question carries 6 Marks

23. Describe the respiratory system of Mullet.
24. Explain the affinities of *Amphioxus*.
25. Give the structure of hyoid apparatus and typical vertebrae of Amphibia.
26. How to distinguish Poisonous and non poisonous snakes.
27. Explain the girdles in Reptilia .
28. Classify and give the characters of Amphibia.
29. What is retrogressive metamorphosis?.
30. Write notes on the Splanchnocranium of Mullet .

(5 x 6 =30 marks)

Part D

Answer any TWO questions. Each question carries 10 Marks

31. Explain the circulatory system of Mullet ?
32. Explain the nervous system in Frog?
33. Explain the blood vascular system in *Calotes*.
34. Write notes on

1. *Gavialis* 2. *Ureotyphlu* 3. *Mugil* 4. *Chimaera* 5. *Protopterus*.

(2 x 10= 20 marks)

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Degree Examination, November 2018

BZOL3CO3 - Physiology, Toxicology and Ethology

(2017 Admission onwards)

Max. Time: 3 hours

Max. Marks: 64

I. One word questions (Each question carries 1 mark) Answer *all* questions.

1. Who proposed fluid mosaic model of plasma membrane?
2. Name an animal where cutaneous respiration occurs.
3. Name the metallic part of haemocyanin.
4. Who proposed ABO blood system?
5. Name the special tissue in the conducting system of heart.
6. Give an example of radioactive pollutant.
7. Name the largest and man like ape.
8. Name the trial and error method of learning behavior.
9. Name an example of neurotransmitter.
10. Name the cell which produce heparin.

(10 x 1 = 10 Marks)

II. Short Answer questions (Each question carries 2 mark) Answer any *seven* questions.

11. What is micropinocytosis?
12. Define Apnoea?
13. What is coronary thrombosis?
14. What are neurotrophins?
15. What is migration?
16. Define osmosis.
17. What are the functions of leucocytes?
18. Mention the causes of peptic ulcers.
19. What is LC 50?
20. What are xenobiotics?

(7 x 2 = 14 Marks)

III. Paragraph questions (Each question carries 5 mark) Answer any *four* questions.

21. Explain the courtship behavior.
22. Write an account on the structure of neuron.
23. Discuss briefly the water conservation in desert animals.
24. Write a short account on physiological changes of muscle contraction.
25. Write an account on carbon monoxide poisoning.
26. Write the importance of dietary fibres.

(4x5=20 Marks)

IV. Essay questions (Each question carries 10 mark) Answer any *two* questions.

27. Write an account on gas transport mechanism.
28. Explain the major toxicants and their public health hazards.
29. Give an account on patterns of behavior exhibited by animals.
30. Write an essay on urea formation.

(10 x 2= 20 Marks)