



U8391

Reg. No.:

Name:.....

**University of Kerala**

First Semester Degree Examination, November 2024

Four Year Under Graduate Programme

Discipline Specific Core Course

ZOOLOGY**UK1DSCZOO101 - NON-CHORDATE DIVERSITY-PART I**

Academic Level: 100-199

Time: 1½ Hours**Max. Marks: 42****Part A.****Answer All Questions Objective Type. 1 Mark Each.****(Cognitive Level: Remember/Understand)****6 Marks. Time: 6 Minutes**

Qn. No.	Question	Cognitive Level	Course Outcome
1.	Father of Taxonomy A) Charles Darwin B) Carl Linnaeus C) Gregor Mendel D) Aristotle	Remember	1
2.	In Protostomia, the blastopore develops into which structure? A) Mouth B) Anus C) Coelom D) Brain	Understand	3
3.	Which mosquito genus is responsible for transmitting malaria? A) Aedes B) Culex C) Anopheles D) Mansonia	Remember	2
4.	Ctenophora are commonly known as: A) Jellyfish B) Sea anemones C) Comb jellies D) Corals	Remember	2
5.	What is the function of the rhopalia in Aurelia? A) Feeding B) Reproduction C) Locomotion D) Sensory perception	Understand	2
6.	Which of the following Protists is commonly known as the "Slipper animalcule"? A) <i>Paramecium</i> B) <i>Physalia</i> C) <i>Aurelia</i> D) <i>Pleurobrachia</i>	Remember	2

Part B.
Answer All Questions Short Answer. 2 Marks Each.
(Cognitive Level: Understand/Apply) 8 Marks. Time: 24 Minutes

Qn. No.	Question	Cognitive Level	Course Outcome										
7.	Match the following <table><tr><th>Column A</th><th>Column B</th></tr><tr><td>a. Monera</td><td>1.Multicellular , photosynthetic organisms</td></tr><tr><td>b. Plantae</td><td>2. Prokaryotic organisms, no membrane- bound organelles</td></tr><tr><td>c. Fungi</td><td>3. Heterotrophic organisms with Chitinous cell walls</td></tr><tr><td>d. Protista</td><td>4. unicellular eukaryotes , both autotrophic and heterotrophic</td></tr></table>	Column A	Column B	a. Monera	1.Multicellular , photosynthetic organisms	b. Plantae	2. Prokaryotic organisms, no membrane- bound organelles	c. Fungi	3. Heterotrophic organisms with Chitinous cell walls	d. Protista	4. unicellular eukaryotes , both autotrophic and heterotrophic	Understand	1
Column A	Column B												
a. Monera	1.Multicellular , photosynthetic organisms												
b. Plantae	2. Prokaryotic organisms, no membrane- bound organelles												
c. Fungi	3. Heterotrophic organisms with Chitinous cell walls												
d. Protista	4. unicellular eukaryotes , both autotrophic and heterotrophic												
8.	Explain any one key feature of the class Calcispongia, and name an example.	Apply	2										
9.	Compare and contrast fringing reef and barrier reef	Understand	3										
10.	Explain the significance of the exoerythrocytic phase in the life cycle of <i>Plasmodium vivax</i> .	Apply	2										

Part C.
Answer all 4 Questions, choosing among options within each question.
Long Answer. 7 marks each.
(Cognitive Level: Understand/Apply/Analyse/Evaluate/Create)
28 Marks. Time: 60 Minutes

Qn. No.	Question	Cognitive Level	Course Outcome
11.	Explain and discuss how the structure of <i>Physalia</i> enhances their adaptability and survival in the marine habitat. OR Describe the polymorphism in Cnidarians with examples.	Apply	5
12.	Explain the pathogenicity of <i>Plasmodium vivax</i> , including its impact on human health OR Prepare a list on the prophylactic measures for preventing African sleeping sickness caused by <i>Trypanosoma gambiense</i> .	Apply	5
13.	Describe how the Super-group model of eukaryotes and the Tree of Life approach help trace evolutionary relationships more accurately. OR Explain the importance of binomial nomenclature in taxonomy and how it is governed by the ICZN.	Understand	1
14.	Explain the key morphological features of sea anemones and explain how these adaptations help in thriving in marine environments. OR Analyse the life cycle of <i>Obelia</i> and explain how it contributes to the success of the organism.	Apply	4