



(2021-22)

# SUM GOVT DEGREE COLLEGE: KONDANAGULA



## Zoology--Internal Assessment Exam-1

BSc(BZC)-VI Sem Paper: Ecology, Zoogeography & Evolution

Zoology  
Name:

max. mark - 20

H.T.NO

Answer the Following Questions

(10x1/2=5marks)

1. The importance and use of Ecological Pyramids was first represented by\_\_? [ ]  
 A) Elton                      B) Lamarck                      C) Aristotle                      D) Morgan
2. The Number of individuals of each Trophic level is represented by\_\_? [ ]  
 A) Pyramid of Number    B) Pyramid of Biomass    C) Pyramid of Energy    D) None
3. Different types of Food chains Inter connected each other called\_\_? [ ]  
 A) Food Chain    B) Food Web                      C) Trophic Level                      D) None
4. Which of the Following is Correct\_\_? [ ]  
 A) Grass→ Grasshopper→ Hawk  
 B) Grass→ Rabbit→ Hawk  
 C) Grass→ Mouse→ Hawk  
 D) Above all Correct
5. An example of Sedimentary Cycle--? [ ]  
 A) Nitrozen Cycle                      B) Carbon cycle                      C) Water cycle                      D) Phosphorus cycle
6. An example of Symbiosis--? [ ]  
 A) Rhizobium-Leguminacea  
 B) Hydra- Zooclorella  
 C) Ants- Aphids  
 D) D) Above all Correct
7. The stages of Hydrach is\_\_? [ ]  
 A) Pioneer stage  
 B) Sub merged stage  
 C) Flotting stage  
 D) Above all
8. Wild Life Protection Act in India\_\_? [ ]  
 A) 1972    B) 1927    C) 1965    D) 1988
9. Kaziranga National Park is located in\_\_? [ ]  
 A) Assam                      B) Gujarat                      C) Telangana                      D) Karnataka
10. Gir National Park is Locate in\_\_? [ ]  
 A) Assam                      B) Gujarat                      C) Telangana                      D) Karnataka



### Filling the Blanks

(10x1/2=5marks)

1. Jim Corbett National park is Located in \_\_\_\_\_
2. Dachigam National park is ; Located in \_\_\_\_\_
3. Mrugavani National park is located in \_\_\_\_\_
4. Simlipal National park is located in \_\_\_\_\_
5. Kawal Sanctuary is located in \_\_\_\_\_
6. Ranthambore Sanctuary is located in \_\_\_\_\_
7. Pakhal Sanctuary is located in \_\_\_\_\_
8. Red Data Book is Explained by \_\_\_\_\_
9. An example of Food chain is \_\_\_\_\_
10. One Horned Rhinoceros is Protected in \_\_\_\_\_

### Answer the following Questions

(5x1=5 marks)

1. Give one example of Food Chain?
2. Asiatic Lions are protected in\_\_?
3. Madhumalai National park is Located in\_\_?
4. Battamekaha Bird is Protected in\_\_?
5. Bharath pure Sanctuary is Located in\_\_?

ASSIGNMENT \_\_\_\_\_ 5 Marks

*Bleep*  
B Johnbabu

Prepared by  
B. Johnbabu  
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SUM GDC Kondanagula





(2021-22)



# SUM GOVT DEGREE COLLEGE: KONDANAGULA

## Zoology--Internal Assessment Exam-2

BSc(BZC)-VI Sem Paper: Ecology, Zoogeography & Evolution

Zoology

max mark - 20

Name:

H.T.NO

Answer the Following Questions

(10x1/2=5marks)

1. An example of Gases cycle\_\_? [ ]  
A) Carbon cycle B) Nitrogen cycle C) A&B D) Water cycle
2. How many ecological pyramids are there\_\_? [ ]  
A) Pyramid of Number B) Pyramid of Biomass C) Pyramid of Energy  
D) Above all correct
3. Please correct the answer\_\_? [ ]  
A) Producers→Herbivorus→Cornovorus  
B) Herbivorus→Carnivorus→ Producers  
C) Carnivorus→Herbivorus→ Producers  
D) None
4. Crustose Lichen stage present in\_\_? [ ]  
A) Xerorch B) Hydroech C) Misorch D) Above all
5. What are the flight adaptations in Birds\_\_? [ ]  
A) Airs sacs B) Flight Muscles C) Feathers D) Above all
6. The reason for acid rains\_\_? [ ]  
A) Co2 B) So2 C) Co D) N2
7. The reason for Green house effect\_\_? [ ]  
A) CO B) CO2 C) N2 D) SO2
8. Indian forest Act\_\_? [ ]  
A) 1954 B) 1927 C) 1972 D) 1975
9. Silent vally national park is located in\_\_? [ ]  
A) Gujarat B) Kerala C) Telangana D) Assam
10. Madhumalai national park is located in\_\_? [ ]  
A) Telangana B) Kerala C) Tamilnadu D) Karnataka



## Filling the Blanks

(10x1/2=5marks)

1. The name of African lung fish \_\_\_\_\_
2. The name of south American lung fish \_\_\_\_\_
3. Germ plasm theory was proposed by \_\_\_\_\_
4. What is the survey ship of Darwinism \_\_\_\_\_
5. The Natutal selection book was written by \_\_\_\_\_
6. The number of vestigial organs present in man is \_\_\_\_\_
7. The theory of Recapitulation was proposed by \_\_\_\_\_
8. Connecting link between annelida and arthropoda \_\_\_\_\_
9. Whats is Hardy Weinberg law \_\_\_\_\_
10. An examples of Homologus organs \_\_\_\_\_

Answer the following questions

(5x1=5 marks)

1. What is IUCN?
2. Give an example of Analogus organs?
3. Atavistic organs means?
4. Give an example of Food chain?
5. What are the Ecological Pyramids?

**ASSIGNMENT-----5 Marks**

*B. John Babu*  
(B. JOHN BABU)

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(2021-22)

**SUM GOVT DEGREE COLLEGE: KONDANAGULA**  
**Department of Zoology**  
**Zoology.III Sem-Internal Assessment Test**

Name: K. Arjun Rao

19  
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20

H.T.NO: 20033051909014

**I. Answer the following Multiple choice questions**

(10X1/2=5Marks)

1. Study of Digestive system is called \_\_\_?

[ B ]

- a) Cardiology    b) Gastro enterology    c) Endocrinology    d) Nephrology

2. Lock and Key theory was Proposed by \_\_\_?

[ A ]

- a) Emil Fisher    b) Mentus    c) Lamark    d) None of the above

3. Inducee fit theory was proposed by \_\_\_?

[ B ]

- a) Emil Fisher    b) Koshland    c) Lamark    d) None of the above

4. At the end of carbohydrates digestion converts into a \_\_\_?

[ C ]

- a) Fatty acids    b) Amino Acids    c) Glucose    d) Above all

5. At the end of <sup>proteins</sup> carbohydrates digestion converts into a \_\_\_?

[ B ]

- a) Fatty acids    b) Amino Acids    c) Glucose    d) Above all

6. At the end of <sup>lipids</sup> carbohydrates digestion converts into a \_\_\_?

[ A ]

- a) Fatty acids    b) Amino Acids    c) Glucose    d) Above all

7. In human beings How many pairs of Salivary glands are Present?

[ A ]

- a) 3 pairs    b) 2 pairs    c) 4 pairs    d) 5 pairs

8. Mammalian Urine Contains?

[ A ]

- a) Urea    b) Uric acid    c) Ammonia    d) Hippuric acid

9. Structural and functional unit of the Kidneys are?

[ B ]

- a) Tendon    b) Nephrons    c) Sarcomere    d) None of the above

10. Heart of the Heart is called?

[ A ]

- a) S.A Node    b) A.V Node    c) Bundle of His    d) Purkinje Fibers



## II. Fill in the Blanks

10X1/2=5 Marks

1. The first step of Urine formation is Glomerules filtration
2. Give an example of Ammonotelic animal fish
3. Give an example of Uriotelic animal man
4. How many chambers contain in Ruminates Stomach 4
5. What is the Respiratory pigment present in Mammlia Hemoglobin
6. Give an example of Open Circulation animals Insects
7. The study of Heart is Called Cardiology
8. Echinochrome Respiratory Pigment present in Sea urchin
9. Molphadin Respiratory Pigment present in Mollusks
10. Father of Circulation William Harvey

## 3. Answer the following questions

5X1=5 Marks

1. What are the steps present in Formation of Urine?

↳ Glomerules filtration 2) selective Reabsorption 3) Tubule

2. What are the Parts present in Nephron Structure?

↳ Bowman Capsule 2) uniferous Tube { PCT  
Henle's loop  
DCT  
Sensitic

3. Explain the Extra cellular Digestion?

↳ Digestion takes place outside of the cell

4. What is Bradycardia

↳ Heart rate decreases below 60 beats per minute called bradycardia

5. Which Valve present between Right auricle and Right Ventricles?

Tricuspid valve

## 4. ASSIGNMENT-

5 Marks

4



P. Multiple choice questions

1. Laplace Transform of  $3t-5$

(a)  $\frac{3-5p}{p^2}$

(b)  $\frac{4-5p}{p^3}$

(c)  $\frac{2p}{p}$

(d)  $\frac{1-2p}{p^2}$

2. Find (i)  $L^{-1}\left\{\frac{1}{p}\right\}$

(a)  $\therefore L^{-1}\left\{\frac{1}{p}\right\}$

(b) since  $L\{1\} = \frac{1}{p}$

(c)  $L^{-1}\{t^n\} = \frac{1}{p}$

(d)  $L^{-1}\left\{\frac{1}{p}\right\}$

3. Evaluate the following.  $L^{-1}\left\{\frac{3p+1}{p+1}\right\}$

(a)  $e^{-t}\left(\frac{3}{2}t^2 - \frac{1}{3}t^3\right)$

(b)  $e^{-t}\cos at$

(c)  $e^{-t}\left(\frac{3}{2} - \frac{1}{3}t^3\right)$

(d)  $e^{-t}\frac{3}{2}t^2 - t^3$

4. Find the inverse Laplace transform of  $e^{-3p/p^3}$

(a)  $\frac{1}{2}(t-3)^2 H(t-3)$

(b)  $\frac{1}{2}(t-3)^3 H(t-2)$

(c)  $\frac{1}{2}(t-3)^2 H(t-3)$

(d)  $\frac{1}{2}(t-3)^2 H(t-4)$

5. Apply convolution theorem to find  $L^{-1}\left\{\frac{1}{p^3(p+1)}\right\}$

(a)  $1-t + \frac{t^2}{2} - e^{-t}$

(b)  $1-t + \frac{t}{2} - e^{-t}$

(c)  $1-t^2 + \frac{t^2}{2} - e^{-t}$

(d)  $1-t^2 + \frac{t^3}{2} - e^{-t}$

6.  $\frac{dy}{dt} + y = 1$  given that  $y = 2$  when  $t = 0$

(a)  $y = 1 + e^{-t^2}$

(b)  $y = 1 + e^{-t}$

(c)  $y = 2 + e^{-t}$

(d)  $y = 1 + 2e^{-t}$

7.  $\frac{\partial y}{\partial x} - \frac{\partial y}{\partial t} = 1 - e^{-t}$ ,  $0 < x < 1$ ,  $t > 0$  and  $y(x, 0) = x$

(a)  $y(x, t) = x + 1 - e^{-t}$

(b)  $y(x, t) = x + 2 - e^{-t}$

(c)  $y(x, t) = x + 3 - e^{-t}$

(d)  $y(x, t) = x + 2 - e^{-1}$

8. solve  $zF(z) = 2 - z + \int_0^z F(z-u)F(u)du$

(a)  $F(z) = 1, -1$

(b)  $F(z) = 2, -1$

(c)  $F(z) = 3, -1$

(d)  $F(z) = 1, 1$



9 solve  $F(t) = 1 + 2 \int_0^t F(t-u) \cos u \, du$  [ ]

10  $F(t) = 1 + 2t e$ . (b)  $F(t) = 1 + 2t e^t$ . (c)  $F(t) = 1 + 2t$  (d)  $F(t) = 1 + 2t e$

10 find  $L\{F(t)\}$ , if  $F(t) = \begin{cases} \frac{e^t}{3}, & 0 < t < 5 \\ t & t > 5. \end{cases}$  [ ]

(a)  $\frac{1 - e^{-5(p-1)}}{p-1} + \frac{3}{p} e^{-5p}$ ,  $p > 1$  (b)  $\frac{1 - e^{-5(p-2)}}{p-1} + \frac{3}{p} e^{-5p}$ ,  $p > 1$

(c)  $\frac{1 - e^{-5(p-1)}}{p-2} + \frac{3}{p} e^{-5p}$ ,  $p > 1$  (d)  $\frac{1 - e^{-5(p-1)}}{p-1} + \frac{3}{p} e^{-5p}$ ,  $p > 3$ .

II Fill in the blanks

1.  $\int_0^{\infty} \frac{F(t)}{t} dt = \underline{\hspace{2cm}}$

2.  $L\{\cosh at\} = \underline{\hspace{2cm}}$

3.  $F(t) = 1 + \int_0^t F(u) e^{im(t-u)} du = \underline{\hspace{2cm}}$

4.  $\int_0^{\infty} \frac{\sin \sqrt{ax}}{\sqrt{x}} dx = \underline{\hspace{2cm}}$

5.  $L\left\{ \frac{p^r}{(p^r + u)^r} \right\} = \underline{\hspace{2cm}}$

III Short Answer questions:

1 Find Laplace transform of the function  $F(t)$ ; where

$$F(t) = \begin{cases} \sin t, & 0 < t < \pi \\ 0, & t > \pi \end{cases}$$

2 evaluate  $L^{-1}\left\{ \frac{1}{(p+a)^n} \right\}$

3 Find  $L^{-1}\left\{ \log \frac{p+3}{p+2} \right\}$

4 solve  $\frac{d^2x}{dt^2} + x = F(t)$

$x = x' = 0$  for  $t = 0$

5 solve the integral equation

$$\int_0^t F(u) F(t-u) du = 16 \sin ut.$$