

Virtual University of Pakistan

BT-101

Ecology-Biodiversity-Evolution-I

Midterms Past Papers

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Course Instructor

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BT101:-

Mid Past Papers:-

Questions with Answer:-

Q.1: what is the function of the cell membrane?

Ans.1:-The **cell membrane** is selectively permeable to ions and organic molecules and controls the movement of substances in and out of **cells**. The basic **function of the cell membrane** is to protect the **cell** from its surroundings. It consists of the phospholipid bilayer with embedded proteins.

Q.2:- What is cell membrane and cell wall?

Ans.2:- Cell Membrane. The **cell wall** is the outer most covering of the **cell**. ... The **cell wall** is present in bacteria, fungi, algae and plant **cell**. It is absent in an animal **cell** and protozoa. The **cell membrane** is a biological **membrane**, which is semi- permeable.

Q.3:-Write a note on soil horizon?

Ans.3:- A **soil horizon** is a layer generally parallel to the soil crust, whose physical characteristics differ from the layers above and beneath

Q.4:-Define detritivores with example?

Ans.4:- Detritivores are heterotrophs that obtain their nutrition by feeding on detritus. The detritus they consume includes decomposing plant and animal parts, as well as fecal matter. These organisms play an important role in all ecosystems by getting rid of decaying organic matter left behind by other organisms. In food webs, detritivores commonly play the role of decomposers. Some common **examples** of **detritivores** are earthworms, who eat rotten plant leaves and other debris, and dung beetles, who eat feces. Other **examples** are millipedes, woodlice, slugs, and sea stars.

Q.5:- Define trophic level with example?

Ans: - A **trophic level** is the position in an ecosystem an organism occupies in relation to primary sources of energy and the food chain. The first **trophic level** is always composed of primary producers that convert either solar or chemical energy into biomass.

Questions:

1. BT101

- 1: Define species with example?
2. Mechanism of survival of endotherm in cold and hot environment?
3. What is the wind action on lentic water bodies?
4. Write the role of population as we study it? (2 marks)
5. Write Wind action on water bodies? (2)
6. What is food chain write an example? (3 marks)
7. Explain torpor with example?

Long Q:

1. Write a short note on population dispersion? (5 marks)
2. What are Ectotherms write its characteristics? (5)

2. BT101:

- 1: Write the role of population as we study it? (2 marks)
2. Write Wind action on water bodies? (2)
3. What is food chain write an example? (3 marks)
4. Explain torpor with example?

Long Q: 1. Write a short note on population dispersion? (5 marks)

2. What are Ectotherms write its characteristics? (5)

3. BT101

- 1: define hotspot specie?
- 2: what is difference between niche and habitat?
- 3: What is torpor? Give an example?
- 4: how animals survive in hot and cold environment?
- 5: what are major components of ecology?
- 6: what are aquatic producers?
- 7: Define population diversity.
- 8: What is torpor with example
- 9: Define intrinsic environmental growth...Biological factors.
- 10: How to organisms survive in cold n warm weather??
- 11: Explain marine water?

4. Bt101

- 1: species hotspot.
- 2: diff between keystone species and foundation species.
- 3: indicator species.
- 4: term ecology
- 5: atmosphere and role in ecosystem.
- 6: 3 zones of rivers.
- 7: differentiate between habitat and niche,
- 8: three zones of river,
- 9: types of soil,
- 10: population dispersion,
- 11: species called indicator of environment 5 marks.
- 12: trophic
- 13: generalist and specialist species
- 14: population growth
- 15: intrinsic rate of growth
- 16: environment resistance
- 17: stream flow affecting factor

BT101 ppr.

plankton and phytoplankton. tertiary consumer. enlist characteristics of community ecology.
examples of tertiary successions. population regulation

Bt101 Today paper was

Long

1-Define species and 4 basic factors that determine species

2-define

Primary succession

Pioneer community

Serial stages

Short question

Torpor

Demography

Differentiate Winter sleep and hibernation

What factor that we determine species

Today's exams of bt101 at 9 am

Photosynthesis?

Torpor + example?

Species abundance and species evenness?

Biotic growth, intrinsic growth rate, environmental resistance ?

Species + primary concept ?

Role of light?..

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bT101 MID TERM PAPER!!!!

hotspot species=2, zones of river, factors of population dispersion,atmosphere=5,growth of population=5

Mera BT101 ka tha

Reproductive potential and factors affecting it(5)

Weathering and its types(5)

Soil hotspots(2)

Characterostics of ectotherms(3)

Non-native species(3)

Generalist species(2)

bt101

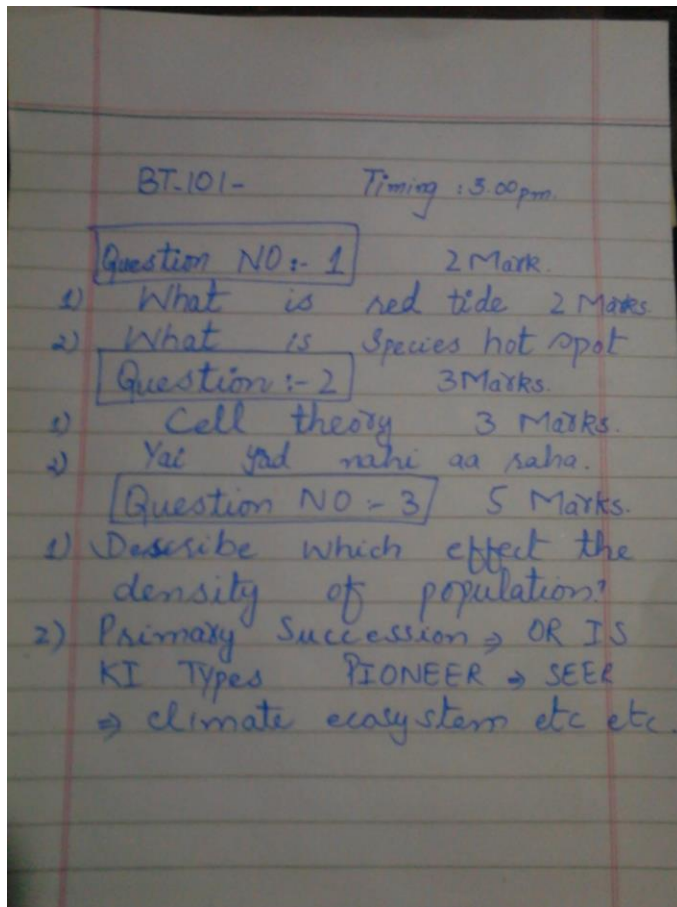
1: photoautosynthesis & chemoautosynthesis

2:torpor

3:easitivation(3)

4:ecological pyramids (5)

5:specialist and gernelist species (3)



Bt101 ppr

Short:

How decomposers work?

Give the composition of geosphere?

Define filter feeders and deposit feeders also give example

How we analyze the soil.type?

Long:

Define ecological pyramid also explain the types

human influence on environment and what are da factors

today My paper of cell bio 201

Q;differentiate between RNA and DNA

2;Application of Pcr

3;differentiate between purine and primydine.

4.types of RNA

5.define heat shock proteins and lysosomes

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BT101 midterm paper

1. difference between plankton and phytoplankton.
2. difference between generalist and specialist species.
3. role of ecological engineer.
4. filter feeder and deposit feeder.

LONG questions;

note on survival ship curve.

types of energy quality

BT101 today midterm paper

Difference between plankton and phytoplankton.

Define generalist and specialist species.

Filter feeder and deposit feeder.

Role of ecological engineers.

Long question:

Types of energy quality.

Survival ship curve.

BT_101 Q: difference b/w hibernation and winter sleep. Q: importance of water Q: biological species concept Q: how we analyse which kind of soil Q: population dispersion Q: difference b/w immigration, emigration

My today's BT101 paper Mcqs was from the topics species, ecosystem, community producer
Long questions 1: define species and four factors to determine species. 2: indicator species
Short questions Differentiate between plankton and phytoplankton Why animals do hibernation How can we use species to indicate environment? Aquatic environment and ecosystem

Bt101 today paper

Species hotspot (2)

Cockroach one benefit and one drawback (2)

Specialist is better or generalist (3)

Ek yaad ni a raha jb se ga send kr dn gy (3) 😊🙏

Soil horizons (5)

Define term species and 4 concepts that define species (5)

BT101 5 june 12 pm

1. benefits and drawbacks of cockroaches 2m
2. differentiate between prokaryotes and eukaryotes 3m
3. how can u analyze the soil type 3m
4. enlist the ecological services of marine ecosystem 5m
5. detailed view about components of ecosystem 5m

Today paper Bt 101

Ecological services of marine water 5 no

5 definition, taxis, tolerance range, limiting factors, habitat etc 5 no

Invasive species 3 no

Torpor 2 no

Types of electromagnetic radiations

BT101

1) Species abundance and species richness

2) Torpor with example

3) Hotspot Species

4) Eutrophication

5) Define species and four basic factors that determine species

6) Define and explain ecological pyramid with example

Bt 101 paper done today Alhmdolillah

10:30 am

Mcqs

Panda belongs to which species?

Who used the term ecosystem first time?

Beavers are which species ?

What is the shape of logistic population graph?

S.q

Torpor with example, hibernation with example, population dynamics, effects of non native species,

L.q

Enlist the density independent factors

How the species composition act as indicators in environment

BT101

1) detritivores

2) hotspot species

3) factors cause the size of population expansion

4) characters of community ecology

5) types of energy quality

6) define the following

a) habitat

b) limiting factor

c) optimum range

d) taxis

BT101 recent papers (remaining)

1) detritivores

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- 2) hotspot species
- 3) factors cause the size of population expansion
- 4) characters of community ecology
- 5) types of energy quality
- 6) define the following
 - a) habitat
 - b) limiting factor
 - c) optimum range
 - d) taxis
 - e) ??? Yeh yaad nai RaBT101
- 1) Species abundance and species richness
- 2) Torpor with example
- 3) Hotspot Species
- 4) Eutrophication
- 5) Define species and four basic factors that determine species
- 6) Define and explain ecological pyramid with example

Mcqs quite tough

BT101 5 june 12 pm

1. benefits and drawbacks of cockroaches 2m
2. differentiate between prokaryotes and eukaryotes 3m
3. how can u analyze the soil type 3m
4. enlist the ecological services of marine ecosystem 5m
5. detailed view about components of ecosystem 5m

Bt101 today paper

Species hotspot (2)

Cockroach one benefit and one drawback (2)

Specialist is better or generalist (3)

Ek yaad ni a raha jb se ga send kr dn gy (3) 🤔🙄

Soil horizons (5)

Define term species and 4 concepts that define species (5)

BT101 midterm paper

1. difference between plankton and phytoplankton.
2. difference between generalist and specialist species.
3. role of ecological engineer.
4. filter feeder and deposit feeder.

LONG questions;

note on survival ship curve.

types of energy quality

My today's BT101 paper

Mcqs was from the topics species, ecosystem, community producer

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Long questions

1: define species and four factors to determine species.

2: indicator species

Short questions

Differentiate between plankton and phytoplankton

Why animals do hibernation

How can we use species to indicate environment?

Aquatic environment and ecosystem

BT_101

Q: difference b/w hibernation and winter sleep.

Q: importance of water

Q: biological species concept

Q: how we analyse which kind of soil

Q: population dispersion

Q: difference b/w immigration, emigration

Bt101 ppr

Short:

How decomposers work?

Give the composition of geosphere?

Define filter feeders and deposit feeders also give example

Bt101 recent papers

Reproductive potential and factors affecting it(5)

Weathering and its types(5)

Soil hotspots(2)

Characteristics of ectotherms(3)

Non-native species(3)

Generalist species(2)

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plankton and phytoplankton. tertiary consumer. enlist characteristics of community ecology. examples of tertiary successions. population regulation

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Photosynthesis?

Torpor + example?

Species abundance and species evenness?

Biotic growth, intrinsic growth rate, environmental resistance ?

Species + primary concept ?

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Role of light?..

Gud luck 😊😊...

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Long

1-Define specie and 4 basic factors that determine species

2-define

Primary secession

Pioneers community

Serial stages

Short question

Torpor

Demography

Differentiate Winter sleep and hibernation

What factor that we determine specie

My Bt-101paper today..3:00

Define ecology? (2)

Role of wind action in lentic water bodies?(2)

Influence of non-active species on environment or habitate.? (3)

Enlist some organism that inhabit in inland wetland? (3)

Enlist factor that are not dependent on population?(5)

Define atmosphere & its role in ecology?(5)

Bt 101

20 mcq.

Astivation process is.....

Lentic zones are.....

Fjords are present in.....

Electromagnetic radiations observed by human eye is.....

Percentage of sea water on earth is.....

Variety of flora and fauna present in.....

Short questions.

1. Define foundation species. 2 marks

2. Define species hotspot. 2 marks

3. Differentiate between indigenous species and endemic species. 3 marks

4. Define term species and explain it with four primary concept. 3 marks

Long questions.

5. Define succession.. explain autogenic and allogenic succession. 5 marks.

6. How human influences any environment? 5 marks.