WEEK-1

1)Which of these is not a characteristic of fitness?

Fitness is environment-specific.

Fitness is species-specific.

Higher reproductive rate means higher fitness.

Fitness should be measured across several generations.

Accepted Answers:

Higher reproductive rate means higher fitness.

2) Ecology is the scientific study of interactions among organisms and their \_\_\_. (Fill in the blanks)

habitat

niche

environment

population

Accepted Answers:

Environment

3) "Enquiry into plants" is a book written by

Theophrastus

Linnaeus

Malthus

Humboldt

Accepted Answers:

Theophrastus

4) Which of these is not a kind of selection

directional

stochastic

disruptive

stabilising

Accepted Answers:

Stochastic

5) Ecology is the scientific study of \_\_\_\_\_\_\_that determine the distribution and abundance of organisms. (Fill in the blanks)

statics

interactions

dynamics

habitat

Accepted Answers:

Interactions

6) Which of these is not a step in natural selection?

variation

underpopulation

struggle for existence

survival of the fittest

Accepted Answers:

Underpopulation

7) Which of these is not a characteristic of fitness?

Fitness is environment-specific.

Fitness is species-specific.

Fitness works on traits such as size and speed.

Fitness should be measured across several generations.

Accepted Answers:

Fitness works on traits such as size and speed.

8) In the Greek word root of Ecology, Oikos refers to

household

preservation

environment

study

Accepted Answers:

Household

9) In the Greek word root of Ecology, logos refers to

household

preservation

environment

study

Accepted Answers:

Study

10) Who amongst these is considered the father of Biogeography?

Theophrastus

Linnaeus

Malthus

Humboldt

Accepted Answers:

Humboldt

WEEK-2

1) for more diversity, the level of disturbance should be

less

intermediate

more

none of these

Accepted Answers:

Intermediate

2) hierarchy emerges almost inevitably through a wide variety of evolutionary processes, for the simple reason that hierarchical structures are \_\_\_\_\_ (fill in the blank)

perfect

imperfect

stable

unstable

Accepted Answers:

Stable

3) "groups of actually or potentially interbreeding natural populations which are reproductively isolated from other such groups" is a definition of

cells

species

ecosystems

biomes

Accepted Answers:

Species

4) the emergent principle can be stated as

whole= sum of parts

whole < sum of parts

whole > sum of parts

none of these

Accepted Answers:

whole > sum of parts

5) there is more biodiversity in areas with

less competition, less predation

less competition, more predation

more competition, more predation

more competition, less predation

Accepted Answers:

more competition, more predation

6) the mitochondrion is a/ an

sub cellular organelle

cell

tissue

organ

Accepted Answers:

sub cellular organelle

7) "the diversity that exists among different geographies" is

alpha biodiversity

beta biodiversity

gamma biodiversity

delta biodiversity

Accepted Answers:

gamma biodiversity

8) "the diversity that exists with an ecosystem" is

alpha biodiversity

beta biodiversity

gamma biodiversity

delta biodiversity

Accepted Answers:

alpha biodiversity

9) the hierarchical system was given by

simon

watson

hutchinson

Humboldt

Accepted Answers:

Simon

10) the laboratory approach to ecology uses

equation

models

observations

experiments

Accepted Answers:

Experiments

WEEK-3

1) I observe a bird take a tick out of another bird's head and eat it. in the social context, this behaviour is known as

tick hunting

auto grooming

allo grooming

foraging

Accepted Answers:

allo grooming

2) the scientific study of animal behaviour is known as

behaviourism

ecology

ethology

prey- predator dynamics

Accepted Answers:

Ethology

3) trampling of grass due to movement of animals is an example of

mutualism

amensalism

commensalism

protocooperation

Accepted Answers:

amensalism

4) birds on a giraffe is an example of

colony

commensalism

protocooperation

allelopathy

Accepted Answers:

Protocooperation

5) i observe a monkey take a tick out of another monkey's head and eat it. in social context this behaviour would be called

tick hunting

auto grooming

allo grooming

foraging

Accepted Answers:

allo grooming

6) hamilton's rule can be stated as

rB < C

rB > C

rB = C

rB + C = 0

Accepted Answers:

rB > C

7) egrets with buffaloes are an example of

colony

commensalism

protocooperation

allelopathy

Accepted Answers:

Commensalism

8) the interaction between exotic shrubs and trees through the action of seed predators is an example of

infraspecific competition

apparent competition

disguised competition

harmonious competition

Accepted Answers:

apparent competition

9) harmonious interaction occurs where

at least one participant is benefited

at least one participant is unharmed

both participants are benefitted

both participants are unharmed

Accepted Answers:

both participants are unharmed

10) an inventory of behaviours exhibited by an animal during a behaviour exercise is called

ecogram

ethogram

behaviourogram

animalogram

Accepted Answers:

Ethogram

WEEK-4

1) tree --> frugivorous birrds --> hawk represents

upright pyramid of numbers

inverted pyramids of numbers

spindle pyramids of numbers

dumb bell pyramid of numbers

Accepted Answers:

spindle pyramids of numbers

2) if we all became vegetarians, we'll be able to support our large populations. this can be explained through

10% rule

1% rule

trophic cascade

biodiversity

Accepted Answers:

10% rule

3) consider the food chain:

grass --> grasshopper --> frog --> snake --> hawk. as we move up the food chain,

available energy decreases

available energy increases

available energy remains same

available energy is zero everywhere

Accepted Answers:

available energy decreases

4) glacial lakes are typical examples of

eutrophic lakes

hypereutrophic lakes

oligotrophic lakes

mesotrophic lakes

Accepted Answers:

oligotrophic lakes

5) trees --> birds --> parasites --> hyperparasites represents

uprights pyramid of numbers

inverted pyramid of numbers

spindle pyramid of numbers

dumb bell pyramid of numbers

Accepted Answers:

inverted pyramid of numbers

6) consider the food chain:

grass --> grasshopper --> frog --> snake --> hawk. in the food chain

frog is producer

frog is consumer and carnivore

frog is consumer and herbivore

frog is decomposer

Accepted Answers:

frog is consumer and carnivore

7) at the compensation point

photosynthesis = respiration

photosynthesis < respiration

photosynthesis > respiration

photosynthesis = 0

Accepted Answers:

photosynthesis = respiration

8) consider the food chain:

grass --> grasshopper --> frog --> snake --> hawk. in this food chain

more number of hawks than grasshopper can be supported

more number of grasshoppers than hawks can be supported

equal number of hawks than grasshopper can be supported

none of these

Accepted Answers:

more number of grasshoppers than hawks can be supported

9) consider the food chain:

grass --> grasshopper --> frog --> snake --> hawk. in this food chain

hawk is producer

hawk is consumer and carnivore

hawk is consumer and herbivore

hawk is decomposer

Accepted Answers:

hawk is consumer and carnivore

10) net primary productivity is given by

APAR X LUE

APAR + LUE

APAR - LUE

APAR / LUE

Accepted Answers:

APAR X LUE

WEEK-5

1) which of these is not a measure of absolute population density?

total count

pelt count

capture- recapture method

removal method

Accepted Answers:

pelt count

2) the juvenile mortality rate is the annual number of deaths of juveniles per

100 births

1000 births

100 live births

1000 live births

Accepted Answers:

1000 live births

3) \_\_\_\_\_ is how close the measured values are to the correct values

accuracy

precision

bias

variance

Accepted Answers:

Accuracy

4) \_\_\_\_ employs a simple rule of selecting every kth unit starting with a number chosen at random from 1 to k as the random start

simple random sampling

systematic sampling

stratified sampling

multistage sampling

Accepted Answers:

systematic sampling

5) cover board surveys are typically used for sampling

herpetofauna

fishes

large mammals

carnivores

Accepted Answers:

Herpetofauna

6) the minimum replacement level fertility for a population to grow should be greater than

1

2

3

4

Accepted Answers:

2

7) the logistic growth curve, when plotted, appears

I shaped

J shaped

S shaped

O shaped

Accepted Answers:

S shaped

8) pan traps are used for sampling

bees

butterflies

non- pollinator insects

pollinator insects

Accepted Answers:

pollinator insects

9) a sampling procedure such that each possible combination of sampling units out of the population has the same chance of being selected is referred to as

simple random sampling

systematic sampling

stratified sampling

multistage sampling

Accepted Answers:

simple random sampling

10) which of these is true?

physiological longevity > ecological longevity

physiological longevity = ecological longevity

physiological longevity < ecological longevity

a or b

Accepted Answers:

a or b

WEEK 7

1.Scarcity of food is a

chemical factor

demographic factor

push factor

pull factor

Accepted Answers:

push factor

2. Good climate is a

chemical factor

demographic factor

push factor

pull factor

Accepted Answers:

pull factor

3. The movement of individuals away from their place of birth or hatching or seed production into a new habitat or area to survive and reproduce is called

translocation

migration

dispersal

drifting

Accepted Answers:

Dispersal

4. "The geographical distribution of a species will be controlled by that environmental factor for which the organism has the narrowest range of tolerance." This is the statement for

Liebig’s law of the minimum

Liebig’s law of the maximum

Shelford’s law of tolerance

Shelford’s law of intolerance

Accepted Answers:

Shelford’s law of tolerance

5. "Quick movement over large distances, often across unsuitable terrain" is a description of

diffusion

secular dispersal

jump dispersal

drifting

Accepted Answers:

jump dispersal

6. The regular, seasonal movement of animals, often along fixed routes is called

translocation

migration

dispersal

drifting

Accepted Answers:

Migration

7. The movement of lions across the Gir landscape is an example of

diffusion

secular dispersal

jump dispersal

drifting

Accepted Answers:

Diffusion

8. Which of these is not a physical factor of habitat?

soil

moisture

predators

temperature

Accepted Answers:

Predators

9. Transplantation experiments are used to find

potential range

effective range

actual range

economic range

Accepted Answers:

potential range

10. I tried growing vegetables under my teak plantation, but the vegetable plants died out. I should be concerned about

autophagy

allelophagy

autopathy

allelopathy

Accepted Answers:

Allelopathy

WEEK 8

1. captive breeding is an example of

in-situ conservation

ex-situ conservation

in-situ preservation

ex-situ preservation

Accepted Answers:

ex-situ conservation

2. the "subset of physical and biotic environmental factors that permit an animal (or plant) or survive and reproduce" is the definition of

habitat

ecosystem

biome

biosphere

Accepted Answers:

Habitat

3. we prefer those areas for the creation of a conservation reserve where the level of threat is

very high

medium

very low

non existent

Accepted Answers:

Medium

4. which of these is a deterministic factor

environmental variation

forest fire

death rate

diseases

Accepted Answers:

death rate

5. the acronym HIPPO does not include

habitat loss

habitat enhancement

invasive species

human over population

Accepted Answers:

habitat enhancement

6. which of these correctly represents the process of habitat fragmentation and loss

original forest --> dissection --> perforation --> fragmentation --> attrition

original forest --> dissection --> attrition --> fragmentation --> perforation

original forest --> dissection --> perforation --> attrition --> fragmentation

original forest --> dissection --> fragmentation --> perforation --> attrition

Accepted Answers:

original forest --> dissection --> perforation --> fragmentation --> attrition

7. the acronym HIPPO does not include

habitat loss

invasive species

pollination

pollution

Accepted Answers:

Pollination

8. which of these is a stochastic factor

birth rate

death rate

population structures

environmental fluctuations

Accepted Answers:

environmental fluctuations

9. according to Leopold, which of these in not a tool of habitat management

fire

gun

cattle

sickle

Accepted Answers:

Sickle

10. zoo is an example of

in-situ conservation

ex-situ conservation

in-situ preservation

ex-situ preservation

Accepted Answers:

ex-situ conservation

WEEK-9

1.which of these is a preventive check according to malthus?

foresight

vice

misery

flood

Accepted Answers:

Foresight

2. which of these is not a pillar of sustainability

environmental sustainability

economic sustainability

trans- boundary sustainability

social sustainability

Accepted Answers:

trans- boundary sustainability

3. \_\_\_\_ is to identify which potential impacts are relevant to assess (fill n the blank)

screening

scoping

reporting

review

Accepted Answers:

Scoping

4. which of these is a positive check according to malthus?

late marriage

war

celibacy

moral restraint

Accepted Answers:

War

5. which of these is a pillar of sustainability

social sustainability

industrial sustainability

agricultural sustainability

trans- boundary sustainability

Accepted Answers:

social sustainability

6. the demographic transition sees a society move from

high birth rate, low birth rate to low birth rate, low death rate

low birth rate, high death rate to low birth rate, low death rate

high birth rate, high death rate to low birth rate, low death rate

high birth rate, high death rate to low birth rate, high death rate

Accepted Answers:

high birth rate, high death rate to low birth rate, low death rate

7. the book "an essay on the principle of population" was written by

darwin

malthus

spencer

owens

Accepted Answers:

Malthus

8. the quantum of human impacts is given by

I = P X A X T

I = P + A + T

I = P + A - T

I = P - (A + T)

Accepted Answers:

I = P X A X T

9. \_\_\_\_ determines which projects or development require a full or partial impact assessment study (fill in the blank)

screening

scoping

reporting

review

Accepted Answers:

Screening

10. according to malthusian model

population grows in geometric progression, food supply increases in arithmetic progression

population grows in geometric progression, food supply increases in geometric progression

population grows in arithmetic progression, food supply increases in arithmetic progression

population grows in arithmetic progression, food supply increases in geometric progression

Accepted Answers:

population grows in geometric progression, food supply increases in arithmetic progression

WEEK-10

1. mesodebris in the context of plastic debris has fragments of size

>20mm

5-20mm

<5mm

<1mm

Accepted Answers:

5-20mm

2. the government came up with a regulation that incandescent bulbs be replaced by LED bulbs, so that electricity consumption and release of carbon dioxide from power plants is reduced. In the context change, such an action would be called

adaptation

mitigation

deceleration

maladaptation

Accepted Answers:

Mitigation

3. which of these is not a climatic forcing for earth?

changes is plate tectonics

changes in earth's orbit

changes in moon's orbit

change in sun's orbit

Accepted Answers:

changes in moon's orbit

4. which of these is not a principle of ecological restoration

ecological integrity

long-term sustainability

benefits and engages scientists

informed by past and future

Accepted Answers:

benefits and engages scientists

5. "the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences" is a definition for

adaptive response

adaptive capacity

mitigative response

mitigative capacity

Accepted Answers:

adaptive capacity

6. which of these is not a principle of ecological restoration

ecological integrity

short-term sustainability

benefits and engages society

informed by past and future

Accepted Answers:

short-term sustainability

7. macrodebris in context of plastic debris has fragments of size

>20mm

5-20mm

<5mm

<1mm

Accepted Answers:

>20mm

8. because of climate change, Mudumalai tiger reserve is suffering from frequent droughts. the management has built several artificial water holes for animals, and fills them up regularly with tankers. in the context of climate change, such an action would be called

adaptation

mitigation

deceleration

maladaptation

Accepted Answers:

Adaptation

9. "any changes in natural and human systems that inadvertently increase vulnerability to climatic stimuli; an adaptation that does not succeed in reducing vulnerability but increases it instead" is a definition for

adaptation

mitigation

maladaptation

malmitigation

Accepted Answers:

Maladaptation

10. which of these is not a climatic forcing for earth

changes in plate tectonics

changes in earth's orbit

changes in sun's orbit

changes in sun's strength

Accepted Answers:

changes in sun's orbit