



## BIOLOGY

# **NEET & AIIMS**

# **MOCK TEST 4**



1. select the incorrect statement.

A. reproduction is a characteristics of living

organism

B. cellular organisation of the body is the

defining feature of life forms

C. increase in mass and increase in number

of cells are twin characteristics of

growth

D. consciousness is not defining feature of

living organism.

Answer: D

2. read the following statements w.r.t. growth in living organisms. (a).In plants growth by cell division occurs continuously throughout their lifespan. (b) growth is a defining property of living organism. (c) cell division occurs in certain tissues to replace lost cells. (d) increase in body mass is considered as growth. (e) in majority of higher animals and plants and in unicellular organisms, growth and

reproduction are mutually exclusive events.

select the correct option.

A. (a), (b) (c) & (d)

B. (a) (c) (d) & (e)

C. (a), (c) & (d)

D. (b) & (c) only

Answer: C



**3.** read the following statements: statement A: no non living objects exhibit metabolism. statement B: isolated metabolic reactions outside the body of an organism, perform in a test tube is is neither living nor non-living.

A. only statement (A) is correct

B. only statement (B) is correct.

C. both statements are incorrect.

D. both statements are correct.

Answer: D



**4.** how many among the following are defining feature of living beings? ( reproduction, growth, metabolism, cellular organisation, consciousness)

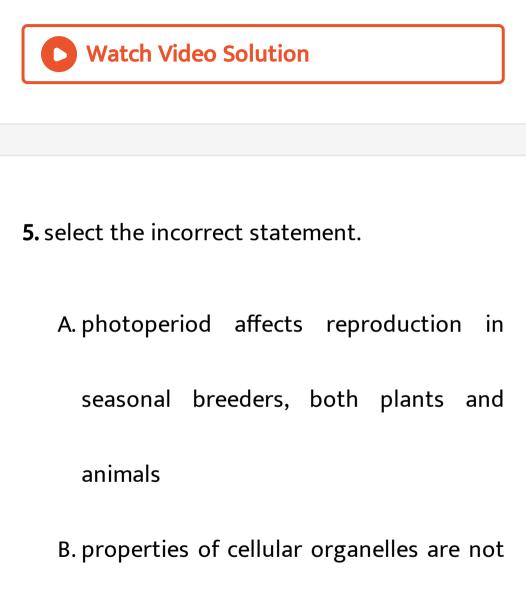
A. 1

B. 2

C. 3

D. 4





present in the molecular constituents of

the organelles.

C. properties of tissue arise as a result of

interaction among the constituent cells

D. living organisms are self replicating and

evolving but not self-regulating

interactive systems capable of

responding to external stimuli

Answer: D

6. nomenclature is is governed by certain universal rules, choose the statement which is contrary to the rules A. biological names are generally in Latin B. name of the author appear before specific epithet C. the scientific name is underlines separately when handwritten D. first word in a biological name represents the genus while the second

component denotes the specific epithet.

Answer: B

Watch Video Solution

**7.** Acacia nilotica var. Indica is scientific name of \_\_\_\_\_.

A. Indian crow

B. Indian Babul

C. cabbage

D. banyan tree

Answer: B

Watch Video Solution

8. match the following: a. ICNB (column I) and
(i) bacteriophage (column II). (b) ICNCP(column
I) and (ii) animals(column II). (c)ICVCN( column
I) and (iii) Vibrio cholerae (column II).
(d)ICZN(column I) and (iv) cultivated plants
(column II)

A. a(iii), b(iv), c(i), d(ii)

B. a(iii), b(ii), c(iv), d(i)

C. a(ii), b(iii), c(i), d(iv)

D. a(iii), b(i), c(iv), d(ii)

Answer: A

Watch Video Solution

**9.** read the following statements: statement A: modern taxonomic studies are based on external and internal structure of organisms along with cell structure, development process an ecological information of organisms. statement B: neo-systematics is best upon morphological characters only.

A. only statement A is incorrect

B. only statement B is incorrect

C. both statements are incorrect

D. both statements are correct

Answer: B

read the following statements: 10. (a) ontogeny is the life history of organisms. (b) classical taxonomy is based on morphological characters. (c) consciousness is is most obvious and technically complicated feature of only higher plants. (d) phylogeny is the evolutionary history of organisms. select the incorrect option

A. (a), (b) & (c)

B. (c) & (d)

C. (c) only

D. All except (d)

#### Answer: C



**11.** branch of science which deals with the study of principles and procedures for grouping of organisms is

A. classification

B. identification

C. taxonomy

D. nomenclature

Answer: C

Watch Video Solution

12. systematics is

A. the science based on characterization,

identification, and nomenclature of

organism

B. the science which deals with diversity of

organisms and their comparative and

evolutionary relationship among them

C. derived from Greek word 'systema'

D. the science which is best on observable

morphological characters.

Answer: B

13. who is known as the father of taxonomy?

A. Theophrastus

- B. William Roxburgh
- C. Aristotle
- D. Carolus Linnaeus

Answer: D



14. the number of species that are known and

described range between

A. 1.7 - 1.8 billion

B. 13 - 14 lakh

C. 13 - 14 million

D. 17 - 18 lakh

Answer: D

15. True regeneration is served in

A. Round Wone

B. Hook worm

C. Planoria

D. Rhizopus

Answer: C



**16.** select the incorrect option.

A. each taxonomic category is referred as

#### unit of classification

B. the characteristic goes on front species

to Kingdom

C. specificity increase from species to

Kingdom

D. species such as a basic and lowest

Answer: C

**17.** how many of categories are there to classify an organism

A. 4

B. 5

C. 7

D. 8

Answer: C

**18.** read the statements w.r.t species. (a) on the basis of taxonomic studies, species is the group of individuals with fundamental similarities. (b) each species have distinct morphological characters than other species. (c) species are group of organisms capable of interbreeding and producing fertile offspring. (d) all species with similarities in morphological features are kept in the same genus and assign to same species epithet

A. (b) only

B. (b) & (d) only

C. (d) only

D. (a) & (d) only

#### Answer: C



### **19.** which of the following is monotypic genus?

A. Homo

B. Solanum

C. Panthers

#### D. Canls

Answer: A

View Text Solution

## 20. Solanaceae and Convolvulaceae belong to

the order

A. carnivora

B. sapindales

C. poales

D. polymoniales

#### Answer: D

Watch Video Solution

**21.** select the incorrect match.

A. Musca(Genus), Muscidae (Family),

Diptera(order)

B. Solanum(Genus), Solanaceae (Family),

Polymoniales(order)

C. Homo(Genus),

Homimidae(Family),

Chordata(order)

D. Triticum(Genus),

Poaceae(Family),

Poales(order)

Answer: C

Watch Video Solution

22. solanum is a group of related

A. Genera

B. species

C. families

D. classes

Answer: B

Watch Video Solution

23. tribe is an intermediate category between

(a) and (b)

A. (a) family (b) subclass,

B. (a) subclass (b) order,

C. (a) subfamily (b) genus,

D. (a) order (b) Sub family

Answer: C

Watch Video Solution

## 24. Which of the following 'suffixes' is used for

"family " in classification ?

**25.** read the following statements. statement A: herbarium serves as quick source of reference in taxonomic studies. statement B: herbarium is associated with conservation of plants.

- A. only statement (A) is correct
- B. only statement (B) is correct
- C. both statements are incorrect
- D. both statements are correct

Answer: A



#### **26.** choose the odd one out w.r.t class

A. Insecta

- B. Dicotyledonae
- C. Mammalia
- D. Angiospermae

#### Answer: D

**27.** The herbarium sheet carry label on the right hand side at lower corner. it does not carry information on

A. name of the collector

B. lifespan of the plant

C. family of the specimen

D. date of collection

Answer: B

**28.** The international size of herbarium sheet

is

A. 
$$41 \times 29$$
 cm<sup>2</sup>  
B.  $16\left(\frac{1}{2}\right) \times 11\left(\frac{1}{2}\right)$  inches<sup>2</sup>  
C.  $29 \times 41$  cm<sup>2</sup>

D. both (1) & (2)

Answer: D

**29.** Who gave the biological concept of species?

A. Lamarck

B. Ernst Mayr

C. Julian Huxley

D. Carolus Linnaeus

#### Answer: B

**30.** choose correct sequence of taxonomic categories in decreasing order

A. phylum-class-order-family-genus

B. Kingdom-division-class-family-order

C. division-class-family-order-genus

D. Kingdom-phylum-order-species-genus

Answer: A

**31.** match the following:

column I (a. Lloyd botanical garden, b. National botanical garden, c. national museum of natural history, d. royal botanical garden, e. Indian botanical garden.) Colum II ( i. Delhi, ii. England, iii. Darjeeling, iv. Howrah, v. Lucknow.)

A. a(i), b(v), c(ii), d(iii), e(iv)

B. a(iv), b(v), c(i), d(ii), e(iii)

C. a(iii), b(v), c(i), d(ii), e(iv)

D. a(v), b(iii), c(i), d(ii), e(iv)

#### Answer: C

Watch Video Solution

## **32.** which of the following statement is incorrect w.r.t. botanical garden?

A. it consists of living plant specimens

B. it is in situ conservation strategy of

plants

C. it is sufficiently large sized tract where

different plants are grown for

educational purposes

D. each plants in botanical garden is level 2

with its scientific name and family

Answer: B

**33.** which of the following solution is used as preservative for keeping plants and animals specimen in a jar?

A. liquid nitrogen

B. formalin

C. acetocarmine

D. safranine

Answer: B

**34.** read the following statements: statement A: keys are based on a pair of constrasting characters known as lead. statement B: keys are analytical in nature

A. both statements (A) and (B) are correct

B. both statements (A) and (B) are

incorrect

C. only statement A is correct

D. only statement B is correct

#### Answer: D



**35.** read the following statements w.r.t. taxonomic aids. (a) monograph contains information of any one taxon. (b) flora provide information for identification of names of various species found in an area. (c) manual gives the actual account of habitat and distribution of various animals of an given area. (d) key contains a set of alternate

characters of various plants only. (e) catalogue includes alphabetical arrangement of species of a particular place. select the correct option.

A. (a), (b) and (e)

B. (a), (c) and (e)

C. (a) and (e) only

D. (b), (c) and (d)

### Answer: C

View Text Solution

**36.** select the correct representation of density of population (N) which can be expressed after a period of time t + 1.

A. 
$$N_{t+1} = N_t + [(B + I) - (D + E)]$$
  
B.  $N_{t+1} = N_t[(B + I) + (D + E)]$   
C.  $N_t = N_{t+1} + [(B + I) - (D + E)]$   
D.  $N_{t+1} = N_t[(B + I) + (D - E)]$ 

#### Answer: A

**37.** which of the following option is true for verhulst Pearl logistic growth?

(A)population growth is decreased by the equation  $drac{N}{dt} = rNigg[rac{K}{K-N}igg].$ 

(B) r' represents biotic potential.

(C) applicable to a population growing in habitat with limited resources.

(D)K represents carrying capacity

A. Only (A)

B. only (B)

C. A, B and D

D. B, C and D

Answer: D

Watch Video Solution

**38.** which of the following age pyramid best depicts the mature human population with growth rate almost equal to zero?









#### Answer: B



# **39.** select the appropriate growth curve of E.coli bacterium depicting exponential growth in culture media in lab conditions









#### Answer: B

View Text Solution

# **40.** select the incorrect statement for exponential growth model.

B. integral form of this growth is is

represented as  $N_1 = N_0 e^n$ 

C. when resources are unlimited in this habitat each species has the ability to realise fully its innate potential to grow

in number

D. population showing exponential growth

is represented by a sigmoid curve.

#### Answer: D



**41.** in a forest there are 40 tigers last year. increase of 8 tigers was observed because of reproduction making the current population to 48. calculate the birth rate for tiger population.

A. 0.833

C. 0.166

D. 6

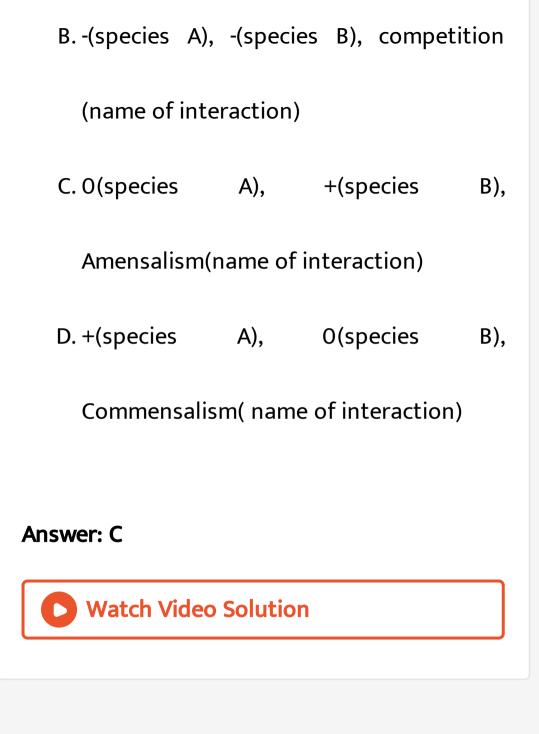
#### Answer: B



**42.** which one is mismatched w.r.t. population interactions.

A. +(species A), +(species B),

Mutualism(name of interaction)



43. nearly \_\_\_\_\_ percent of all insects are

#### phytophagous.

A. 0.1

B. 0.25

C. 0.4

D. 0.65

#### **Answer: B**

**44.** which of the following states that too closely related species competing for the same resources cannot coexist indefinitely and the competitively inferior one will be eventually eliminated?

A. Mac Arthur principle

B. Gause's principle

C. Tilman's principle

D. Allen's rule

#### Answer: B



**45.** Barnacles growing on the back of whale is

an example for :

A. protocoorporation

B. commensalism

C. competition

D. predation

Answer: B

**46.** cryptic appearance of an organism that appears similar to objects found in the surrounding environment to protect itself from predators is called

A. chemical cefence

B. Camouflage

C. antibiosis

D. Both (1) & (2)

Answer: B



47. anthropogenic ecosystem is characterized

by all of the followings, except

A. little cycling of nutrients

B. have little diversity

C. low productivity

D. simple food chain

#### Answer: C





48. select the correct set of steps involved in

the process of decomposition. (a) stratification, (b) catabolism, (c)

fragmentation, (d) mineralization, (e) leaching

A. (a), (b) and (d)

B. (a), (c) and (e)

C. all except (e)

D. all except (a)





### 49. select the correct option w.r.t. producers

A. herbivorous

- B. transducer
- C. secondary carnivorous
- D. all except (2)

Answer: B



## **50.** Primary productivity does not depend upon

A. plant species inhabiting a particular area

B. photosynthetic capacity of plants

C. biomass of parasites

D. availability of nutrients







### 51. all of the following are highly productive

ecosystems except

A. coral reefs

B. sugarcan fields

C. tropical rainforest

D. Deserts

#### Answer: D

52. select the incorrect option

A. sea anemone hand clown fish : Mutualism

B. cuckoo and crow: Brood parasitism

C. Ophyrus and bee : Commensalism

D. Sea anemone hermit crab : Parasitism

Answer: B

**53.** the rate of decomposition increases if detritus is rich in

A. Lignin and chitin

B. nitrogen compounds like protein and

nucleic acid

C. tennis and cellulose

D. chitin and phenotics

Answer: B

**54.** annual NPP of whole biosphere is approximately \_\_\_\_\_ tons (dry weight) of organic matter

A. 170 millions

B. 115 billion

C. 55 billion

D. 265 billion

#### Answer: A

**55.** select incorrect statement w.r.t. Mac Arthur experiment on five closely related species of warblers.

A. they were living together on the same tree

- B. they were able to avoid competition
- C. David unable to promote coexistence
- D. they enhance their rate of Survival by

changing foraging patterns





**56.** which of the following factor inhibit decomposition?

A. low temperature and anaerobiosis

B. warm and moist environment

C. aeration

D. both (2) & (3)





# **57.** What percentages of PAR can be captured by plants ?

A. more than 50%

B. 0.5

C. 20 to 40%

D. 2 to 10%

#### Answer: D



**58.** read the following statements and choose the option which is the set of correct statements.

(a) sun is the source of energy for grazing food chains.

(b) in aquatic ecosystem, DFC is the major conduit of energy flow

(c) some organism of DFC prey to GFC animals.

(d) ecosystem can support unlimited number

of trophic levels.

(e) waves provide stability to the ecosystem

A. b,c and e

B. a, b, c and d

C. a, c and e

D. all except b and c

#### Answer: C

**59.** successional community which is relatively stable and is in equilibrium with the environment referred as

A. seral community

B. Pioneer community

C. climax community

D. transitional community

#### Answer: C

**60.** which one of the following pyramid is generally inverted?

A. pyramid of number in grassland ecosystem

B. pyramid of biomass in a grassland

ecosystem

C. pyramid of number in sea

D. pyramid of biomass in sea





**61.** choose the correct set of statements (A) successful germination of propagules and its establishment in a bare area is called nudation. (B) succession and evolution would have been parallel processes to have occurred over millions of years scenes life started on earth (C) the flow of energy is uni directional from producer to consumer level.

A. A and B

B. only A

C. B and C

D. A and C

Answer: C

Watch Video Solution

62. ecological pyramid does not accommodate

all, except

A. food web

B. insectivorous plants

C. saprophytes

D. herbivores

Answer: D

Watch Video Solution

**63.** select the pyramid which correctly depicts A tree supporting on number of herbivorous birds which are eaten by 1 or 2 hawks of the area (A-tree, B-herbivorous birds, C-Haws )











# **64.** which of the following ecological characteristics undergo change during

succession? (a) Humus content of soil (b) total

biomass (c) number of species (d) temperature

A. all except (a)

B. all except (b)

C. all except (c)

D. all except (d)

Answer: D

**65.** select the correct sequence of stages in xerarch succession.

A. lichens rarr bryophytes rarr shrubs rarr

herbs rarr forest

B. lichensrarr bryophytes rarr herbs rarr

shrubs rarr forest

C. grass rarr bryophytes rarr shrubs rarr

herbs rarr forest

# D. mossrarr grassrarr shrubs rarr herbs

rarr forest

Answer: B

Watch Video Solution

66. standing crop is expressed as

A. the number for biomass of organism

part unit area

B. total amount of nutrients present in soil

at any time

C. total number of primary producer at any

time in an area

D. total amount of energy at any tophic

level at any time

Answer: A

**67.** which of following environmental factors control the rate of release of nutrients from reservoir to atmosphere? A. soil, B. moisture, C.

pH, D. temperature

A. A and D only

B. A, B, C and D

C. B and C only

D. A and B only

# Answer: B





**68.** mark the correct statement regarding services

A. the products of ecosystem processes are named as ecosystem services

B. the value of ecosystem services can be

easily determined on the basis of

function performed

C. out of total cost of various ecosystem

services, the nutrient cycling accounts

for 50%

D. a healthy forest ecosystem cannot purify

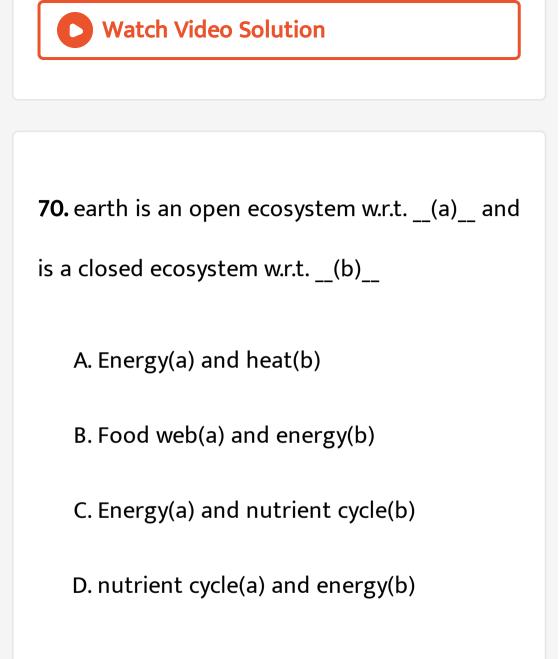
air and water

Answer: A

**69.** statement A: same organisms always occupy only one specific tophic level in a food web. statement B: a species may occupy more than one trophic level in the same ecosystem at the same time

- A. only statement A is correct
- B. only statement B is correct
- C. Both statements A and B are correct
- D. both statements A and B are incorrect

Answer: B



# Answer: C



71. match the following columns and choose the correct option w.r.t. hydrarch succession. a. submerged plant stage (column I) and (i) hydrilla (column II), b. scrub stage (column I), (ii) phytoplanktons ( column II), c. Pioneer community (column I), (iii) juncas(column II), d. Marsh meadow stage (column I), (iv) Salix (column II)

A. a(i), b(iv), c(ii), d(iii)

B. a(i), b(ii), c(iv), d(iii)

C. a(i), b(iii), c(iv), d(ii)

D. a(ii), b(iv), c(i), d(iii)

Answer: A

Watch Video Solution

**72.** According to Robert May, the global species diversity is about:

A. 18 million

B. 7 million

C. 1.5 million

D. 1.7 million

Answer: B

Watch Video Solution

**73.** Arrange the following in order of increasing diversity of birds A) New York B) India C) Columbia D) Greenland

A. Dlt Blt Clt A

B. Alt B lt DltC

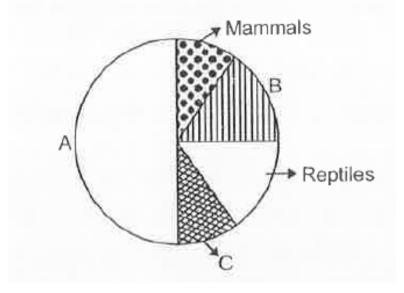
C. DIt Alt BltC

D. Blt Alt Dlt C

Answer: C

Watch Video Solution

**74.** Observe the given pie chart representing biodiversity of different vertebrates. Choose



- A. fishes Birds amphibians
- B. fishes molluscs amphibians
- C. insects Birds fishes
- D. insect crustaceans molluscs

# Answer: A



**75.** On a logarithmic scale the correct representation of species area relationship is represented by the equation

A. 
$$\log S = \log C - Z \log A$$

- $\mathsf{B}.\log S = \log C + Z\log A$
- $\mathsf{C}.\log A = \log C + Z\log S$

 $\mathsf{D}.\log S = \log A + Z\log C$ 



76. Tropics are rich in biodiversity- choose correct option that explain the reason for the given statement A) frequent disturbance such as glaciation has occurred for millions of years in tropics. B) relatively more constant, predictable and less seasonal tropical environment. C) more solar energy received by tropics.

A. A and B

B. B and C

C. A, B and C

D. A and C

**Answer: B** 

Watch Video Solution

**77.** statement A: in India, biosphere reserve ecologically unique and legally protected biodiversity rich regions. Statement B:

biodiversity hotspots have high degree of endemism.

A. only statement A is correct

B. only statement B is correct

C. both statements A and B are correct

D. both statements A and B are in correct

Answer: C

# 78. How many among the following are Ex-situ

and In-situ conservation strategies

respectively.

Sand, Faecal matter, Paper fibres, Nitrates, Calcium, Silt

A. 5,4

B. 4,5

C. 6,3

D. 3,6

#### Answer: A





**79.** Which of the following is a sacred plant?

A. Ocimum

B. azadirachta

C. Mangifera

D. Acacia

Answer: A

**80.** the Earth Summit held on Rio de Janeiro in 1992 was called to

A. discuss method to control pollution

B. discuss sustainable development

C. take appropriate measure for

conservation of biodiversity and

sustainable utilisation of its benefit

D. discuss the impact of deforestation on

ecosystem

# Answer: C



**81.** Read the following statement A) 6th mass extinction species is being caused anthropogenically and is 10 time faster than the rate of natural extinctions. B) passenger pigeon have become extinct due to over Exploitations of humans. C) Norway has lower ecosystem diversity than India. D) more than 50000 varieties of mango occur in India. choose the option with correct sets of

statement

A. A and D

B. A and B

C. B and C

D. C and D

Answer: C

**82.** Exotic species have the maximum harmful impact of island ecosystem because of their

A. small size

B. small number of indigenous species

C. More productivity

D. both 1 and 2

Answer: D

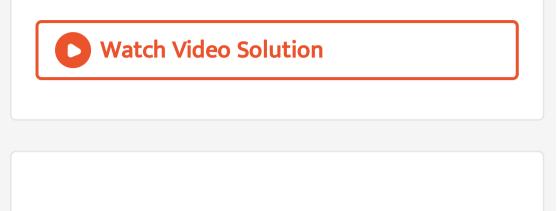
83. According to Rivel popper hypothesis, rivets on the wings represent A. species with larger body size B. key species C. species that drive major ecosystem function D. both (2) & (3)

Answer: D

**84.** mark the incorrect statement regarding biodiversity hotspots

A. these region have high level of species richness and high degree of Endemism B. The 34 biodiversity hotspots covers almost 30% of Farth's land surface C. these hotspots are also region of accelerated Habitat loss D. Western Ghat in India is a biodiversity

hotspot



**85.** in global plant diversity, \_\_\_\_\_ are the taxonomic group which are most species diverse.

A. fungi

B. angiosperms

C. algae

D. gymnosperms



**86.** match the following columns and select the correct option

A. a(ii), b(iii), c(iv), d(i)

B. a(iii), b(iv), c(ii), d(i)

C. a(iii), b(ii), c(iv), d(i)

D. a(i), b(iv), c(ii), d(iii)



**87.** vehicles treated with catalytic converter should use lead free petrol because

A. lead enhances the activity of catalytic

converter

B. lead inactivates the catalyst

C. lead oxidises the hydrocarbons

D. lead attracts pollutants from air

Answer: B

Watch Video Solution

**88.** CNG is better than diesel because (a) it is cheaper (b) burns most efficiently (c) can be shiphoned off

A. All except (a)

B. All except (b)

C. All except (c)

D. only (b)

# Answer: C



89. Snow blindness is caused by

A. UV-A

B. UV-B

C. UV-C

D. all except (2)

# Answer: B

Watch Video Solution

# **90.** how many of the following impurities is/are in the form of colloidal material in domestic sewage?

Hotspots, Seed banks, Aquaria, Sanctuaries, Home gardens, Biosphere reserves, Zoological parks, National parks, Botanical gardens B. two

C. three

D. four

Answer: B

Watch Video Solution

**91.** which of the following secondary pollutants ? (a)  $CO_2$  (b) ozone (c) PAN (d) CO

A. (a) & (b)

B. (b) & (c)

C. (c) &(d)

D. (a) &(d)

Answer: B

Watch Video Solution

**92.** Choose the correct option w. r. t the statement given below. 'rise in temperature is leading to deleterious change in the

environment and resulting in odd climates

changes'

A. ozone hole

B. global warming

C. soil erosion

D. biomagnification

Answer: B

93. Which of the following is not an illeffects

of noise pollution?

A. Sleeplessness

B. Altered breathing pattern

C. skin ageing and cancer

D. impared hearing ability

Answer: C

94. Measure of \_\_\_\_\_, gives the estimate

amount of biodegradable organic matter in sewage water.

A. Biomagnification

B. BOD

C. SPM

D. all except (2)

Answer: B

**95.** Excessive growth of planktonic algae due to presence of large amounts of nutrients in water causing a distinct colouration of water is known as

A. Biomagnification

B. Algal bloom

C. Eutrophication

D. Green muffler

### Answer: B

**96.** Blue-baby syndrome is caused by drinking water contaminated with

A. Carbonates

B. Phosphates

C. Sulphates

D. Nitrates

Answer: D

**97.** In which year the Water (prevention and Control of Pollution) Act was passed by the government of India to safegaurd our water resources?

A. 1974

B. 1981

C. 1987

D. 1994

Answer: A



**98.** Select the mismatched pairs w.r.t. relative contribution of various green house gases to totral global warming: (a) CFCs - 20% (b)  $N_2O$  -6% © Carbon dioxide - 60% (d) Methane - 14%

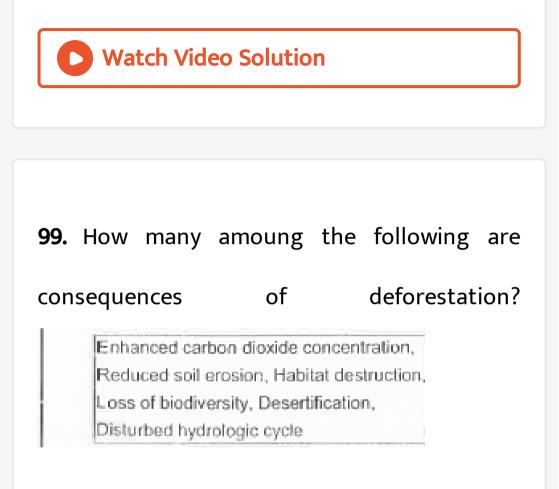
A. (a) and  $\bigcirc$ 

B. (b) & (c)

C. (b) & (d)

D. (a) &(d)

### Answer: D



A. 6

B. 5

C. 4

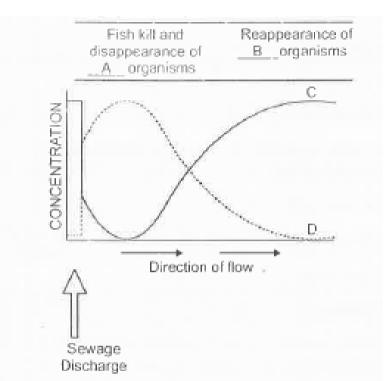
D. 3

#### Answer: B



**100.** The given graph depicts the depicts the efect of sewage discharge on some important characteristics of a river. Select the correct

D



A. Clean water clean water Dissolved

## oxygen BOD

B. Marine water Marine water BOD

**Dissolved** oxygen

C. Clean water Marine water BOD Dissolved

oxygen

D. Marine water Clean water Dissolved

oxygen BOD

Answer: A

View Text Solution

**101.** Read the following statement (A) Biomagnification occurs because a toxic substance accumulated by an organism cannot be metabolismed or excreated and is thus passed on to the most higher trophic levels. (B) FOAM are responsible for the upkeep of the marshland developed in town of Ercala for integrated waste water treatment. (C) E.Coli indicates water pollution by faecal matter. Select the option for the set of all the correct statements.

A. (A), (B) & ©

B. (A) & (B)

C. (B) & ©

# D. (A) &(C)

Answer: A

View Text Solution

**102.** A piece of DNA is subjected to restriction enzyme digestion and the digested sample is electrophoresed. Which statement is correct in the above context? A. Smallest fragment is present near

cathode

B. Largest fragment is present near anode

C. Largest fragment is present in the

middle of the gel

D. Smallest fragment is present near anode

Answer: D

**103.** Which of the following is incorrect regarding gel electrophoresis?

A. Agarose gel is used for separation of

DNA fragments while polyacrylamide

gels ate used for protein separation

B. Separated DNA fragments can be

visualised with or without staining with

ethidium bromide

C. The desired band of DNA containing gene of interest are extracted from gel by a process known as elution D. DNA fragments separate according to their size through sieving effect of agarose gel

**Answer: B** 

104. Read the given four statements and choose the correct option. a. An alien DNA is linked with the "ori" for multiplication b. Normal E.coli cells do not carry antibiotic resistant genes for tetracycline and ampicilin c. Salmonella typhimurium carry gene for resistance against antibiotic d. An antibiotic resistance gene can be used as a selectable marker or cloning site

A. a, b correct but d incorrect

B. a, b and d correct but c incorrect

C. c and d correct but a and b incorrect

D. a, b, c and d are correct

Answer: D



105. Which of the following enzymes cannot be

used for isolation of DNA from Lactobacillus?

A. Lysozyme

**B.** Protease

## C. Cellulase

D. Ribonuclease

#### Answer: C

Watch Video Solution

**106.** Given below are different steps of transformation in a bacterial cell. Arrange them in correct sequence. (i) Heat shock (at 42°C) (ii) Treatment of bacterial cell with divalent cations at 4°C (iii) Bacterial cells are

incubated with recombinant DNA on ice (iv) Recombinant/Transformed bacteria are plated and kept at 37°C

A. (i), (ii), (iii), (iv)

B. (ii), (i), (iii), (iv)

C. (ii), (iv), (i), (iii)

D. (iv), (ii), (iii), (i)

### Answer: B

**107.** Which of the following restriction enzyme site is present in nucleotide sequence of ampicillin resistance gene in pBR322?

A. Pvu I

B. Pvu II

C. Hind III

D. Sal I

Answer: A

**108.** Which given statements are incorrect for bioreactors?

A. Larger biomass is produced in a batch culture system w.r.l continous culture in a bioreator

B. The most commonly used bioreactors are stirred type

C. Stirrer facilitates even mixing of oxygen

and nutrients

D. Bioreactor is a type of fermenter in

which raw materials are biologically

converted into specific products

Answer: A

Watch Video Solution

**109.** From given statements select the incorrect statement. (a) Proteins which are obtained by recombinant DNA technology are called recombinant proteins (b) Downstream

processing include separation and purification of the desired product (c) After purification the product has to be formulated with suitable preservatives (d) Downstream processing and quality control testing do not vary from product to product

A. (a)

B.(b)

C. (c)

D. (d)

Answer: D



**110.** Farmer may obtain cost effective maximum yield from their fields without polluting environment by

A. Argo-chemical based agriculture

- B. Organic agriculture
- C. Genetically engineered crop-based

agriculture

D. Green revolution

### Answer: C



111. Read the given statements about properties of genetically modified plants. They exhibit (a) Enhanced nutritional value of food (b) Decreased efficiency of mineral usage by plants. (c) Increased reliance on chemical pesticides (d) Reduced post harvest losses. Which statement is/are correct? A. a, b and d

- B. Only a
- C. a and d
- D. a, b, c, and d

#### Answer: C

Watch Video Solution

112. Select the mismatch

A. cry I Ac – Helicoverpa

B. cry I Ab – Com borer

C. cry II Ab – Corn borer

D. cry I Ab – Ostrinia

Answer: C

Watch Video Solution

113. What is the reason for death of bollworms

due to Bt toxin protein?

A. Inhibition of nerve impluse

B. Disturbed digestion of food in foregut

C. Creation of pores that cause cell

swelling and lysis in midgut

D. Lysis of cells of hindgut

Answer: C

Watch Video Solution

114. RNAi technology was discovered in

A. Nicotiana tobaccum

- B. Caenorhabditis elegans
- C. Meloidogyne incognita
- D. Bacillus thuringiensis

## Answer: B

Watch Video Solution

**115.** Which of the following nematode infects the roots of tobacco plant and causes a great reduction in yield.

- A. Bacillus thuringiensis
- B. Ascaris lumbricoides
- C. Wuchereria malayi
- D. Meloidogyne incognita

Answer: D