

# **BIOLOGY**

## **BOOKS - NTA MOCK TESTS**

## **NTA NEET SET 22**

Biology

**1.** Seed banks and wildlife safari parks are examples of:

- A. Ex-situ conservation
- B. Offsite conservation
- C. In situ conservation
- D. Cryopreservation

## **Answer: A**



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**2.** Match the following and select the correct answer.

	Column I		Column II
(a)	Centriole	(p)	Infoldings in mitochondria
(b)	Chlorophyll	(q)	Thylakoids
(c)	Cristae	(r)	Nucleic acids
(d)	Ribozymes	(s)	Basal body cilia or flagella

### **Answer: A**



- **3.** In a population of an area, natality was equal to mortality for a given time equal to mortality for a given time period. However, the population density of the population increased, whih of the following may be the reason for the increases?
  - A. Number of immigrants = number of emigrants
  - B. Number of immigrants gt Number of emigrants

C. Number of immigrants It Number of emigrants

D. Cannot be predicted

## **Answer: B**



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**4.** In a plant, red fruit (R) is dominant over yellow fruit (r) and tallness (T) is dominant over shortness (t). If a plant with RRTt genotype is crossed with a plant that is rrtt

- A. 75% will be tall with red fruit
- B. 25% will be tall with red fruit
- C. 50% will be tall with red fruit
- D. All the offspring will be tall with red fruit

## **Answer: C**



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**5.** The colonies of recombinant bacteria appear white in contrast to blue colonies of non-recombinant bacteria because of

- A. Insertional inactivation of alphagalactosidase in non-recombinant bacteria
- B. Insertional inactivation of alphagalactosidase in recombinant bacteria
- C. Insertional inactivation of betagalactosidase in recombinant bacteria.
- D. Insertional inactivation of betagalactosidase in non-recombinant bacteria.

#### **Answer: C**



- **6.** Plant deficient in elemental nitrogen, often show its effect on the biosynthesis of:
  - A. Proteins
  - B. Nucleic acids
  - C. Vitamins
  - D. More than one option is correct

#### **Answer: D**



- **7.** Fructose is abosrbed into the blood through mucosa cells of intestine by process called
  - A. active transport
  - B. facilitated transport
  - C. simple diffusion
  - D. co-transport mechanism

#### **Answer: B**



- 8. Select incorrect pairing.
  - A. Hetersomes-Sex chromosomes
  - B. Lampbrush chromosomes-Diplotene bivalents
  - C. Polytene chromosomes Oocytes of
    - amphibians

D. Heterochromatin - Darkly stained region of chromosome

## **Answer: C**



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**9.** Which of the following is not necessarily a property of all hormones?

A. Chemical messangers

B. Secreted in low amounts

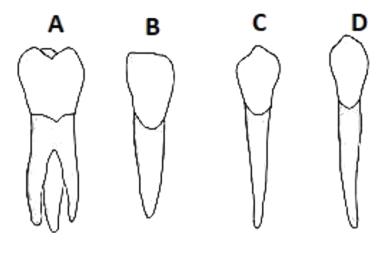
- C. Releasedby ductless glands
- D. Protein in nature

**Answer: D** 



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**10.** Identify teeth labelled as A-D in the given figure.



A.

 $egin{array}{cccccc} A & B & C & D \\ \mbox{Premolars} & \mbox{Incisors} & \mbox{Molars} & \mbox{Canines} \\ \end{array}$ 

В.

 $egin{array}{cccccc} A & B & C & D \\ ext{Molars} & ext{Incisors} & ext{Canines} & ext{Premolars} \\ \end{array}$ 

C.

 D.

 $A \hspace{1cm} B \hspace{1cm} C \hspace{1cm} D$ 

Premolars Incisors Canines Molars

## **Answer: C**



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**11.** The country which hosted the first world earth summit on the conservation of environment is

A. Rio de Janerio, Brazil

- B. Johannesburg, South Africa
- C. Delhi, India
- D. Lima, Peru

### **Answer: A**



- 12. The term 'polyadelphous' is related to
  - A. Gynoecium
  - B. Androecium

C. Corolla

D. Calyx

**Answer: B** 



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**13.** Which of the following statement about pollent is correct?

A. Sporopollenin is responsible for fossilization of pollens

- B. Pollen consumption has been claimed to increase the performance of athletes and race horses.
- C. Pollen grains are not rich in nutrients
- D. More than one option is correct

**Answer: D** 



**14.** A large proportion of oxygen is left unused the human blood even after its uptake by the body tissue. This  $\mathcal{O}_2$ 

A. It raises the  $pco_2$  of blood to 75 mm of Hg

- B. It is enough to keep oxyhaemoglobin
- C. It helps in releasing more  ${\cal O}_2$  to the epithelial tissues.
- D. It acts as a reserve during muscular exercises

#### **Answer: D**



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**15.** A unit composed of a sugar and base linked by  $\beta$  glycosidic bond is known as a

- A. Nucleotide
- B. Nucleoside
- C. Glycoside
- D. Purine

#### **Answer: B**



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## **16.** The collar bone is common name for

A. Sternum

B. Scapula

C. Coracoid

D. Clavicle

**Answer: D** 

**17.** Classification based on chromosome number, structure and behaviour is called

A. Numerical taxonomy

B. Cytotaxonomy

C. Phylogenetic taxonomy

D. Chemotaxonomy

Answer: B



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18. Gross defomities of gential organs occur in

A. Ringworm

**B.** Ascariasis

C. Elephantiasis

D. Leprosy

**Answer: C** 



19. Pinnately compoun	nd leaf is found i	n
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A. Silk cotton

B. Alstonia

C. Neem

D. Mangifera indica

**Answer: C** 



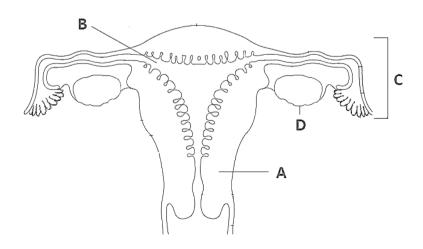
- 20. Gynaecomastia is a characteristic of
  - A. A genetic disorder caused by trisomy of sex chromosome in females
  - B. A genetic disorder caused by trisomy of autosomal chromosome in females
  - C. A genetic disorder caused by trisomy of sex chromosome in males
  - D. A genetic disorder caused by trisomy of autosomal chromosome in males

#### **Answer: C**



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**21.** Refer to the given figure of the female reproductive system and choose the correct option.



A. A- Oviduct, B - Uterus, C - Octduct, D Ovary

B. A - Cervix, B - Uterus, C - ovary, D- Tumor

C. A - Cervix, B - Uterine cavity, C - Ovary, D-Fallopian tube

D. A-Cervix, B- Uterine cavity, C - Fallopian tube, D- Ovary

### **Answer: D**



## 22. Transitional epithelium is found in

- A. Lungs
- B. Liver
- C. Urinary bladder
- D. Stomach

#### **Answer: C**



23.	Law	of	segregatio	n can	be a	associa	ated	with
		•	200.0000.0		~ ~ ~			

- A. Anaphase
- B. Anaphase I
- C. Anaphase II
- D. All of these

### **Answer: B**



**24.** A woman has a haemophilic son and three normal children . Her genotype and that of her husband with respect to this gene would be

- A. XX and  $X^hY$
- $B. X^h X^h$  and  $X^h Y$
- $\mathsf{C}.\,X^hX^h$  and XY
- $D. X^h X$  and XY

#### **Answer: D**



**25.** Euro-II norms stipulate that sulphur should be controlled at

- A. 350 ppm in petrol and 150 ppm in diesel
- B. 350 ppm in diesel and 150 ppm in petrol
- C. 50 ppm in petrol and 250 ppm in diesel
- D. 150 ppm in petrol and 50 ppm in diesel

**Answer: B** 



**26.** Which of the following is correct about the thermal ends of a linear DNA chain?

- A. 5' phosphate end 3' phosphate end
- B. 5' phosphate end and 3' OH end
- C. 5' OH end 3' phosphate end
- D. 5' OH end and 5' OH end

### **Answer: B**



**27.** Which of the following factors will not cause change in gene frequency?

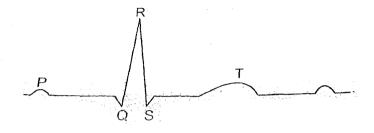
- A. Mutation
- B. gene flow
- C. Large population
- D. Genetic recombination

#### **Answer: C**



28. Given below is the ECG of a normal human.

Which of its components is correctly interpreted below?



- A. Complex QRS-One complete Pulse
- B. Peak T Initiation of total cardiac contraction
- C. Peak P and Peak R together-Systolic and diastolic blood pressures

D. Peak P-Initiation of left atrial contraction only

## Answer: A



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**29.** The common pathway for both aerobic and anaerobic respiration is

A. EMP pathways

B. Kreb's cycle

- C. HMP pathway
- D. Oxidative phosphoylation

**Answer: A** 



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**30.** Select the odd one with respect to long-day plants.

- A. Poppy
- B. Sunflower

C. Wheat

D. Radish

**Answer: B** 



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**31.** Which one of the following animals may occupy more than one trophic level in the same ecosystem at the same time?

A. Sparrow

- B. Mice
- C. Goat
- D. Frog



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**32.** One of the ex-situ conservation methods for endangered species is

A. Wildlife Sanctuaries

- B. Biosphere Reserves
- C. Cryopreservation
- D. National parks



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**33.** As per accepted concept of hormone action, if receptor molecules are removed from target organs, the target organs will

- A. Continue to respond to hormone but in opposite way
- B. Continue to respond to the hormone without any difference
- C. Continue to respond to hormone but will require higher concentration
- D. Not respond to the hormone

## **Answer: D**



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**34.** Which of the following is not a pteridophyte

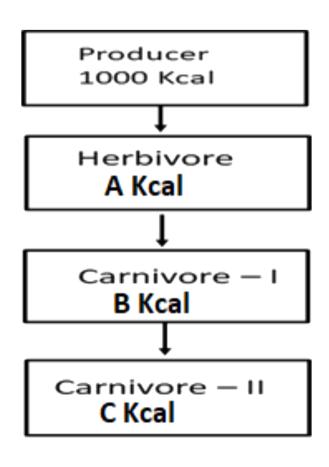
- A. Ginkgo
- B. Selaginella
- C. Polypodium
- D. Azolla

**Answer: A** 



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**35.** Based on a 10% law of enery transerfer, identify values for A, B and C in the figure given below.



A.  $\frac{A}{10} \frac{B}{0.1} \frac{C}{0.01}$ 

B. 
$$100 ext{ } 10 ext{ } 1$$

c.  $A ext{ } B ext{ } C$ 

100 10 0.1

D.  $A ext{ } B ext{ } C$ 

1000 100 10

# **Answer: B**



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**36.** The taxonomic unit 'Phylum' in the classification of animals is equivalent to which hierarchial level in classification of plants?

- A. Class
- B. Order
- C. Division
- D. Family



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**37.** Adenosine diphospate contains

A. One high energy bond

- B. Two high energy bond
- C. three high energy bond
- D. Four high energy bond



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**38.** A tissue is characterized by the presence of thin walls and isodiametric cells that are either closely packed or have intercellular spaces. This tissue is found in

- A. Shoot apex
- B. Wood fibres
- C. Pith of monocot root
- D. Bast fibres



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**39.** How many full turns of the Calvin cycle are required to make one molecule of glucose

- A. Eight
- B. Two
- C. Six
- D. Four



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**40.** Which of the following can be associated with STI?

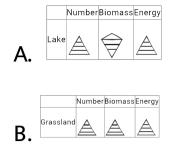
- A. Abortions
- B. Pelvic inflammatory diseases
- C. Ectopic pregnancy
- D. All of these

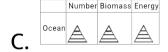
## **Answer: D**



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**41.** Which one is incorrect about ecological pyramids?









**42.** Which enzymes are not used for isolation of the DNA?

I. Cellulose II. Lysozyme III. Dnase IV. Lyase A. I, III B. II, III C. III, IV D. IV, II **Answer: C Watch Video Solution**  **43.** Assume that there are 6 types of the nitrogen bases are available and 37 types of an amino acid are avialiable for protein synthesis. In genetic code, each codon will be made up of how many minimum number of nitrogen bases?

**A.** 3

B. 4

C. 5

D. 2



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**44.** The structure that help some bacteria to attach to rocks and host tissues are

- A. Fimbriae
- **B.** Mesosomes
- C. Holdfast
- D. Rhizoids



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- 45. Identify true statements:
- (A) Cnidarians have blind-sac body plan.
- (B) Digestion in Ctenophora is both intra as well as extracellular
- (C) Agnathans are endoparasites on fishes.
- (D) Icthyophis belongs to Tetrapoda group.

A. A, C and D

- B. A, B and D
- C. B and D
- D. A and D

**Answer: B** 



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