





# **BIOLOGY**

# **BOOKS - TRUEMAN BIOLOGY**

# NEET (UG) - 2018 (Conducted by CBSE on 06-05-2018)



**1.** The similarity of bone structure in the forelimbs of many vertebrates is

an example of

A. Adaptive radiation

B. Convergent evolution

C. Analogy

D. Homology

Answer:



**2.** In which disease does mosquito transmitted pathogen cause chronic inflammation of lymphatic vessels

A. 1)Amoebiasis

- B. 2)Ringworm disease
- C. 3)Ascariasis
- D. 4)Elephantiasis

# Answer:

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3. Conversion of milk to curd improves its nutri-tional value by increasing

the amount of

A. Vitamin E

B.  $Vita \min B_{12}$ 

C. Vitamin A

D. Vitamin D

## Answer:

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4. Which of the following characteristics represent "Inheritance of blood

groups' in humans?

(a) Dominance

(b) Co-dominance

(c). Multiple allele

(d) Incomplete dominance

(e) polygenic inheritance

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

B. (b),(d) and (e)

C. (a),(b) and (c)

D. (b),(c ) and €

Answer:

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5. Among the following sets of examples for divergent evolution, select

the incorrect option

A. Eye of octopus ,bat and man

B. Brain of bat ,man and cheetah

C. Heart of bat ,man and cheetah

D. Forelimbs of man ,bat and cheetah

Answer:

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6. Which of the following is not an autoimmune disease?

A. Vitiligo

B. Alzheimer's disease

C. Rheumatoid arthritis

D. Psoriasis

## Answer:

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7. Match the items given in Column I with those in Column II and select

the correct option given below

	Column-I	Column-II
1.	Glycosuria	i. Accumulation of the acid in joints.
2.	Gout	ii. Mass of crystallised salts within the kidney.
3.	Renal calculi	iii. Inflammation in glomeruli
4.	Glomerular nephritis	iv. Presence of glucose in urine.

$$\begin{array}{ccccc} A.1 \\ iv & i & ii & iii \\ iv & i & ii & iii \\ B.2 \\ ii & iii & i & iv \\ C.3 \\ i & ii & iii & iii \\ D.4 \\ iii & ii & iv & i \end{array}$$

# Answer:



8. Match the items given in Column I with those in Column II and select

the correct option below

	Column I		Column II
	(Function)		(Part of Excretory System)
(a)	Urine storage	(i)	Henle's loop
(b)	Concentration of urine	(ii)	Ureter
(c)	Transport of Urine	(iii)	Urinary Bladder

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9. The contraceptive 'SAHELI'

A. Is a post -coital contraceptive

B. Is an IUD

C. Increases the concentration of estrogen and prevents ovulation in

females .

D. Blocks estrogen receptors in the uterus ,preventing eggs from

getting implanted .

#### Answer:

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10. The amnion of mammalian embryo is derived from

- A. Ectoderm and endoderm
- B. mesoderm and trophoblast
- C. Endoderm and mesoderm
- D. Ectoderm and mesoderm

# Answer:

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11. The difference between spermiogenesis and spermiation is

A. In spermiogenesis spermatozoa are formed ,while in spermiation

spermatozoa are released from sertoli cells into the cavity of

seminiferous tubules .

- B. In spermiogenesis spermatozoa from sertoli cells are released into
  - the cavity of seminiferous tubules ,while in spermiation spermatozoa are formed .
- C. In spermiogenesis spermatozoa are formed ,while in spermiation

spermatids are formed.

D. In spermiogenesis spermatids are formed, while in spermiation

spermatozoa are formed .

### Answer:

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12. Hormones secreted by the placenta to maintain pregnancy are

A. hCG, progesterones , estrogens, glucocorticoids

B. hCG,HPL,progesterones ,estrogens

C. HCG,HPL,estrogen ,relaxin ,oxytocin

D. HCG,HPL,progesterones prolactin

## Answer:



13. Which of the following gastric cells indirectly help in erythropoiesis ?

A. Parietal cells

B. Goblet cells

C. Mucous cells

D. Chief cells

#### Answer:



14. Match the items given in Column I with those in Column II and select

the correct option given below

	Column I		Column II
(A)	Fibrinogen	(i)	Osmotic balance
(B)	Globulin	(ii)	Blood clotting
(C)	Albumin	(iii)	Defence mechanism

^	$\mathbf{a}$	b	с
А.	ii	iii	i
Б	a	b	с
Β.	i	iii	ii
		_	
c	$\mathbf{a}$	b	С
C.	a i	b ii	c iii
C.			

## Answer:

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15. Calcium is important in skeletal muscle contraction because it

A. Prevents the formation of bonds between the myosin cross bridges

and the actin filament.

B. Dettaches the myosin head from the actin filament

C. Activates the myosin ATPase by binding to it .

D. Binds to troponin to remove the masking of active sites on actin for

myosin.

# Answer:

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16. Which of the following is an occupational respiratiory disorder?

A. Emphysema

B. Botulism

C. Silicosis

D. Anthracis

## Answer:

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17. Match the items given in Column-I with those in Column II and select

the correct option given below :

Column I	Column II
(a)Eutrophication	$(i) { m UV} ext{-B}  ext{ radiation}$
(B)Sanitary landfill	(ii) Deforestation
$(c) { m Snow} \ { m blindness}$	(iii)Nutrient enrichment
(d)Jhum cultivation	$(iv) { m Waste  disposal}$

^	a	b	c iv	d
А.	i	ii	iv	iii
Б	a	b	c i	$\mathbf{d}$
Б.	iii	iv	i	ii
c	a	b	c iv	d
Ċ.				
	1	111	iv	ii
D.				

#### Answer:

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18. Which one of the following population interactions is widely used in

medical science for the production of antibiotics ?

A. Amensalism

B. Parasitism

C. Mutualism

D. Commensalism

#### Answer:

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# 19. Which part of poppy plant is used to obtain the drug 'Smack'?

A. Leaves

B. Roots

C. Latex

D. Flowers

#### Answer:

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- 20. In a growing population of a country. `
  - A. Pre-reproductive individuals are less than the reproductive individuals .
  - B. Reproductive and Pre-reproductive individuals are equal in number.
  - C. Reproductive individuals are less than the post-reproductive individuals.
  - D. Pre-reproductive individuals are more than the reproductive individuals.

### Answer:



21. All of the following are included in 'Ex-situ conservation' except

A. Seed banks

- **B.** Botanical gardens
- C. Sacred groves
- D. Wildlife safari parks

## Answer:

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22. AGGTATCGCAT is a sequence from the coding strand of a gene. What

will be' the corresponding sequence of the transcribed mRNA?

A. UCCAUAGCGUA

B. ACCUAUGCGAU

C. UGGTUTCGCCAT

D. AGGUAUCGCAU

Answer:



23. A woman has an X-linked condition on one of her X chromosomes.

This chromosomes can be inherited by

- A. Both sons and daughters
- B. Only grandchildren
- C. Only sons
- D. Only daughters

## Answer:

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24. Match the items given in Coulmn I with those Coulmn II and select the

correct option given below

- $\operatorname{Column} I$
- (a) Proliferative phase (i)
- (b) secretory phase (ii)
- (c) Menstruation

- $\operatorname{Column} \operatorname{II}$
- Breakdown of endometerial lining
- ) Follicular phase
- (*iii*) Luteal phase
- b с  $\mathbf{a}$ A. i ii iii b с  $\mathbf{a}$ Β. ii iii i b с  $\mathbf{a}$ C. ii iii i с b  $\mathbf{a}$ D. iii i ii

## Answer:

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25. All of the following are part of an operon except

A. A promoter

B. An enhancer

C. Structural genes

D. An operator

# Answer:

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26. According to Hugo de Vries, the mechanism of evolution is

A. Minor mutations

**B.** Phenotypic variations

C. Saltation

D. Multiple step mutations

### Answer:

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27. Which of the following option correctly reprsetns the lung conditonn

sin asthma and emphysema respectively ?

A. Decreased respiratory surface , inflammation of bronchioles

B. Increased respiratory surface, inflammation of bronchioles

C. Increased number of bronchioles, increased respiratory surface

D. Inflammation of bronchioles, decreased respiratory surface .

#### Answer:

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28. Match the items given in Column I with those in Column II and select

# the correct option given below

Column I Column II

- A. Tricuspid valve (i) Between left atrium and left ventricle
- B. Bicuspid valve (ii) Between right ventricle and pulmonary artery
- C. Semilunar (iii) Between right atrium and right ventricle
  - b  $\mathbf{c}$  $\mathbf{a}$ A. ii i iii b c  $\mathbf{a}$ Β. ii iii b с  $\mathbf{a}$ C. ii iii

D. a b c iii i ii

## Answer:



29. Match the items given in Column I with those in Column II and select

# the correct option given below :

Column I

- (a) Tidal volume
- (b) Inspiratory Reserve volume
- (c) Expiratory Reserve volume
- (d) Residual volume
  - A. a b c d iv iii ii i B. i iv ii iii C. iii i iv ii D. iii ii i iv

# Column II

- (i) = 2500-3000 mL
- (ii) 1100-1200 mL
- (iii) 500- 550 mL
- (iv) 1000-1100mL

### Answer:

30. Which of the following is an amino acid derived hormone ?

A. Estriol

**B. Estradiol** 

C. Ecdysone

D. Epinephrine

## Answer:

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31. Which of the following structures or regions is incorrectly paired with

its function.

A. Corpus callosum : band of fibers connecting left and right cerebral

hemispheres .

B. Hypothalamus : production of releasing hormones and regulation

of temperature , hunger and thirst .

C. Limbic system : consists of fibre tracts that interconnect different

regions of brain , controls movement.

D. Medulla oblongata : controls respiration and cardiovascular reflexes

## Answer:

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**32.** Which of the following hormones can play a significant role in osteoporesis

A. Parathyroid hormone and prolactin

- B. Estrogen and parathyroid hormone
- C. Progesterone and Aldosterone

D. Aldosterone and prolactin

## Answer:



33. The transparent lens in the human eye is held in its place by

A. Smooth muscles attached to the ciliary body

B. Smooth muscles attached to the iris

C. Ligaments attached to the iris

D. Ligaments attached to the ciliary body

### Answer:



34. Which of the following terms descibe humans dentition ?

- A. Pleurodont ,diphyodont ,heterodont
- B. Pleurodont ,monophyodont ,homodont
- C. Thecodont ,diphyodont ,heterodont
- D. Thecodont ,diphyodont ,homodont

## Answer:



**35.** Which of the following events does not occur in rough endoplasmic reticulum,

- A. Phospholipid synthesis
- B. Cleavage of signal peptide
- C. Protein glycosylation
- D. Protein folding

### Answer:

**36.** Select the incorrect match.

A. 1)Polytene - Oocytes of chromosomes amphibians

B. 2)Submetacentric -L -shaped chromosomes chromosomes

C. 3)Allosomes -sex chromosomes

D. 4)Lampbrush -Diplotene bivalents

# Answer:

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37. Nissl bodies are mainly composed of

A. Free ribosomes and RER

B. Nucleic acids and SER

C. DNA and RNA

D. Proteins and lipids

## Answer:



**38.** Many ribosomes may associate with a single mRNA to form multiple copies of a polypeptide simultaneously. Such strings of ribosomes are termed as

A. Nucleosome

B. plastidome

C. Polyhedral bodies

D. Polysome

## Answer:

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**39.** Which of these statements is incorrect.

A. Oxidative phosphorylation takes place in outer mitochondrial membrane .

B. Glycolysis operates as long as it is supplied with NAD that can pick

up hydrogen atoms .

C. Glycolysis occurs in cytosol.

D. Enzymes of TCA cycle are present in mitochondrial matrix.

### Answer:

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**40.** Identify the vertebrate group of animals characterized by crop and gizzard in its digestive system

A. Osteichthyes

B. Aves

C. Reptilia

D. Amphibia

Answer:

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41. Ciliates differ from all other protozoans in

A. Having two types of nuclei

B. Using pseudopodia for capturing prey

C. Having a contractile vacuole for removing excess water

D. Using flagella for locomotion

Answer:

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42. Which of the following animals does not undergo metamorphosis?

A. Starfish

B. Moth

C. Tunicate

D. Earthworm

## Answer:

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43. Which of the following features is used to identify a male cockroach

from a female cockroach?

A. Presence of anal cerci

B. Forewings with darker tegmine

C. Presence of caudal styles

D. Presence of a boat shaped sternum on the 9th abdominal segment

# Answer:

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44. Which of the following organisms are known as chief producers in the

oceans?

A. Euglenoids

B. Cyanobacteria

C. Diatoms

D. Dinoflagellates

### Answer:

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**45.** Which one of these animals is not a homeotherm ?

A. Psittacula

B. Camelus

C. Chelone

D. Macropus

### Answer:

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46. Which of the following pairs is wrongly matched?

A. T.H morgan :Linkage

B. XO type sex determination : Grasshopper

C. ABO blood grouping : CO - dominance

D. Starch synthesis in pea : Multiple alleles

### Answer:

47. Which of the following flowers only once in its life-time

A. Papaya

B. Mango

C. Jackfruit

D. Bamboo species

## Answer:

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48. Select the correct match :

A. Francois Jacob and Jacques Monod: Lac operon

B. Matthew Meselson and F. Stahl: Pisum sativum

C. Alfred Hershey and Martha Chase: TMV

D. Alec Jeffreys : Streptococcus pneumoniae

## Answer:



**49.** Select the correct statement:

A. Transduction was discovered by S. Altman

B. Splicesomes take part in translation

C. Punnett square was developed by a British scientist .

D. Franklin Stahl coined the term 'linkage'

# Answer:



**50.** Which of the following has proved helpful in preserving pollen as fossils ?

A. Sporopollenin

B. Oil content

C. Cellulosic intine

D. Pollenkitt

# Answer:

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51. Offsets are produced by

A. Parthenogenesis

B. Parthenocarpy

C. Mitotic divisions

D. Meiotic divisions

# Answer:

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52. The experimental proof for semi-conservative replication of DNA was

first shown in a

A. 1)Virus

B. 2)Plant

C. 3)Bacterium

D. 4)Fungus

Answer:

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53. Winged pollen grains are present in

A. Pinus

B. Mango

C. Cycas

D. Mustard

### Answer:

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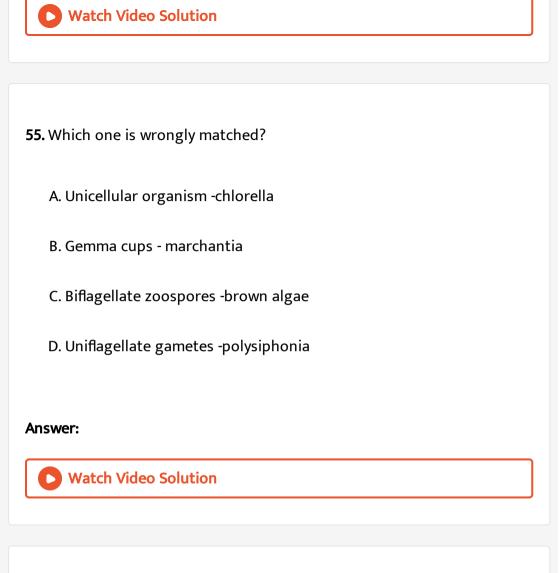
**54.** After karyogamy followed by meiosis, spores are produced exogenously in

A. Saccharomyces

**B.** Agaricus

C. Alternaria

D. Neurospora



**56.** Match the items given in Column I with those in Column II and select the correct option given below :

Column I	Column II
(Function)	(Part of Excretory
<ul> <li>(a) Ultrafiltration</li> <li>(b) Concentration of urine</li> <li>(c) Transport of urine</li> <li>(d) Storage of urine</li> </ul>	System) (i) Henle's loop

A.	(a) iii	(b) iv	(c)	(d)
	iii	iv	i	ii
В.	(a) ii	(b)iv	(c)	(d)
	ii	iv	iii	i
C.	(a) iii	(b) ii	(c)	(d)
	iii	ii	i	iv
D.	(a) i	(b)	(c)	(d)
	i	iv	iii	ii

## Answer:

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57. In which of the following forms is iron absorbed by plants?

A. Both ferric and ferrous

B. Free element

C. Ferrous

D. Ferric

Answer:

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**58.** Which one of the following plants shows a very close relationship with a species of moth, where none of the two can complete its life cycle without the other ?

A. Viola

B. Banana

C. Yucca

D. Hydrilla



59. Oxygen is not produced during photosynthesis by

A. Chara

B. Cycas

C. Nostoc

D. Green sulphur bacteria

# Answer:

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60. Which of the following elements is responsible for maintaining turgor

in cells?

A. Calcium

**B.** Potassium

C. Sodium

D. Mangnesium

Answer:

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**61.** What is the role  $NAD^+$  in cellular respiration ?

A. It is the final electron acceptor for anaerobic respiration .

B. It is a nucleotide source for ATP synthesis

C. It functions as an electron carrier .

D. It functions as an enzyme

Answer:

# 62. Double fertilization is

- A. Syngamy and triple fusion
- B. Fusion of two male gamete with one egg
- C. fusion of one male gamete with two polar nuclei
- D. Fusion of two male gamete of a pollen tube with two different eggs

### Answer:

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63. Pollen grains can be stored for several years in liquid nitrogen having

a temperature of

- A.  $-160^{\,\circ}\,C$
- $\mathrm{B.}-196^{\,\circ}\,C$
- ${
  m C.}-80^{\,\circ}\,C$

D.  $-120^{\circ}C$ 

## Answer:



**64.** What type of ecological pyramid would obtained with the following

data?

Secondary consumer : 120 g

Primary consumer : 60 g

Primary producer : 10 g

A. Upright pyramid of biomass

B. Upright pyramid of numbers

C. Pyramid of energy

D. Inverted pyramid of biomass



65. Natality refers to

A. Number of individuals entering a habitat

B. Birth rate

C. Death rate

D.

Answer:

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66. Which of the following is a secondary pollutant ?

A.  $O_3$ 

 $\mathsf{B.}\,SO_2$ 

 $\mathsf{C}.CO_2$ 

# Answer:



**67.** In stratosphere , which of the following element acts as a catalyst in degradation of ozone an release of molecular oxygen ?

A. Oxygen

B. Fe

C. Cl

D. Carbon

### Answer:

# 68. Niche is

A. The functional role played by the organism where it lives

B. The range of temperature that the organism needs to live

C. The physical space where an organism lives

D. All the biological factors in the organism environment .

### Answer:

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69. World Ozone Day is celebrated on

A. 22nd april

B. 16th september

C. 21st april

D. 5th june

# Answer:

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70. Which of the following statements is correct ?

A. 1)Stems are usually unbranched in both cycas and cedrus .

B. 2)Horsetails are gymnosperms .

C. 3)Selaginella is heterosporous ,while salvinia is homosporous.

D. 4)Ovules are not enclosed by ovary wall in gymnosperms.

### Answer:

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71. Secondary xylem and phloem in dicot stem are produced by

A. Axillary meristems

B. Phellogen

C. Vascular cambium

D. Apical meristems

## Answer:

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72. Sweet potato is a modified

A. Rhizome

B. Tap root

C. Adventitious root

D. Stem

### Answer:

# 73. Pneumatophores occur in

- A. 1)Submerged hydrophytes
- B. 2)Carnivorous plants
- C. 3)Free -floating hydrophytes
- D. 4)Halophytes

# Answer:

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- 74. Select the wrong statement
  - A. Mitochondria are powerhouse of the cell in all kingdoms except

monera .

- B. Pseudopodia are locomotory and feeding structutes in sporozoans .
- C. Mushrooms belong to basidiomycetes .

D. Cell wall is present in members of fungi and plantae.

### Answer:



75. casparian strips are present in the of the root.

A. Endodermis

B. Cortex

C. Pericycle

D. Epidermis

#### Answer:

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76. Plants having little or no secondary growth are

A. Cycads

**B.** Conifers

C. Deciduous angiosperms

D. Grasses

### Answer:

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77. A 'new' variety of rice was patented by a foreign company, though such

varieties have been present in India for a long time. This is related to

A. Basmati

B. Lerma rojo

C. Sharbati sonora

D. Co- 667

78. Which of the following is commolnly used as a vector for introducing a

DNA fragement in human lymhocytes?

A. 1)pBR322

B. 2) $\lambda$  phage

C. 3)Ti plasmid

D. 4)Retrovirus

### Answer:

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**79.** Use of bioresources by multinationals companies and organisation without authorisation from the concerned country and its people is called

A. Bioexploitation

**B. Biodegradation** 

C. Biopiracy

D. Bio- infringement

### Answer:

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80. Select the correct match

A. G.mendel -Transformation

B. T.H. morgan -Transduction

C.  $F_2$ \*Recessive - Dihybrid cross parent

D. Ribozyme - nucleic acid



81. The correct order of steps in polymerase chain Reaction (PCR) is

A. Denaturation , annealing , extension

B. Denaturation, extension, annealing

C. Annealing, Extension ,Denaturation

D. Extension ,Denaturation, Annealing

### Answer:

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**82.** In India organization responsible for assessing the safety of introducing genetically modified organisms for public use is

A. Genetic Engineering Appraisal Committee (GEAC)

B. Research Committee on Genetic Manipulation (RCGM)

C. Council for scientific and Industrial Research (CSIR)

D. Indian Council of Medical Research (ICMR)

## Answer:

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**83.** The stage during which separation of the paired homologous chromosomes begin is

A. Zygotene

B. Diakinesis

C. Diplotene

D. Pachytene

### Answer:

84. The Golgi complex participates in

A. Activation of amino acid

B. Respiration in bacteria

C. Formation of secretory vesicles

D. Fatty acid breakdown

### Answer:

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85. Stomatal movement is not affected by

A.  $CO_2$  concentration

B.  $o_2$  concentration

C. Light

D. Temperature

# Answer:

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86. The two functional groups characteristic of sugars are

- A. Carbonyl and hydroxyl
- B. Carbonyl and phosphate
- C. Carbonyl and methyl
- D. Hydroxyl and methyl

### Answer:

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**87.** Which of the following is not a product of light reaction of phtosynthesis

A. Oxygen

B. NADPH

C. NADH

D. ATP

### Answer:

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88. Stomata in grass leaf are

A. Barrel shaped

B. Rectangular

C. Kidney shaped

D. Dumb -bell shaped



89. Which of the following is true for nucleolus ?

A. It is a site for active ribosomal RNA synthesis .

B. It takes part in spindle formation .

C. It is a membrane -bound structure .

D. Larger nucleoli are present in dividing cells .

# Answer:

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90. Which among the following is not a prokaryote?

A. oscillatoria

B. nostoc

C. Mycobacterium

D. Saccharomyces

# Answer: