

Sharath Gore

NEET mock test 1 (biology) 2022-23

Time : 90 Min

Bio : Full Portion Paper

Marks : 400

01) Statement 1 : The sex organs in the bryophytes are jacketed.

Statement 2 : Bryophytes are land plants.

- A) Both the statement 1 and statement 2 are true but the statement 2 is not a correct explanation of the statement 1
B) Both the statement 1 and the statement 2 are true and the statement 2 is a correct explanation of the statement 1
C) The statement 1 is true but the statement 2 is false
D) Both the statement 1 and statement 2 are false

02) Find out a, b, c, and d:

RNA \xrightarrow{a} DNA \xrightarrow{b} DNA \xrightarrow{c} mRNA \xrightarrow{d} Polypeptide

- A) a = reverse transcription, b = Translation, c = Transcription, d = Replication
B) a = Replication, b = Transcription, c = Translation, d = Transduction
C) a = Replication, b = Transformation, c = Transcription, d = Translation
D) a = Reverse transcription b = Replication, c = Transcription, d = Translation

03) Disease caused by deficiency of iodine is

- A) Goitre
B) Myxedema
C) Tetany
D) Cretinism

04) In _____ processes CO_2 is not released.

- A) aerobic respiration in animals
B) aerobic respiration in plants
C) alcoholic fermentation
D) lactate fermentation

05) If a man Rh^+ marries a lady Rh^- , then

- A) First child will survive
B) First child will die
C) No child will be born
D) None of these

06) 'Key' is a taxonomical aid used for the identification of organisms. Each statement in key is known as a_____.

- A) lead
B) couplet
C) both (a) and (b)
D) none of these

07) Non-motile male gametes are formed in

- A) Pinus
B) Fern
C) Selaginella
D) Funaria

08) High temperature in malaria occurs after completion of

- A) Erythrocytic cycle
B) Exo-erythrocytic cycle
C) Gametogony
D) Pre-erythrocytic cycle

09) A child of O-group has B-group father. The genotype of father will be (1992)

- A) I^0I^0
B) I^BI^B
C) I^AI^B
D) I^BI^0

10) Selaginella has the character of evolutionary importance. That character is

- A) Strobilus
B) Heterospory
C) Seed
D) Ligule

11) What is most effective way to conserve plant diversity of an area?

- A) Botanical garden
B) Tissue culture
C) Biosphere reserves
D) Seed banks

12) Polluted water can be purified by using

- A) Micro-organisms
B) Pesticides
C) Algae
D) Fishes

13) Have capacity of absorbing water, used to replace cotton and used as a fuel is

- A) Sphagnum
B) Marchantia
C) Riccia
D) Funaria

14) Match the following

- | | |
|---|-----------------------------------|
| A. Reflex action | 1. Reflex action |
| B. Multipolar | 2. Neuron |
| C. Na^+ and K^+ ions | 3. Parasympathetic nervous system |
| D. Increases secretion of saliva and digestive juices | 4. Involuntary action |
| E. Knee jerk | 5. Active transport |

The correct pairing sequence is

- A) 4, 2, 5, 3, 1
B) 2, 4, 3, 5, 1
C) 1, 4, 3, 5, 2
D) 2, 3, 5, 1, 4

15) The testes in humans are situated outside the abdominal cavity inside a pouch called scrotum. What is the purpose?

- A) For maintaining the scrotal temperature lower than the internal body temperature
B) For escaping any possible compression by the

visceral organs

C) For providing a secondary sexual feature for exhibiting the male sex

D) For providing more space for the growth of epididymis

16) What are the 'cell of Rauber'?

A) Inner cell mass of blastocoel

B) Secretory cells of endometrium in uterus

C) Outer cells of trophoblast in contact with uterine wall

D) cells of trophoblast, in contact with inner cell mass of blastocyst

17) Most fatal malaria is caused by

A) plasmodium vivax

B) plasmodium falciparum

C) plasmodium ovale

D) plasmodium malariae

18) Identify the disease depicts in following picture.



A) Myxoedema

B) Acromegaly

C) Simple goiter

D) Cretinism

19) Statement 1 : Balanoglossus is often considered as "acorn worms".

Statement 2 : The word 'acorn worm' has no meaning.

A) Both the statement 1 and the statement 2 are true and the statement 2 is a correct explanation of the statement 1

B) Both the statement 1 and statement 2 are true but the statement 2 is not a correct explanation of the statement 1

C) The statement 1 is true but the statement 2 is false

D) Both the statement 1 and statement 2 are false

20) In the terrestrial habitat which of the following factors affect temperature and rainfall conditions

A) Transformation

B) Trans location

C) Thermo-denaturation

D) Transpiration

21) Statement 1 : Ootheca is formed in female Cockroach by the group of fertile eggs.

Statement 2 : Nymph of Cockroach grows with adult by undergoing moulting process several times.

A) Both the statement 1 and the statement 2 are true and the statement 2 is a correct explanation of the statement 1

B) Both the statement 1 and the statement 2 are true but the statement 2 is not a correct explanation of the statement 1

C) The statement 1 is true but the statement 2 is false

D) Both the statement 1 and statement 2 are false

22) _____ is not an accessory glands in male reproductive system.

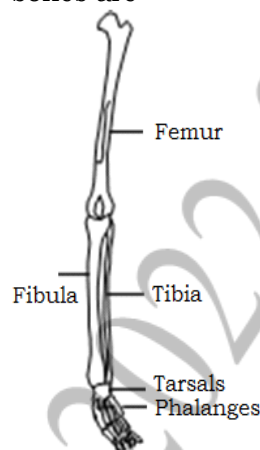
A) Seminal vesicle

B) Prostate gland

C) Bartholin's gland

D) Cowper's gland

23) Given below is a diagram of the left human hindlimb as seen from front. It has certain mistakes in labeling. Two of the wrongly labelled bones are



A) Femur and fibula

B) Tibia and tarsals

C) Fibula and phalanges

D) Tarsals and femur

24) Organize the following in ascending order of Linnaean hierarchy.

A) Kingdom-Family-Genus-Species-Class-Phylum-Order

B) Kingdom-Phylum-Class-Order-Family-Genus-Species

C) Kingdom-Order-Species-Genus-Class-Family-Phylum

D) Species-Genus-Family-Order-Class-Phylum-Kingdom

25) _____ are not ureotelic.

A) Terrestrial amphibians

B) Mammals

C) Aquatic insects

D) None of above

26) The use of _____ is the most convenient way for easy identification of plants and animals by applying diagnostic features.

A) herbaria

B) botanical gardens

C) museums

D) taxonomic keys

27) A certain road accident patient with unknown blood group needs immediate blood transfusion. His one doctor friend at once offers his blood. The blood group of the donor is

A) blood group AB

B) blood group B

- C) blood group O
D) blood group A

28) Match the following with correct combination

(a)	Hyaluronidase	(i)	Acrosomal reaction
(b)	Corpus luteum	(ii)	Morphogenetic movements
(c)	Gastrulation	(iii)	Progesterone
(d)	Capacitation	(iv)	Mammary gland
(e)	Colostrum	(v)	Sperm activation

- A) (a)-(v), (b)-(ii), (c)-(iv), (d)-(i), (e)-(iii)
B) (a)-(i), (b)-(iii), (c)-(ii), (d)-(v), (e)-(iv)
C) (a)-(iv), (b)-(ii), (c)-(v), (d)-(iii), (e)-(i)
D) (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv), (e)-(v)

29) Which are an important muscle proteins that help in movement?

- A) Tropomyosin
B) Actin and myosin
C) Troponin
D) All of these

30) Correct Statement is

- A) Archaeopteryx is connecting link between aves and mammals
B) Duck-billed platypus is connecting link between mammals and reptiles
C) Hydra is connecting link between protozoa and metazoa
D) Sea horse is connecting link between horse and fish

31) In light reaction of photosynthesis, chlorophyll is subjected to

- A) Neutralization
B) Permanent reduction
C) Oxidation and reduction
D) Destruction

32) A narrow layer of thin walled cells found between phloem/bark and wood of a dicot is (1993)

- A) cork cambium
B) vascular cambium
C) endodermis
D) pericycle

33) A contraceptive method in which the couples avoid or abstain from coitus from day 10 to 17 of the menstrual cycle when ovulation could be expected, is known as

- A) periodic abstinence
B) coitus interruptus
C) multiloal
D) lactational amenorrhea

34) Identify a wrong statement from the following.

- A) Eutrophication is a natural phenomenon in freshwater bodies
B) Ozone in upper part of atmosphere is harmful to animals
C) Greenhouse effect is a natural phenomenon
D) Most of the forests have been lost in tropical areas

35) Statement 1: In intraspecific speciation, a single species may give rise to new species.

Statement 2: Gene flow within populations must be interrupted.

- A) Both Statement 1 and Statement 2 are true but Statement 2 is not the correct explanation of Statement 1
B) Both Statement 1 and Statement 2 are true and the Statement 2 is correct explanation of the Statement 1
C) The Statement 1 is true but the Statement 2 is false
D) Both Statement 1 and Statement 2 are false

36) If forest area is reduced to half, which one of the following will be a long term effect?

- A) It will be converted into large desert
B) Cattles of that area will die due to scarcity of fodder
C) To diversity in germplasm will effect the crop breeding
D) The natives (tribals) of that area will die on account of hunger

37) The transgenic plant flavr savr tomato carries an artificial gene for

- A) Longer shelf life
B) Delay ripening process
C) Added flavours
D) All of these

38) _____ refer to the arrangement of xylem in stem.

- A) Endarch
B) Mesarch
C) Exarch
D) Both (a) and (b)

39) Dental formula of human being is

- A) I_2, C_2, P_1, M_3
B) I_2, C_1, P_2, M_3
C) I_2, C_2, P_3, M_1
D) I_3, C_1, P_2, M_2

40) In which of the following pair, both the plants can be vegetatively propagated by leaf pieces?

- A) Agave and Dioscorea
B) Bryophyllum and Kalanchoe
C) Chrysanthemum and Agave
D) Bryophyllum and Asparagus

41) _____ is the most appropriate in normal circumstances.

- A) During inspiration, the intrapulmonary pressure is less than the atmospheric pressure.
B) During expiration, the intrapulmonary pressure is less than the atmospheric pressure.
C) During expiration, the intrapulmonary pressure is equal to the atmospheric pressure.
D) During inspiration, the intrapulmonary pressure is more than the atmospheric pressure.

42) Terramycin is got from which of the following?

- A) Streptomyces griseus
B) S. aureofaciens
C) S. venezuelae
D) S. rimosus

43) Match List I and List II and select the correct answer using the code given below the lists

	List I	List II
1	Microtubules	Structural Component of cilia
2	Centrioles	Store hydrolytic enzymes
3	Peroxisomes	Store oil protein and starch in plants

- A) 1 and 3 are correct, 2 is false
 B) 1 is correct, 2 and 3 are false
 C) 1 and 2 are correct, 3 is false
 D) 1, 2 and 3 are correct

44) In which of the following colourblindness is inherited?

- A) In females only
 B) In males only
 C) In both males and females
 D) In none of the above

45) William Harvey is known for the discovery of

- A) Blood clotting
 B) Blood transfusion
 C) Blood circulation
 D) Blood purification

46) Match the following columns.

	Column I		Column II
a	Apomixis	1	Mango
b	Polyembryony	2	Seedless fruit
c	Parthenocarpy	3	Asteraceae

A)

a	b	c
3	1	2

B)

a	b	c
2	3	1

C)

a	b	c
3	2	1

D)

a	b	c
1	2	3

47) Four daughter cells formed after meiosis are

- A) Anucleate
 B) Multinucleate
 C) Genetically different
 D) Genetically similar

48) Microbes are present everywhere in soil, water, air, inside our bodies and that of other plants and animals. They are present even at sites where no other life-form could possibly exist, like

- A) deep in the soil, and under the layers of snow several meters thick
 B) deep inside the geysers (thermal vents) where the temperature may be high as 100°C
 C) in highly acidic environment
 D) all of the above

49) What is the amount of CSF in the cranial cavity?

- A) 500 mL

- B) 140 mL
 C) 1.5 mL
 D) 1 L

50) Enzymes concerning H_2O_2 metabolism are present in

- A) Peroxisomes
 B) Golgi bodies
 C) rRNA
 D) Chloroplasts

51) Which of the following would most likely disrupt by the injury localised to the hypothalamus?

- A) Co-ordination during locomotion
 B) Short- term memory
 C) Executive functions, such as decision making
 D) Regulation of body temperature

52) Consider the following four statements (i), (ii), (iii) and (iv) and select the right option for two correct statements. (mains 2010)

(i) In vexillary aestivation, the large posterior petal is called standard, two lateral ones are wings and two small anterior petals are termed keel.

(ii) The floral formula for Liliaceae is $\oplus \overset{\circ}{\text{P}}_{3+3} \text{A}_{3+3} + \underline{\text{G}}$

(iii) In pea flower the stamens are monodelphous

(iv) The floral formula for Solanaceae is

$\oplus \overset{\circ}{\text{K}}_{(3)} \text{C}_{(3)} \text{A}_{(4)} + \underline{\text{G}}_{(2)}$

The correct statements are

- A) (i) and (iii)
 B) (i) and (ii)
 C) (ii) and (iii)
 D) (iii) and (iv)

53) Which of the following does not contain chlorophyll?

- A) Algae
 B) Fungi
 C) Bryophyta
 D) Pteridophyta

54) To avoid excessive water loss during severe drought stress, the closure of stomata is signaled by the production of which of the following phytohormone?

- A) NAA
 B) IAA
 C) ABA
 D) IBA

55) Endangered or threatened animals are protected from extinction by ex-situ conservation by which of the following method?

- A) National parks
 B) Wild life sanctuary
 C) Biosphere reserves
 D) Zoological parks

56) Which one of the following is not a fibrillar protein?

- A) Collagen
 B) Elastin
 C) Myosin
 D) Albumin

57) The exact sequence of events during digestion of protein is

- A) Proteins → peptones → acid metaproteins and peptides
- B) Proteins → proteoses and peptones → peptides → amino acids
- C) Proteins → primary proteins → peptides → amino acids
- D) Proteins → acid metaproteins → proteoses → amino acids → peptides

58) In _____ biolistic technique is used.

- A) tissue culture process
- B) gene transfer process
- C) germplasm conservation process
- D) hybridization process

59) Mark the incorrect statements from the following.

- a. The placenta is located inside the locule. Arising from the placenta are the ovules.
 - b. The number of ovules in an ovary may be one (papaya, watermelon and orchids) to many (wheat, paddy and mango).
 - c. Each ovule has one or two protective envelopes called integuments.
 - d. Integuments encircle the ovule except at the tip where a small opening called the chalaza is organised. Opposite the chalaza is the micropylar end.
 - e. Enclosed within the integuments is a mass of cells called the perisperm.
- A) b, d and e
 - B) a, c and d
 - C) a, b and d
 - D) b, c and e

60) Statement 1: RNA is the genetic material in some bacteria.

Statement 2: DNA is the genetic material in all bacteria.

- A) Both Statement 1 and Statement 2 are true but Statement 2 is not the correct explanation of Statement 1
- B) Both Statement 1 and Statement 2 are true and the Statement 2 is correct explanation of the Statement 1
- C) Both Statement 1 and Statement 2 are false
- D) The Statement 1 is false but the Statement 2 is true

61) One functional unit of gene which specifies synthesis of one polypeptide is known as

- A) Cistron
- B) Codon
- C) Clone
- D) Recon

62) Which one is the smallest among the following

- A) Bacteriophage
- B) TMV
- C) Neurospora
- D) E. Coli

63) Match the animals list with names under Column-I with the animals listed with regular

zoological name given under Column-II; choose the answer which gives the correct combination of the alphabets of the two columns.

Column I (Animal with common name)		Column II (Animal with zoological name)	
A	Starfish	p	Sepia
B	Jellyfish	q	Astropecten
C	Devfish	r	Aurelia
D	Cuttlefish	s	Octopus

- A) A = q, B = r, C = s, D = p
- B) A = q, B = p, C = s, D = r
- C) A = r, B = p, C = s, D = q
- D) A = r, B = s, C = p, D = q

64) _____ is the subaerial stem modification with long internode.

- A) Offset
- B) Rhizome
- C) Runner
- D) Sucker

65) Statement 1: Carolus Linnaeus was Swedish naturalist.

Statement 2: Linnaeus is called as Father of Taxonomy.

- A) Both Statement 1 and Statement 2 are true but Statement 2 is not the correct explanation of Statement 1
- B) Both Statement 1 and Statement 2 are true and the Statement 2 is correct explanation of the Statement 1
- C) The Statement 1 is true but the Statement 2 is false
- D) The Statement 1 is false but the Statement 2 is true

66) A well watered herbaceous plant exhibits a decrease in rate of transpiration in intense light; this is due to

- A) Loss of water from the soil
- B) Photo-oxidation of chlorophyll
- C) High rate of photosynthesis
- D) Partial closure of stomata

67) Floral formula represents

- A) Symmetry of a flower
- B) Position of flower
- C) Functions of a flower
- D) Diagrammatic notation of floral characters

68) Secondary productivity is rate of formation of new organic matter by which of the following component?

- A) Consumers
- B) Decomposers
- C) Parasites
- D) Producers

69) _____ biomolecules is common to respiration-mediated breakdown of fats, carbohydrates and proteins.

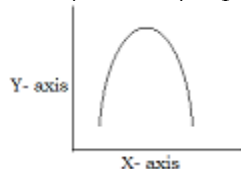
- A) Fructose 1, 6-bisphosphate
- B) Glucose -6-phosphate
- C) Pyruvic acid
- D) Acetyl CoA

70) _____ gastrointestinal hormone stimulates

insulin secretion.

- A) CCK
- B) Gastrin
- C) Secretin
- D) GIP

71) The curve given below shows enzymatic activity in relation to there conditions (pH, temperature and substrate concentration). What do the two axes (X and Y) represent? (2011)



X-axis	Y-axis
Enzymatic activity	pH

A)

X-axis	Y-axis
Temperature	Enzyme activity

B)

C)

X-axis	Y-axis
Substrate concentration	Enzymatic activity

D)

X-axis	Y-axis
Enzymatic activity	Temperature

72) Tikka disease of groundnut is caused by

- A) Phytophthora
- B) Cercospora
- C) Albugo
- D) Colletotrichum

73) The removal of 'keystone' species will affect which of the following component?

- A) The consumers
- B) The producers
- C) The ecosystem
- D) The decomposers

74) Total amount of 'A and T' in DNA is 45%. What will be amount of guanine?

- A) 22.5%
- B) 27.5%
- C) 55%
- D) 45%

75) Vernalisation is subjected to plants growing in which of the following region?

- A) Sub tropical
- B) Tropical areas
- C) Temperature areas
- D) Hot areas/Arctic region

76) In citric acid cycle, Which is the step not mediated by dehydrogenase enzyme?

- A) Oxaloacetic acid to citric acid
- B) Citric acid to α -ketoglutaric acid
- C) Malic acid to oxaloacetic acid
- D) Succinic acid to Fumaric acid

77) A fibrous root system is better adapted than tap root system for

- A) Absorption of water and minerals
- B) Anchorage of plant to soil
- C) Storage of food
- D) Transport of water and organic food

78) The deficiencies of micro nutrients, not only affects growth of plants but also vital functions such as photosynthetic and mitochondrial electron flow. Among the list given below, which group of three elements shall affect most, both photosynthetic and mitochondrial electron transport?

- A) Cu, Mn, Fe
- B) Co, Ni, Mo
- C) Ca, K, Na
- D) Mn, Co, Ca

79) In a type of apomixis known as adventive embryony, embryos develop directly from the (2005)

- A) nucellus or integuments
- B) zygote
- C) synergids or antipodals in an embryo sac
- D) accessory embryo sacs in the ovule

80) Photochemical transformation of the automobile exhaust emission in UV wavelength of sunlight results into

- A) CH_4 and C_6H_6
- B) SO_2 and NO_2
- C) O_3 and PAN
- D) CO and CO_2

81) Which of the following pairs is a sedimentary type of biogeochemical cycle? (1995)

- A) Phosphorus and nitrogen
- B) Phosphorus and sulphur
- C) Oxygen and nitrogen
- D) Phosphorus and carbon dioxide

82) Determine the common means of transmission of AIDS.

- A) Placental transfer
- B) Sexual intercourse
- C) Blood transfusion
- D) All of these

83) With which of the following process Cholodny-Went theory is concerned?

- A) Phototropism
- B) Photomorphogenesis
- C) Photoperiodism
- D) Photorespiration

84) Urine output is reduced by

- A) ACTH
- B) Oxytocin
- C) LH
- D) Vasopressin

85) Mark the incorrect statements from the following.

- a. Though the genotypic ratios can be calculated using mathematical probability, by simply looking at the phenotype of recessive trait, it is not possible to know the genotypic composition.

b. The $1/4 : 1/2 : 1/4$ ratio of TT: Tt: tt is mathematically condensable to form of the binomial expression $(ax + by)^2$, that has the gametes bearing genes T and t in equal frequency of $1/2$.

c. Based on his observation on dihybrid crosses Mendel proposed two rules that are called Principles or Laws of Inheritance: the First Law or Law of Dominance and the Second Law or Law of Segregation.

d. If in test cross, all the progenies shows dominant

e. ABO blood groups are controlled by three alleles I^A, I^B and i . I^A and I^B produce a slightly different type of the sugar while allele i doesn't produce any sugar.

- A) a, c and d
- B) b, d and e
- C) a and c only
- D) c and d only

86) Meristematic activity occurs at

- A) Bud
- B) Stem apex
- C) Root hair
- D) Leaf

87) Starch sheath is also known as

- A) epidermis
- B) hypodermis
- C) casparian strip
- D) none of these

88) A rabbit eats a lot of gram. Then its digestion starts in

- A) Mouth
- B) Stomach
- C) Ileum
- D) Duodenum

89) The law of limiting factor for photosynthesis was enunciated by

- A) Blackman
- B) Hill
- C) Kalmen
- D) Ruben

90) Consider the statements regarding the lac operon and find the correct option.

1. An inducer regulates the switching on and off lac operon.
2. Repressor protein dissociates from operator region and prevents RNA polymerase from transcribing the operon.
3. In the presence of lactose, the repressor is activated by interaction with lactose.
4. RNA polymerase has access to the promoter and transcription proceeds only when the repressor is inactivated

- A) 1 and 4 alone are correct
- B) 2 alone is correct
- C) 1 and 3 alone are correct
- D) 3 and 4 alone are correct

91) Among various categories of threatened species, what is the percentage of angiosperms

categorized as vulnerable?

- A) 19%
- B) 14%
- C) 41%
- D) 51%

92) Neurons are classified on the basis of

- A) Number of nucleus present
- B) Number of processes arising from the cell body
- C) Number of axons present
- D) Number of dendrites present

93) Pick up the correctly matched

- A) Flame cell-Flatworm
- B) Marsupium-Platypus
- C) Blubber-Kangaroo
- D) Water vascular system-Sponge

94) Plant cells differ from animal cells in having

- A) Plastid
- B) Vacuole
- C) Golgi body
- D) Centrosome

95) Which of the following is not an attribute of enzymes?

- A) They are used up in reactions
- B) They are specific in nature
- C) They speed up the rate of biochemical reactions
- D) They are proteinaceous in nature

96) By which of the following active uptake of water is affected?

- A) Typical tissue organization
- B) Transpirational power of the root hairs
- C) Tension due to transpiration
- D) Osmotic concentration of the cell sap of the leaves

97) IR-8 variety of paddy is introduced in India from

- A) Sri Lanka
- B) Philippines
- C) Japan
- D) China

98) _____ hormones has no effect on heart beat.

- A) Thyroxine
- B) Oxytocin
- C) Noradrenaline
- D) Adrenaline

99) The trachea and bronchi are provided with C - shaped cartilaginous rings which

- A) Are responsible for sound production
- B) Give them support and prevent their collapse
- C) Give support to lungs
- D) Divide trachea and bronchi

100) Fibroblasts, macrophages and mast cells are found in

- A) adipose tissue
- B) cartilage tissue
- C) areolar tissue
- D) glandular epithelium