



BIOLOGY

BOOKS - NTA MOCK TESTS

NTA NEET SET 116



1. A population has a stable growth. The shape

of the pyramid will be?

A. Triangular

B. Upright

C. Urn-shaped

D. Bell-shaped

Answer: D

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2. Glisson's capsule covers?

A. Hepatic lobule

B. Pancreatic acini

C. Gall bladder

D. Spleen

Answer: A

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3. With respect to Chargaff's rule, select the

option that shows appropriate base pairing.

A. AG, CT

B. AC, GT

C. AT, GC

D. All of these

Answer: C

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4. Ashwagandha and petunia belong to the family of

A. Liliacease

B. Fabacease

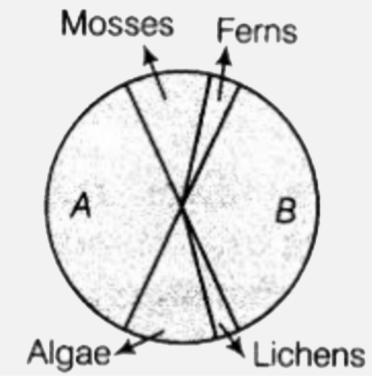
- C. Solanacease
- D. Brassicacease

Answer: C

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5. Observe the pie chart given below showing

biodiversity and identify 'a' and 'b'



b = Gymnosperms

B. a = Fungi

b = Gymnosperms



b = Angiosperms

D. a = Fungi

b = Angiosperms

Answer: D

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6. Select the correct option by identifying the relative contribution of various greenhouse

gases to the total global warming.

| | Carbon | | |
|---|----------|---------|-----|
| | dioxide | Methane | CFC |
| | (CO_2) | | |
| 1 | 50% | 30% | 14% |
| 2 | 60% | 14% | 20% |
| 3 | 60% | 20% | 14% |
| 4 | 40% | 20% | 20% |

A. (1)

- B.(2)
- C. (3)
- D. (4)

Answer: C



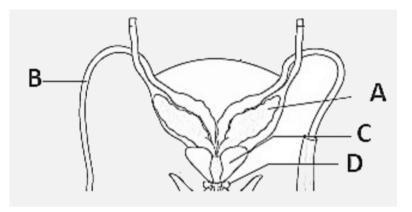
7. Which characterstic is NOT possessed by the phylum Annelida?

- A. Closed circulatory system
- B. Segmentation
- C. Pseudocoelom
- D. Ventral nerve cord.

Answer: C

8. Identify the labeled part A, B, C and D in the

given figure.



A. A-Seminal vesicle, B-Vas deferens, C-

Prostate, D-bulbourethral gland

B. A-Vas deferens, B-Seminal vesicle, C-

Bulbourethral gland, D-Prostate

C. A-Ureter, B-Seminal vesicle, C-Prostate, D-

bulbourethral gland.

D. A-Ureter, B-prostate, C-Seminal vesicle, D-

Bulbourethral gland

Answer: A

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9. How many ATP and NADPH are formed

during photorespiration ?

A. 18 ATP and 12 NADPH

B. 15 ATP and 10 NADPH

C. 10 ATP and 10 NADPH

D. 3 ATP and 2 NADPH

Answer: C

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10. In which of the following organisms, the feature of menstrual cucle during sexual reproduction is observed ?

(a) Most seasonal breeders

(b) Human females

(c)Old-world monkeys and apes

(d)Tiger

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

B. (b) & (c)

C. (c) & (d)

D. (a) & (b)

Answer: B

11. Which one of the following cannot be explained on the basis of Mendel's Law of Dominance?

A. The discrete unit controling a particular character is called as factor

B. In a pair of factors, one unit factor is

dominate, while other is recessive

C. Alleles do not show any blending and

both the characters recover as such in

F_2 generation

D. Factors occur in pairs

Answer: C



12. The synthesis of non-essential amino acids

like glumatic acid, aspartice acid, etc. Takes place during

A. catabolism

B. anabolism

C. both (a) and (b)

D. none of thesse

Answer: B

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13. The structure that is present in the 9^{th} abdominal segment of cockroach is?

A. anal styles in male.

B. anal ceric in female

C. anal style and antennae in female.

D. Both (A) and (C)

Answer: A

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14. Read the following sentences and then following sentences and then answer the given below.

I. Parathyroid hormone regulates the

metabolism of calcium.

II. Vasopressin is also called antidiuretic hormone.

III. Grave's disease is caused by malfunctioning of the adrenal gland.

IV. Oxytocin facilitates parturition by acting on the middle layer of the uterus which is madeup of striated involuntary muscles.

A. I and III are true, II and IV are false

B. I and II are true, II and IV are false

C. I and IV are false , II and IV are true

D. I , II and III are true, IV only false

Answer: B

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15. The pollen tube enters the ovule through

A. antipodal cells

B. micropyle

C. degenerating synergids

D. all of these

Answer: B



16. According to most accepted theory of the origin of our universe, the universe is?

A. 10 billion year old.

B. 20 billion years old.

C. 14 billion years old.

D. 5 billion years old.

Answer: B



17. In which of the following does pollinations takes place?

A. Pteridophytes and angiosperms

B. Angiosperms and gymnosperms

C. Angiosperms and fungi

D. Bryophytes and angiosperms





18. The exchange of chromosomal segments between non-sister

A. Leptotene

B. Pachytene

C. Diplotene

D. Diakinesis





19. The phenmenon of induction of flowering upon low temperature treatment is known as?

A. Vernalization

B. Photoperiodism

C. Cryopreservation

D. Cryostat





20. Who from the following first proposed the natural system of classification

A. Engier and Pranti

B. Hutchinson

C. Takhtajan

D. Bentham and Hooker

Answer: D



21. Statement 1: In plants, the tonoplast facilitates the transport of a number of ions and other materials against concentration gradients into the vacuole.
Statement 2: In amoeba, the contractile vacuole is important for osmoregulation and excretion.

A. Both statement 1 and 2 are correct

B. Statement 1 is incorrect and statement 2

,is correct

C. Statement 1 is correct and statement 2 is

incorrect

D. Both statement 1 and 2 are incorrect

Answer: A

22. Select the option with the correct pairing

| Column I | Column II |
|------------------|------------------------|
| a. Statin | (i) Trichoderma |
| b. Swiss cheese | (ii) Methanobacterium |
| c. Cyclosporin A | (iii) Monascus |
| d. Biogas | (iv) Propionibacterium |

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

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

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

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

Answer: C



23. Read the following statements about menstrual cycle and select two correct statements:

(i). Lack of menstruation may be indicative of pregnance

(ii). The changews in the ovary and the uterus are induced by changes in the lveles of ovarian hormones only

(iii). LH suge induces ovulation

(iv). If fertilisation occurs, corpus luteum degenerates immediately

A. (i) and (ii)

B. (ii) and (iii)

C. (i) and (iii)

D. (ii) and (iv)

Answer: C

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24. B-cells and T-cells, responsible for acquired

immune response in the body, are formed in

the

A. thymus and bone marrow respectively. B. bone marrow. C. thymus only D. lymph nodes and bone marrow respectively. Answer: B

25. The Hershey and Chase's experiment using

bacteriophage demonstrates.

A. Semi-autonomous nature of DNA

B. All viruses are DNA viruses

C. DNA is genetic material

D. DNA show repair mechanism

Answer: C

26. Asexual reproduction takes place by

zoospores or by aplanospores in

A. Colletotrium

B. Saccharomyces

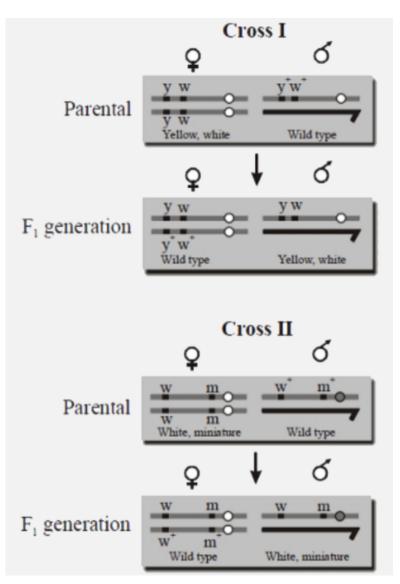
C. Rhizopus

D. Alternaria

Answer: C

27. The figure shows the experiment of T.H Morgan on the linkage. If in cross-I, genes are tightly linked and in cross-II, genes are loosely linked then what will be the percentage of recombination produced in cross-I and cross-II

respectively?



A. 98.7% and 62.8%

B. 1.3% and 37.2%

C. 37.2% and 1.3%

D. 62.8% and 98.7%

Answer: B

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28. The phenomenon of development of organism without fertilization of ovum is known as

A. adventitive embryony

B. polyembryony.

C. parthenocarpy

D. parthenogenesis

Answer: D

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29. The structure that are interconnected by

corpus callosum are

- A. Cerebral hemipheres
- B. Ventricles of brain
- C. Cerebellar hemisphere
- D. Thalamus

Answer: A



30. The kind of evolution seen between flying

insects, birds and bats is

A. divergent evolution.

B. parrallel evolution.

C. retrogressive metamorphosis

D. convergent evolution

Answer: D

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31. Read the given statements and select the

correct option

Statement 1 : Amnicentesis is often misused

Statement 2 : Amniocentesis is being used to

determine the sex of the foetus so that female

foetus may be aborted.

- A. Both statement I and II are correct
- B. Statement I is correct but statement II is

incorrect

C. Statement I is incorrect but statement II

is correct

D. Both statement I and II are incorrect

Answer: A



32. During biology nitrogen fixation, nitrogen

is converted to

A. ammonia

B. nitrate

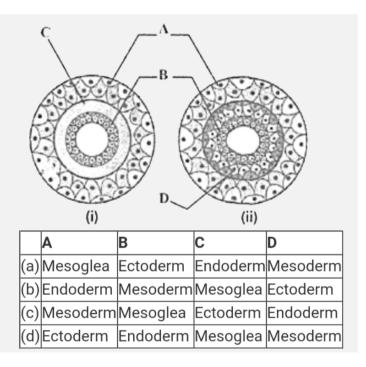
C. nitrite

D. amino acid

Answer: A



33. Identify the labelled parts A to D in sections of (i) diploblastic and (ii) triploblastic organisations in animals.



B. (b)

C. (c)

D. (d)

Answer: D

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34. Ascent of xylem sap, caused due to transpiration, depends mainly on three physical properties of water, These properties result in

A. low tensile strength but high capillarity

B. low tensile strength as well as low capilarity

C. high tensile strength as well as high capilarity.

D. high tensile strength but low capilarity.

Answer: C

35. Match Column-I with Column-II and choose

the correct option of the following.

| | Column-I | | Column- |
|-------|----------------------|-----|----------|
| (i) | Transgenic tobacco | (A) | Vitamin |
| (ii) | Golden rice | (B) | Alpha-la |
| (iii) | Transgenic Rosie cow | (C) | Pest res |
| (iv) | Transgenic animals | (D) | Alpha-1- |

A. (i) -C, (ii) -A, (iii) - B, (iv) - D

D. (i) -D, (ii) -A, (iii) -B, (iv) - C

Answer: A





36. The key concept of darwinian theory of evolution is

A. natural selection.

- B. branching descent
- C. salitation
- D. Both (A) and (B)

Answer: D

37. Which of the following organisms was used to establish the semi-conservative nature of DNA?

A. Escherichia coli

B. Neurospora crassa

C. Pneumococcus

D. Drosophila melanogaster







38. Number of ATP molecules formed during aerobic respiration in break down of one glucose molecule via malate aspartate shuttle.

A. 30

B. 38

C. 40

D. 24

Answer: B





39. In marigold, the type of placentation is called

A. marginal

B. basal

C. free central

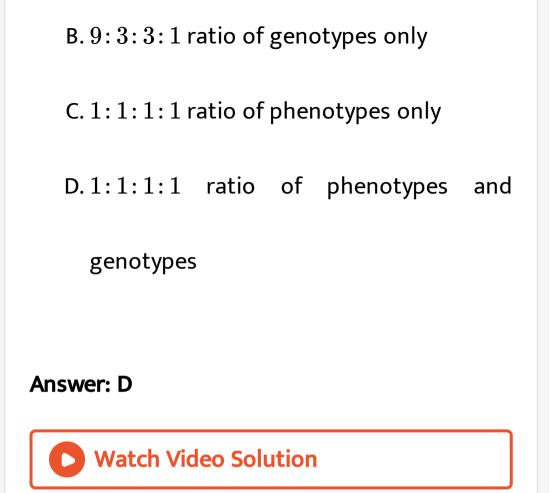
D. axile

Answer: B

40. Read the given paragraph to answer In a certain plant, yellow fruit colour (Y) is dominant to green fruit colour (y) and round shape (R) is dominant to oval shape (r). The two genes involved are located on different chromosomes.

Which of the following is correct for the condition when plant YyRr is back crossed with the double recessive parent ?

A. 9: 3: 3: 1 ratio of phenotypes only



41. Which of the following option correctly defines the function of sodium-potassium pump?

A. Na^+ and K^+ out of the neuron

- B. Na^+ and into the neuron
- C. Na^+ into the neuron and K^+ out of

the neuron

D. K^+ into the neuron and Na^+ out of

the neuron

Answer: D

42. In bacteria, the restriction enzyme plays an important role in defence against viral infection by chopping foreign DNA into pieses, but it does not cut its own DNA because of A. difference in recognition sequence.

B. methylation of A or C at the recognition

site.

C. restriction endonuclease leave the DNA out of the cells.

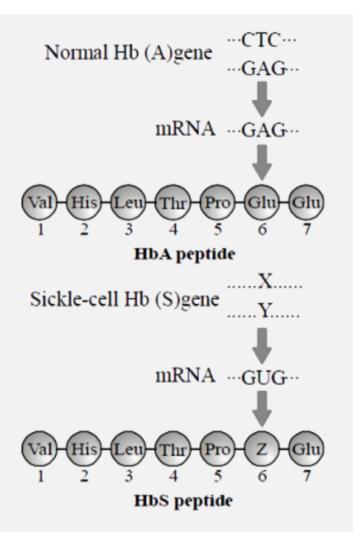
D. none of these

Answer: B



43. Given below is a diagram related to sicklecell anaemia, which provides immunity to malarial parasite. Identify X, Y and Z in the

given diagram.



A. X-CAC, Y-GTG, Z- Val

B. X-CAC, Y-GTG, Z-Phe

C. X-GTG, Y-CAC, Z-val

D. X-CAC, Y-GTG, Z-His

Answer: A

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44. Who define biotechnology as the integration of natural science and organisms cells, parts there of, and molecular analogues for products and services ?

A. Genetic Engineering Approval

Committee

B. European Federation of Biotechnology.

C. US Patent and Trademark Office.

D. Internatinal Union of Biochemistry.

Answer: B

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45. In the 1950s, kinetin was first discovered by

- A. Skong and miller.
- B. Letham.
- C. Calvin
- D. Thimman and Went,

Answer: A



46. The hormone responsible for maintaining the diurnal rhythm and sexual behaviour in animals is

A. FSH

- B. aldosterone
- C. androgens
- D. melatonin

Answer: D



47. Read statements (a-c) regarding pollen grains and select the option that has correct statements.

a. The generative cell floats in the cytoplasm of

the vegetative cell.

b. Sporollenin is absent at germ pores.

c. Pollen grain measures about 25-50

micrometer in diameter.

A. a,b and c

B. Only b and c

C. only a

D. only a and b

Answer: A





48. Arrange the following structures based on their location from the periphery to centre with respect to the anatomy of a dicotyledonous root.

I Pericycle

II Casparian strips

III Epiblema

IV Conjunctive tissue

A. IV,I,II,III

B. IV,II,III,I

C. I,II,III,IV

D. 111,11,1,1V

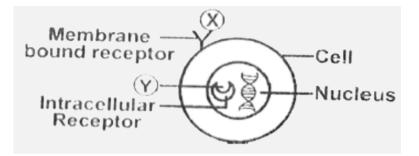
Answer: D

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49. Given below is a schematic representation

of the mechanism of hormone action. Select

the set of hormones which can bind with Y.



- A. Testosterone, Estrogen
- B. Thyroxine, FSH
- C. FSH, Estrogen
- D. FSH, LH

Answer: A



50. Which statement is correct about the disorder of skeletal or muscular system?

A. Muscular dystrophy - Age - related shroteining of muscles B. Osteoporosis - Decrease in bone mass and a higher chance of fractures with advancing age C. Myasthenia gravis - Autommue disorder

which inhibits sliding of myosin

filaments

D. Gout - inflammation of joints due to

extra deposition of calcium

Answer: B

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51. One of the most important functions of botanical gardens is that

| A. One can be observe tropical plants | | | |
|----------------------------------------|--|--|--|
| there. | | | |
| B. They allow ex- situ conservation of | | | |
| germplasm. | | | |
| C. They provide a natural habitat | | | |
| recreation. | | | |
| D. They provide a beautiful area for | | | |
| reaction | | | |

Answer: B

52. How world the rate of respiration be affected if a a starving plant is provide with glucose?

A. First rises, then fall

B. Become constant

C. Decrease

D. Increase

Answer: D



53. In Riccia, the female reproductive structures are called:

A. Antheridium

B. Strobili

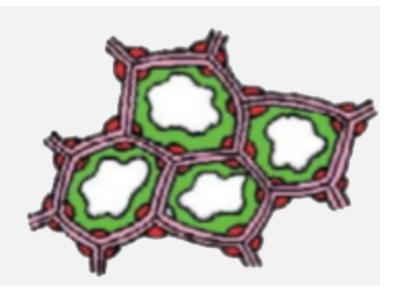
C. Archegonium

D. Oogonium

Answer: C

54. Observe the following diagram and select

the propertythat is false.



A. It provides mechanical support to the growing parts of the plants such as

young stream and pitiole of leaves.

B. It is present below the epidermis in the from of a homogeneous layer or as patches in dicot stem. C. It is present in the from of semilunar patches in the pericycle of monocot stem.

D. They can assimilate food

Answer: C

55. Match animal in column I with their

respective respiratory structure in column II.

| Column I (Animals) | Column II (Respiratory structures) |
|--------------------|------------------------------------|
| A. Pigeon | (i) Book gills |
| B. Scorpion | (ii) Pharyngeal wall |
| C. Planaria | (iii) Lungs |
| D. Earthworm | (iv) Gills |
| E. Insects | (v) Tracheal tubes |
| F. King crab | (vi) Body surface |
| G. Prawn | (vii) Skin |
| H. Labeo | |

A. A - (iii) , B - (v), C - (iv), D - (vii), E - (v), F -

(i), G - (iv), H - (iv)

B. A - (v), B - (ii), C - (iv), D - (vii), E - (vi), F -

(iv), G - (i), H - (iii)

56. When resources are limited, populations exhibit logistic growth, In iongistic growth, population expansion decreases as resources

become scarce, levilling off when the carrying

capcity of the enviornment is reached,

resulting in a _____curve.

A. S-shaped

B. J - shaped

C. Straight line

D. Circular.

Answer: A

57. Sutures are made up of :

A. Yellow elastic connective tissue

- B. Dense fibrous connective tissue
- C. Calcified cartilage
- D. White fibrocartilage

Answer: B



58. The purpose served by keeping beehives in

crop fields is an increase in

A. crop yield

B. honey yield

C. weeds yeilds

D. Both (A) and (B)

Answer: D

59. Which of these forms a symbiotic association with roots and helps to improve phosphorus uptake?

A. Glomus

B. Rhizobium

C. Azoosprillum

D. More than one option is correct

Answer: A

60. Read the following statements :

(a) Over one - third of all named species on earth are arthropods.

(b) All mollusuc contain a file like a rasping organ for feeding.

(c) Nereis possess parapoida which help in swimming.

(d) Development is indirect in Bufo.

Choose the incorrect statements.

A. (a) and (b) only

B. (b) and (c) only

C. (c) and (d) only

D. None of these

Answer: D



61. Which of these statements are fasle regarding the human respiratory regarding the human respiratory system?
(a) The nasal chamber opens into the pharynx.
(b) Trachea, bronchus and initial bronchioles

are supproted by complete cartilaginous rings.
(c) The branching network of bronchi,
bronchioles and alveoli comprises the lungs.
(d) Pleural fluid increase friction on the lung surface.

A. a & b

B. b & c

C. b & d

D. only d

Answer: C





62. The causative agent of dysentery is/are

A. Virus

B. Fungi

C. Protozoa

D. Both (A) and (C)

Answer: C

63. Match the recently extinct animal with

their region of habitat

| | Column –I | | Column –II |
|---|-------------------|-----|------------|
| А | Thylacine | i | Russia |
| В | Dodo | ii | Africa |
| С | Steller's sea cow | iii | Mauritius |
| D | Quagga | iv | Australia |

A. A - iii, B - iv , C - i, D - ii

- B. A iv, B iii, C ii, D i
- C. A iv,B i, C iii, D ii
- D. A iv, B iii, C i, D ii

Answer: D

64. Noise pollution may cause nervousness and irritability by stimulating the secretion of

A. Thyroid hormone

B. Adrenaline hormone

C. Parathyroid hormone

D. None of these

Answer: B

65. In the polymerase chain reaction, the optimum temperature for the extension step is

- A. $72^{\,\circ}\,C$
- B. $50^{\,\circ}\,C$
- C. $90^{\,\circ}\,C$
- D. $45^{\,\circ}\,C$

Answer: A



66. The technique of direct introduction of gametes into the oviduct is called

A. Artificial insemination

B. ICSI

C. GIFT

D. IVE-ET

Answer: C

67. Among the following , more than one trophic level in a food chain can be occupied by :

- A. Fish and zooplanktons
- B. Sparrow and insectivorous plants
- C. Frog and lion
- D. Grasses and lichens

Answer: B

68. Select the correct statement.

| A. The | algal | cell | wall | is | made | up | of |
|-------------------------------------------|--------|------|------|------|---------|----|-----|
| cellulose, algin, pectin and polysulphate | | | | | | | |
| este | rs | | | | | | |
| B. Mos | t of | the | e gy | /mn | osperm | IS | are |
| homosporous | | | | | | | |
| C. Mos | t of | the | e pt | erio | lophyte | S | are |
| hete | rospor | us, | anc | l | some | | are |
| homosporus. | | | | | | | |

D. Water is not required for fertilisation in

seed plants like Selaginella and Salvinia

Answer: A

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69. The most abundant protein of the biosphere is found in:

A. Chloroplast

B. Mitochondria

C. Ribosomes

D. Dictyosomes

Answer: A



70. The epithelial tissues are characterised by :

A. Tight junction, adhering junction and

gap junction

B. Tight junction and gap junction

C. Gap junction only

D. Tight junction only

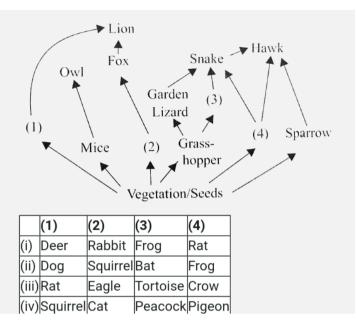
Answer: A

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71. Identify the missing organisms - (1), (2), (3)

and (4) in the following food web and select

the correct option.



A. (i)

B. (iii)

C. (iv)

D. (ii)





72. In which of the following categories does the genetic disorder phenylketonuria fall into ?

A. Multiple allelism

B. Polygenic inheritance

C. Multiple factor

D. Pleiotropy

Answer: D



73. In the majority of the flowering plants, female gametophytes having eight nuclei is

A. tetrasporic

B. monosporic

C. bisporic

D. trisporic





74. CJD caused by prion proteins is seen in

A. cattle

B. sheep

C. humans

D. all of these

Answer: C



75. Select the option that correctly describes ECG phase

A. P - wave - Depolarisation of the ventricles

B. P - wave - Depolarisation of the A node

C. QRS wave - Depolarisation of the

ventricles

D. T - wave - Depolarisation of the atria

Answer: C



76. Choose the option that has only correct statements :

(i) Inclusion bodies which are found in prokaryotic cells are not bounded by any membrane system

(ii) Ribosomes are the site of protein synthesis.

(iii) Pili are the surface structures of the

bacteria which may play a role in motility.

(iv) The cell membrane of prokaryotes is structurally similar to the eukaryotes

A. i, ii, iii and iv

B. ii, iii and iv

C. i, ii and iv

D. i, iii and iv

Answer: C

77. Which of the following characters are seen in an individual with trisomy of chromosome number 21 ?

A. Psychomotor and mental development is retarded

- B. Mental retardation
- C. Presence of gynaecomastia
- D. Loss of skin pigmentation

A. Only A is correct

B. Only A & B are correct

C. Only A, B & C are correct

D. All are correct

Answer: B

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78. Match the taxonomical tools and its

explanation between column - I and column -

II.

| <u> </u> | | | | | | |
|----------|---------------|-------|---------------------------------------------|--|--|--|
| | Column - I | | Column - II | | | |
| a. | Museum | (i) | Information on one taxon. | | | |
| b. | Herbarium | (ii) | Couplet. | | | |
| C. | Monograph | (iii) | A store house of collected plant specimens. | | | |
| d. | Taxonomic key | (iv) | Educational institutes. | | | |
| | | (v) | Records of local flora. | | | |

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

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

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

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

Answer: A

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79. In which phase of the cell cycle, the amount

of DNA in a cell remains constant at 4C level,

considering that the initial amount of DNA was 2C ?

- A. G_0 and G_1
- $B. G_1$ and S
- C. Only G_2
- D. G_2 and M

Answer: C



80. Glucose and amino acids are reabsorbed in

A. PCT

B. DCT

C. Henle's loop

D. Bowman's capsule

Answer: A

81. Which of the following disease can be

detected by Widal test ?

A. Typhoid

B. AIDS

C. Malaria

D. Tuberculousis

Answer: A

82. Which of the following can accelerate the rate of decompositon of the detritus? A. It the detritus contains lignin, chitin, tannins and celliulose B. If the detritus is present in acidic soil

C. If the molecule and aeration are at

optimum

D. If the temperature is below $10^{\,\circ}\,C$

Answer: C

83. Which among the following is true ?

A. Plasma membrane helps in transportation of only water in and out of cell. B. Plasma membrane helps in protein synthesis C. Plasma membrane helps in

osmoregulation

D. Plasma membrane helps in nucleic acid

synthesis

Answer: C



84. Use of bio-resources by multinational companies and other organisations without proper authorisation from the countries and people concerned without compensatory payment is termed as

A. biopatent

B. bioethics

C. bioweapon

D. biopiracy

Answer: D

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85. Which of the following statements related

to green light is correct ?

A. The atmosphere filters out all the colours of the visible light spectrum except green. B. The green light is the most effective wavelength region of the visible spectrum in sunlight for photosynthesis C. Chorophyll is least effective in absorbing green light D. The green light allows maximum photosynthesis

Answer: C



86. Which of the following statements is/are incorrect regarding roots?

(i) In Rhizophora, pneumatophores are found.

(ii) Tap roots of carrot, turnip and advertitious

roots of sweet potato, get swollen and store

food.

(iii) The stems of maize and sugercane have

supporting prop roots coming out of the

lower nodes of the stem.

A. I and II

B. Only II

C. II and III

D. Only III

Answer: D

87. Lichens are indicators of pollution as :

A. They grow more on polluted areas

- B. They are not found in non-polluted areas
- C. They do not grow in polluted areas
- D. Not related to pollution

Answer: C

88. The fruit that develops from monocarpellary superior ovaries and has one seed is/are

A. mango

B. apple

C. coconut

D. More than one option is correct

Answer: D

89. Which amongst the following is a competitive inhibitor of succinic dehydrogenase? A. α - ketoglutarate B. Malate C. Malonate D. Oxaloacetate

Answer: C



90. If Vase efferentia gets blocked , the gametes will not be transported form :

A. Testies to epididymis

B. Epididymis to vas deferens

C. Vas deferens to ejaculatory duct

D. None of these

Answer: A