DAY THIRTY EIGHT

Mock Test 1

Based on Complete Syllabus

Instruction

- This question paper contains of 100 Multiple Choice Questions of Biology (Botany & Zoology), divided into two Sections; section A and section B.
- Section-A contains 35 questions and all questions are compulsory.
- Section-B contains 15 questions out of which only 10 questions are to be attempted.
- Each question carries 4 marks.

Botany

Section-A

1 Bacteria that live around deep sea hot water vents obtain energy by oxidising inorganic hydrogen sulphide belched out by the vents. They use this energy to build organic molecules from carbon obtained by carbon dioxide in the seawater. These bacteria might be described as

(a) photoheterotrophs (b) chemoautotrophs
(c) photoautotrophs (d) chemoheterotrophs

2 In a flower, the stamens are present in monoadelphous condition, which refers to

(a) filaments of all the stamens are united in one group, but anthers are free
(b) filaments and anthers both are fused
(c) anthers are fused but filaments are free
(d) None of the above

3 In certain fungi and algae, cells undergo mitosis repeatedly without subsequently undergoing cytokinesis. What would result from this?

(a) A decrease in chromosome number
(b) Inability to duplicate DNA
(c) Division of the organism into many cells, most lacking nuclei
(d) Large cells containing many nuclei

4 Devices for self-pollination are

(a) dicliny or unisexuality (b) dichogamy
(c) heterostyly (d) None of these

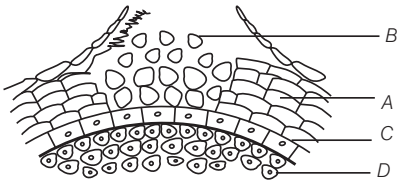
5 Moss protonema can be differentiated from the filamentous alga by the presence of

(a) long rhizoids
(b) sporangium
(c) multiciliated and coiled antherozoids
(d) oblique septa

6 A plant undergoes flowering only when exposed to alternating exposure of 4 hours light and 2 hours of dark in a 24 hours cycle. Such a plant will be classified as a

(a) long day plant (b) short day plant
(c) day neutral plant (d) short-long day plant

7 In the diagram of lenticel, identify the parts indicated as *A, B, C* and *D*.



(a) *A* – Phellem, *B* – Complementary cells, *C* – Phellogen, *D* – Phelloderm
(b) A – Phellem, *B* – Complementary cells, *C* – Phelloderm, *D* – Periderm
(c) *A* – Complementary cells, *B* – Phellogen, *C* – Phelloderm, *D* – Periderm
(d) *A* – Complementary cells, *B* – Phellem, *C* – Periderm, *D* – Phelloderm

8 Which of the following processes is common to both cyclic and non-cyclic modes of photophosphorylation?
(a) Release of O_2
(b) CO_2-fixation
(c) Formation of NADPH
(d) Involvement of both PS-I and PS-II

9 Why is vivipary an undesirable character for annual crop plants?
(a) It reduces the vigour of plant
(b) The seeds cannot be stored under normal conditions for the next season
(c) The seeds exhibit long dormancy
(d) It adversely affects the fertility of the plant

10 The label of a herbarium sheet does not carry information on
(a) date of collection (b) name of collector
(c) local names (d) height of the plant

11 Radial symmetry is found in the flowers of
(a) *Brassica* (b) *Trifolium* (c) *Pisum* (d) *Cassia*

12 The balloon-shaped structures called tyloses
(a) originate in the lumen of vessels
(b) characterise the sapwood
(c) are extensions of xylem parenchyma cells into vessels
(d) are linked to the ascent of sap through xylem vessels

13 The primary producers of the deep-sea hydrothermal vent ecosystem are
(a) green algae (b) chemosynthetic bacteria
(c) blue-green algae (d) coral reefs

14 Cortex is the region found between
(a) epidermis and stele
(b) pericycle and endodermis
(c) endodermis and pith
(d) endodermis and vascular bundle

15 Methanogens belong to
(a) eubacteria (b) archaebacteria
(c) dinoflagellates (d) slime moulds

16 The process which makes major difference between C_3 and C_4 plants is
(a) glycolysis (b) Calvin cycle
(c) photorespiration (d) respiration

17 Free-central placentation is found in
(a) *Dianthus* (b) *Argemone*
(c) *Brassica* (d) *Citrus*

18 The term 'polyadelphous' is related to
(a) gynoecium (b) androecium
(c) corolla (d) calyx

19 Conifers are adapted to tolerate extreme environmental conditions because of
(a) broad hardy leaves (b) superficial stomata
(c) thick cuticle (d) the presence of vessels

20 The ovule of an angiosperm is technically equivalent to
(a) megasporangium
(b) megasporophyll
(c) megaspore mother cell
(d) megaspore

21 Which one of the following generates new genetic combinations leading to variation?
(a) Vegetative reproduction (b) Parthenogenesis
(c) Sexual reproduction (d) Nucellar polyembryony

22 In majority of angiosperms
(a) egg has a filiform apparatus
(b) there are numerous antipodal cells
(c) reduction division occurs in the megaspore mother cells
(d) a small central cell is present in the embryo sac

23 A true breeding plant is
(a) one that is able to breed on its own
(b) produced due to cross-pollination among unrelated plants
(c) near homozygous and produces offspring of its own kind
(d) always homozygous recessive in its genetic constitution

24 Phytochrome is a
(a) flavoprotein (b) glycoprotein
(c) lipoprotein (d) chromoprotein

25 Pollination in water hyacinth and water lily is brought about by the agency of
(a) water (b) insects or wind
(c) birds (d) bats

26 Which is essential for the growth of root tip?
(a) Zn (b) Fe
(c) Ca (d) Mn

27 Which of the following is correctly matched?
(a) Aerenchyma — *Opuntia*
(b) Age pyramid — Biome
(c) *Parthenium hysterophorus* — Threat to biodiversity
(d) Stratification — Population

28 During cell growth, DNA synthesis takes place in
(a) S-phase (b) G_1-phase
(c) G_2-phase (d) M-phase

29 Taylor conducted the experiments to prove semi-conservative mode of chromosome replication on
(a) *Vinca rosea* (b) *Vicia faba*
(c) *Drosophila melanogaster* (d) *E. coli*

30 Biochemical Oxygen Demand (BOD) may not be a good index for pollution in water bodies receiving effluents from
(a) domestic sewage (b) dairy industry
(c) petroleum industry (d) sugar industry

31 Red List contains data or information on
(a) all economically important plants
(b) plants whose products are in international trade
(c) threatened species
(d) marine vertebrates only

32 The highest DDT concentration in aquatic food chain shall occur in
(a) phytoplankton (b) seagull
(c) crab (d) eel

33 A lake which is rich in organic waste may result in
(a) increased population of aquatic organisms due to minerals
(b) drying of the lake due to algal bloom
(c) increased population of fish due to lots of nutrients
(d) mortality of fish due to lack of oxygen

34 A dioecious flowering plant prevents both
(a) autogamy and xenogamy
(b) autogamy and geitonogamy
(c) geitonogamy and xenogamy
(d) cleistogamy and xenogamy

35 Joint Forest Management Concept was introduced in India during
(a) 1970s (b) 1980s
(c) 1990s (d) 1960s

Section-B

36 Match the Column I with Column II and select the correct option using the codes given below.

	Column I		Column II
A.	Citric acid	1.	*Trichoderma*
B.	Cyclosporin	2.	*Clostridium*
C.	Statins	3.	*Aspergillus*
D.	Butyric acid	4.	*Monascus*

Codes

	A	B	C	D		A	B	C	D
(a)	3	1	2	4	(b)	3	1	4	2
(c)	1	4	2	3	(d)	3	4	1	2

37 Select the incorrect statement.
(a) The walls of diatoms are easily destructible
(b) 'Diatomaceous earth' is formed by the cell walls of diatoms
(c) Diatoms are chief producers in the oceans
(d) Diatoms are microscopic and float passively in water

38 You are given a tissue with its potential for differentiation in an artificial culture. Which of the following pairs of hormones would you add to the medium to secure shoots as well as roots?
(a) IAA and gibberellin
(b) Auxin and cytokinin
(c) Auxin and abscisic acid
(d) Gibberellin and abscisic acid

39 Study the four statements (I-IV) given below and select the two correct ones out of them :
I. Definition of biological species was given by Ernst Mayr.
II. Photoperiod does not affect reproduction in plants.
III. Binomial nomenclature system was given by RH Whittaker.
IV. In unicellular organisms, reproduction is synonymous with growth.
The correct statements are
(a) II and III (b) III and IV
(c) I and IV (d) I and II

40 Which one of the following statement is incorrect?
(a) Algae increase the level of dissolved oxygen in the immediate environment
(b) Algin is obtained from red algae and carrageenan from brown algae
(c) Agar-agar is obtained from *Gelidium* and *Gracilaria*
(d) *Laminaria* and *Sargassum* are used as food

41 Which one of the following statement is not correct?
(a) Offspring produced by the asexual reproduction are called clone
(b) Microscopic, motile asexual reproductive structures are called zoospores
(c) In potato, banana and ginger, the plantlets arise from the internodes present in the modified stem
(d) Water hyacinth, growing in the standing water, drains oxygen from water that leads to the death of fishes

42 Match the Column I with Column II and select the correct option using the codes given below.

	Column I		Column I
A.	Pistil fused together	1.	Gametogenesis
B.	Formation of gametes	2.	Pistillate
C.	Hyphae of higher ascomycetes	3.	Syncarpous
D.	Unisexual female flower	4.	Dikaryotic

Codes

	A	B	C	D		A	B	C	D
(a)	4	3	2	1	(b)	2	1	4	3
(c)	1	2	4	3	(d)	3	1	4	2

43 A few drops of sap were collected by cutting across a plant stem by a suitable method. The sap was tested chemically. Which one of the following test results indicates that it is phloem sap?

(a) Acidic (b) Alkaline
(c) Low refractive index (d) The absence of sugar

44 How many plants among *Indigofera, Sesbania, Salvia, Allium, Aloe*, mustard, groundnut, radish, gram and turnip have stamens with different length in their flowers?

(a) Three (b) Four (c) Five (d) Six

45 Which of the following is the correct sequence of events in the origin of life?

I. Formation of protobionts.
II. Synthesis of organic monomers.
III. Synthesis of organic polymers.
IV. Formation of DNA based genetic systems.

(a) I, II, III, IV (b) I, III, II, IV
(c) II, III, I, IV (d) II, III, IV, I

46 Match the Column I with Column II for housefly classification and select the correct option using the codes given below.

	Column I		Column II
A.	Family	1.	Diptera
B.	Order	2.	Arthropoda
C.	Class	3.	Muscidae
D.	Phylum	4.	Insecta

Codes

	A	B	C	D
(a)	3	1	4	2
(b)	3	2	4	1
(c)	4	3	2	1
(d)	4	2	1	3

47 Select the mismatch.

(a) Gas vacuoles — Green bacterial cells
(b) Large central vacuoles — Animal cells
(c) Protists — Eukaryotes
(d) Methanogens — Prokaryotes

48 Match the stages of meiosis in Column I to their characteristic features in Column II and select the correct option using the codes given below.

	Column I		Column II
A.	Pachytene	1.	Pairing of homologous chromosomes
B.	Metaphase-I	2.	Terminalisation of chiasmata
C.	Diakinesis	3.	Crossing-over takes place
D.	Zygotene	4.	Chromosomes align at equatorial plate

Codes

	A	B	C	D
(a)	3	4	2	1
(b)	1	4	2	3
(c)	2	4	3	1
(d)	4	3	2	1

49 Select the incorrect statement.

(a) Bacterial cell wall is made up of peptidoglycan
(b) Pili and fimbriae are mainly involved in motility of bacterial cells
(c) Cyanobacteria lack flagellated cells
(d) *Mycoplasma* is a wall less microorganism

50 Which of the following is made up of dead cells?

(a) Xylem parenchyma
(b) Collenchyma
(c) Phellem
(d) Phloem

Zoology

Section-A

51 If the length of a double helical DNA is 1.7 metres. The number of base pairs present in the DNA will be

(a) 1.7×10^5 (b) 1.9×10^5
(c) 1.7×10^9 (d) 5×10^9

52 The population of an insect species shows an explosive increase in numbers during rainy season followed by its disappearance at the end of the season. What can be interpreted from this?

(a) S-shaped or sigmoid growth of the insect species
(b) The food plants mature and die at the end of the rainy season
(c) The population growth curve is of J-type
(d) The population of insect predators increases enormously

53 Which one of the following combinations of microbes is responsible for the formation and flavour of yoghurt?

(a) *Lactobacillus casei* and *Streptococcus thermophilus*
(b) *Rhizobium meliloti* and *Azotobacter* sp.
(c) *Ectobioquerilluers ruburn* and *Sciencealla typhosa*
(d) *Bacillus subtilis* and *Escherichia coli*

54 WBCs accumulate at site of wound by

(a) hypertension (b) arteriosclerosis
(c) haemopoiesis (d) diapedesis

55 A study is being done to identify the biodivesity of a geographical region. This would help to identify

(a) endemic species (b) endangered species
(c) keystone species (d) All of these

56 Which of the following is not an evidence that endosymbiosis occurred in the origin of eukaryotes?

(a) Chloroplasts have their own DNA
(b) The inner membrane of a chloroplast is similar to prokaryotic membranes

(c) Mitochondria and chloroplasts are surrounded by two membranes
(d) The DNA in the eukaryotic nucleus codes for some enzymes in mitochondria

57 A transgenic human protein used for treating emphysema is

(a) α-1 antitrypsin (b) α-1 globulin
(c) Cry I Ab protein (d) Cry II Ac protein

58 What evidence most strongly suggests that an impact by an asteroid or meteorite may have caused the extinction of the dinosaurs?

(a) Fossils show that dinosaurs suffered from cold and starvation
(b) Sedimentary rocks contain a layer of mineral uncommon on earth
(c) There have been several near misses in recent years
(d) The dinosaurs disappeared rather abruptly—virtually overnight

59 Researchers found that when laboratory rats were already infected with a virus, they were better able to resist infection by a second completely different virus. The first infection apparently caused……, which protected the rats from the second infection.

(a) increased stress (b) secretion of interferons
(c) production of antibodies (d) passive immunity

60 The ability to reproduce cannot be an all inclusive defining trait of living beings because

(a) growth is not exhibited by all living forms
(b) many organisms do not reproduce
(c) non-living forms can show reproduction
(d) all living organisms show small period of reproductive phase in their life

61 RBC and a plant cell (with thick cell wall) are placed in distilled water. The solute concentration is the same in both the cells. What changes would be observed in them?

(a) Both plant cell and RBC would not undergo any change
(b) The RBC would increase in size and burst, while the plant cell would remain about the same size
(c) The plant cell would increase in size and burst, while the RBC would remain about the same size
(d) Both plant cell and RBC would decrease in size and collapse

62 Contraceptive pills are considered very effective and have less side effects. These prevent conception by

(a) inhibition of ovulation
(b) inhibition of implantation
(c) acting as a physical barrier to meeting sperm and ovum
(d) Both (a) and (b)

63 A chemist has discovered a drug that blocks glucose phosphate isomerase, an enzyme that catalyses the second reaction in glycolysis. He wants to use the drug for bacterial infection in people. But he cannot do this because

(a) bacteria are facultative anaerobes; they usually do not need to do glycolysis
(b) glycolysis produces so little ATP that the drug will have little effect
(c) human cells also do glycolysis; the drug might also poison them
(d) bacteria do not perform glycolysis

64 Which type of hybridisation is done for mule?

(a) Inbreeding hybridisation (b) Outbreeding hybridisation
(c) Interspecific hybridisation (d) Intraspecific hybridisation

65 The disease in poultry, which reduces immunity and spreads through contaminated food is

(a) Ranikhet disease (b) aflatoxicosis
(c) thrush (d) Marek's disease

66 The Kyoto protocol was adopted at the

(a) United Nations Framework Convention on Climatic change (UNFCC) in 1992
(b) Third conference of the UNFCC in 1997
(c) Convention on the Transboundary effects of Industrial Accidents
(d) Convention on Biological Diversity

67 Which of the following statement is correct regarding hypothalamic control of pituitary function?

(a) All the hypothalamic hormones are synthesised and secreted by neurons
(b) Blood flows from the anterior pituitary to the hypothalamus in the portal vessels
(c) The hypothalamic releasing hormones reach the general circulation in significant amount
(d) Loss of dopaminergic neurons in the hypothalamus is likely to lead to a fall in the secretion of prolactin

68 In a random mating population in equilibrium, which one of the following brings about a change in gene frequency in a non-directional manner?

(a) Mutations (b) Random drift
(c) Selection (d) Migration

69 In ileum, which of the following is absorbed?

(a) Vitamin-K
(b) Monosaccharides
(c) Bile salts
(d) Fats

70 Which of the following discoveries resulted in a Nobel Prize?

(a) Recombination of linked genes
(b) Genetic engineering
(c) X-rays induce sex-linked recessive lethal mutations
(d) Cytoplasmic inheritance

71 Identify which of the following phyla is correctly matched with its two general characteristics.

(a) Echinodermata–Pentamerous, radial symmetry and mostly internal fertilisation
(b) Mollusca–Normally oviparous and development through a trochophore or veliger larva

(c) Arthropoda–Body divided into head, thorax and abdomen and respiration by trachea
(d) Chordata–Notochord at some stage and separate anal and urinary opening to the outside

72 Which of the following constitutes for lymph?
(a) WBCs and serum
(b) All components of blood except RBCs and some proteins
(c) RBCs, WBCs and plasma
(d) RBCs, proteins and platelets

73 Biological equilibrium is found among the
(a) producers, consumers and decomposers
(b) producers and consumers
(c) producers and decomposers
(d) None of the above

74 Synthesis of RNA molecule is terminated by a signal which is recognised by
(a) α (alpha) factor (b) γ (gamma) factor
(c) ρ (rho) factor (d) δ (delta) factor

75 Which of the following depicts the correct pathway of transport of sperms?
(a) Rete testis → Efferent ductules → Epididymis → Vas deferens
(b) Rete testis → Epididymis → Efferent ductules → Vas deferens
(c) Rete testis → Vas deferens → Efferent ductules → Epididymis
(d) Efferent ductules → Rete testis → Vas deferens → Epididymis

76 If '+' sign is assigned to beneficial interaction, '–' sign to detrimental and '0' sign to neutral interaction, then the population interaction represented by '+' '–' refers to
(a) mutualism (b) amensalism
(c) commensalism (d) parasitism

77 Smooth muscles are
(a) involuntary, fusiform, non-striated
(b) voluntary, multinucleate, cylindrical
(c) involuntary, cylindrical, striated
(d) voluntary, spindle-shaped, uninucleate

78 Which hormones do stimulate the production of pancreatic juice and bicarbonate?
(a) Angiotensin and epinephrine
(b) Gastrin and insulin
(c) Cholecystokinin and secretin
(d) Insulin and glucagon

79 Name the ion responsible for unmasking of active sites for myosin for cross-bridge activity during muscle contraction.
(a) Calcium (b) Magnesium
(c) Sodium (d) Potassium

80 The chronological order of human evolution from early to the recent is
(a) *Australopithecus* → *Ramapithecus* → *Homo habilis* → *Homo erectus*
(b) *Ramapithecus* → *Australopithecus* → *Homo habilis* → *Homo erectus*
(c) *Ramapithecus* → *Homo habilis* → *Australopithecus* → *Homo erectus*
(d) *Australopithecus* → *Homo habilis* → *Ramapithecus* → *Homo erectus*

81 Serum differs from blood in
(a) lacking globulins (b) lacking albumins
(c) lacking clotting factors (d) lacking antibodies

82 Which of the following is incorrect regarding vasectomy?
(a) No sperm occurs in seminal fluid
(b) No sperm occurs in epididymis
(c) Vasa deferentia is cut and tied
(d) Irreversible sterility

83 Graves' disease is caused due to
(a) hyposecretion of thyroid gland
(b) hypersecretion of thyroid gland
(c) hyposecretion of adrenal gland
(d) hypersecretion of adrenal gland

84 Which of the following is correct for *r*-selected species?
(a) Large number of progeny with small size
(b) Large number of progeny with large size
(c) Small number of progeny with small size
(d) Small number of progeny with large size

85 As a result of ligation of a foreign DNA at the *Bam* HI site carrying tetracycline resistance gene in pBR322, the recombinant plasmid will exhibit
(a) only ampicillin resistance
(b) tetracycline resistant
(c) ampicillin sensitivity
(d) sensitivity towards both the tetracycline and ampicillin

Section-B

86 Choose the correct statement.
(a) Nociceptors respond to changes in pressure
(b) Meissner's corpuscles are thermoreceptors
(c) Photoreceptors in the human eye are depolarised during darkness and become hyperpolarised in response to the light stimulus
(d) Receptors do not produce graded potentials

87 Geneticists suspect that the extrachromosome seen in Down's syndrome usually comes from the egg, rather than the sperm, because
(a) eggs are produced so rapidly that there is more chance for error
(b) Down's syndrome is due to a dominant gene in women, a recessive gene in men

(c) most women inherit Down's syndrome from their mothers
(d) meiosis takes longer in the ovary, increasing the likelihood of error

88 Which kind of therapy was given in 1990 to a four-year-old girl with Adenosine Deaminase (ADA) deficiency?
(a) Gene therapy
(b) Chemotherapy
(c) Immunotherapy
(d) Radiation therapy

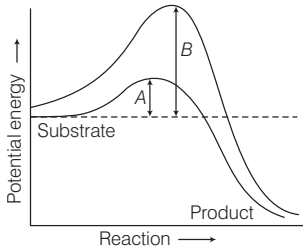
89 Match the Column I with Column II and select the correct option using the codes given below.

	Column I		Column II
A.	Mons pubis	1.	Embryo formation
B.	Antrum	2.	Sperm
C.	Trophectoderm	3.	Female external genitalia
D.	Nebenkern	4.	Graafian follicle

Codes

	A	B	C	D
(a)	3	4	2	1
(b)	3	4	1	2
(c)	3	1	4	2
(d)	1	4	3	2

90 Which of the following describes the given graph correctly?



(a) Endothermic reaction with energy *A* in the presence of enzyme and *B* in the absence of enzyme
(b) Exothermic reaction with energy *A* in the presence of enzyme and *B* in the absence of enzyme
(c) Endothermic reaction with energy *A* in the absence of enzyme and *B* in the presence of enzyme
(d) Exothermic reaction with energy *A* in the absence of enzyme and *B* in the presence of enzyme

91 If a colourblind man marries a woman who is homozygous for normal colour vision, the probability of their son being colourblind is
(a) 0 (b) 0.5
(c) 0.75 (d) 1

92 Read the following statements.
I. Preganglionic nerve fibres of III, VII, IX and X cranial nerves are a part of the parasympathetic nervous system.
II. VII, IX and X cranial nerves are mixed nerves.
III. Trochlear nerves are the largest cranial nerves.
IV. Abducens nerves are motor nerves and originate from the Gasserian ganglia.

Which of the above statements are correct?
(a) I and IV (b) I and II
(c) II and III (d) I and III

93 Match the following columns.

Column I (Types of bacteria)	Column II (Activity)
A. *Streptomyces*	1. Food poisoning
B. *Rhizobium*	2. Source of antibiotics
C. *Nitrosomonas*	3. Nitrogen-fixation
D. *Acetobacter*	4. Nitrification
	5. Vinegar synthesis

Codes

	A	B	C	D
(a)	2	3	1	5
(b)	2	3	4	5
(c)	4	5	1	3
(d)	5	1	3	4

94 Match the following columns.

Column I (Bacteria)	Column II (Human disease)
A. *Treponema pallidum*	1. Syphilis
B. *Bordetella pertussis*	2. Whooping cough
C. *Pasteurella pestis*	3. Bubonic plague
D. *Vibrio cholerae*	4. Cholera

Codes

	A	B	C	D
(a)	1	2	3	4
(b)	4	3	2	1
(c)	1	3	2	4
(d)	3	1	2	4

95 Read the statements regarding muscle proteins.
I. Actin is a thin filament and is made up of two F-actins.
II. The complex protein, tropomyosin is distributed at regular intervals of troponin.
III. Myosin is a thick filament, which is also a polymerised protein.
IV. The globular head of meromyosin consists of Light Meromyosin (LMM).

Which of the above statements are correct?
(a) I, II and III (b) I, II and IV
(c) I and III (d) II and IV

96 Refer the following features.
I. Adenohypophysis produces gonadotrophins.
II. Besides sex cells, hormones are also produced by testis and ovary.
III. Testosterone is produced by Leydig's cells.
IV. Oestrogen is produced by ovary.

Which of the above factors influence secondary sexual characters?
(a) III and IV
(b) II, III and IV
(c) II and III
(d) I, II, III and IV

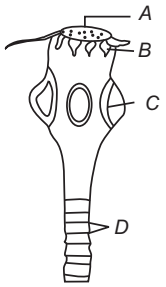
97 Match the following columns.

Column I (Excretory organ)	Column II (Animal)
A. Metanephridia	1. *Hydra*
B. Malpighian tubules	2. Leech
C. Protonephridia	3. Shark
D. Kidneys	4. Flatworms
	5. Cockroach

Codes

	A	B	C	D
(a)	2	5	4	3
(b)	4	2	1	5
(c)	1	2	4	3
(d)	2	4	5	4

98 In the given diagram, different parts are indicated by alphabets. Choose the answer, in which these alphabets correctly match with the parts they indicate.



(a) *A*–Rostellum *B*–Hooks *C*–Sucker *D*–Proglottids
(b) *A*–Suctorial mouth *B*–Hooks *C*–Sucker *D*–Segments
(c) *A*–Mouth *B*–Tentacles *C*–Sucker *D*–Segments
(d) *A*–Sucker *B*–Hairs *C*–Ring *D*–Proglottids

99 Mammalian lungs have a very high number of air sacs called alveoli, which permit
(a) increased volume of inspired air
(b) increased surface area for gaseous exchange
(c) spongy texture of lungs
(d) active nerve supply

100 Match the following columns.

Column I		Column II	
A.	Inguinal canal	1.	Network of seminiferous tubules
B.	Rete testes	2.	Secondary sexual character
C.	Leydig's cells	3.	Far descending of testis
D.	Prepuce	4.	Spongy erectile tissue
E.	Corpora cavernosa	5.	Terminal skin of penis

Codes

	A	B	C	D	E
(a)	1	2	3	5	4
(b)	3	1	4	2	5
(c)	3	1	2	5	4
(d)	2	4	3	5	1

Answers

Botany

1	*(b)*	2	*(a)*	3	*(d)*	4	*(d)*	5	*(d)*	6	*(a)*	7	*(a)*	8	*(a)*	9	*(b)*	10	*(d)*
11	*(a)*	12	*(c)*	13	*(b)*	14	*(a)*	15	*(b)*	16	*(c)*	17	*(a)*	18	*(b)*	19	*(c)*	20	*(a)*
21	*(c)*	22	*(c)*	23	*(c)*	24	*(d)*	25	*(b)*	26	*(c)*	27	*(c)*	28	*(a)*	29	*(b)*	30	*(c)*
31	*(c)*	32	*(b)*	33	*(d)*	34	*(b)*	35	*(b)*	36	*(b)*	37	*(a)*	38	*(b)*	39	*(c)*	40	*(b)*
41	*(c)*	42	*(d)*	43	*(b)*	44	*(b)*	45	*(c)*	46	*(a)*	47	*(b)*	48	*(a)*	49	*(b)*	50	*(c)*

Zoology

51	*(d)*	52	*(c)*	53	*(a)*	54	*(a)*	55	*(d)*	56	*(d)*	57	*(a)*	58	*(b)*	59	*(b)*	60	*(b)*
61	*(b)*	62	*(d)*	63	*(c)*	64	*(c)*	65	*(b)*	66	*(b)*	67	*(a)*	68	*(b)*	69	*(c)*	70	*(c)*
71	*(c)*	72	*(b)*	73	*(a)*	74	*(c)*	75	*(a)*	76	*(d)*	77	*(a)*	78	*(c)*	79	*(a)*	80	*(b)*
81	*(c)*	82	*(b)*	83	*(b)*	84	*(a)*	85	*(a)*	86	*(c)*	87	*(d)*	88	*(a)*	89	*(b)*	90	*(b)*
91	*(a)*	92	*(b)*	93	*(b)*	94	*(a)*	95	*(c)*	96	*(d)*	97	*(a)*	98	*(a)*	99	*(b)*	100	*(c)*