

Common Quarterly Examination - September 2013

Standard 11
BIOLOGY

Time: 3.00 Hrs.

Marks: 150

N.B.: Candidates should be answer Part I (Botany) and Part II (Zoology) in separate answer sheets.

PART - I (BOTANY)
Section - A

Marks : 75
14×1=14

Note: i) Answer all the questions. ii) Choose the correct answer.

- 1) Carolus Linnaeus proposed the following system of classification.
a) Phylogenetic b) Two kingdom c) Five kingdom d) Natural
- 2) Developing a vaccine for SARS is difficult because
a) it spreads by infectious materials b) it is an enveloped virus
c) it is constantly changing it's form d) it has ssRNA
- 3) Cell which keeps changing it's shape is called
a) Spirilla b) Pleomorphic c) Symbiont d) Gram-negative
- 4) Phycology is the study of
a) Plants b) Virus c) Algae d) Bacteria
- 5) The equivalent structure of megasporangium in a seed plant is called an
a) Ovule b) Embryosac c) Pollensac d) Style
- 6) An exception to cell theory is
a) Fungi b) Bryophytes c) Gymnosperms d) Pteridophytes
- 7) Ribosomes that exist in groups are called
a) Polysomes b) Centrosomes c) Lysosomes d) Dictyosomes
- 8) Phagocytosis is also known as
a) cell eating b) cell death c) cell drinking d) cell lysis
- 9) The internal system of inter-connected membrane limited sacs of chloroplasts are called
a) Grana b) Stroma c) Thylakoids d) Cisternae
- 10) Cytokinesis is the division of
a) Cytoplasm b) Nucleus c) Chloroplast d) Centriole
- 11) The type of phyllotaxy found in calotropis is
a) alternate b) opposite decussate c) opposite superposed d) ternate
- 12) Power house of a cell is
a) Chloroplast b) Lysosome c) Mitochondria d) Ribosome
- 13) This is a homogamous head with ray florets
a) Vernonia b) Tridax c) Launaea d) Helianthus
- 14) A flower is said to be complete when it has _____ whorls.
a) one b) three c) two d) four

Section - B

7×3=21

Note: Answer any seven questions.

- 15) Define Systematics.
- 16) Define Virus.
- 17) What are Commensals?
- 18) Justify the statement by Pasteur "Without fungi even death will be incomplete".
- 19) What is agar-agar?
- 20) What is peat?
- 21) What are the functions of Nucleus?
- 22) What is crossing-over?
- 23) What are pneumatophores?
- 24) What is a bisexual flower?

Section - C

4×5=20

Note: i) Answer any four questions. ii) Question No. 25 is compulsory.

- 25) Write a note on "Significance of Viruses".
- 26) Write about the symbiotic mode of nutrition as seen in fungi.
- 27) What are the salient feature of pteridophytes?
- 28) State the important features of cell doctrine.
- 29) Draw a plant cell and label it's parts.
- 30) Describe the pitcher plant.
- 31) Explain the hypogynous and epigynous flowers with example.

Section - D

2×10=20

Note: i) Answer any two questions. ii) Draw diagrams wherever necessary.

- 32) Write an essay on the cause, symptoms and prevention of AIDS.
- 33) Write an essay on the economic importance of algae.
- 34) Describe Mitosis. Add a note on its significance.
- 35) Give an account of different types of phyllotaxy with example.

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PART - II (ZOOLOGY)
Section - A

Marks : 75
16×1=16

Note: i) Answer all questions. ii) Choose the correct answer.
iii) Each question carries one mark.

- 1) Five kingdom concept does not include _____
a) Fungi b) Viruses c) Flowering plant d) Bacteria
- 2) The amniotes are characterised by the presence of _____.
a) four legs b) amphibious life c) egg membranes d) metamorphosis
- 3) The famous book 'Systema naturae' was published by
a) Lamarck b) Charles Darwin c) E. Mayr d) Carl Linnaeus
- 4) Tapeworms belong to the class
a) Platyhelminthes b) Cestoda c) Turbellaria d) Trematoda
- 5) The substance that causes malarial fever is _____.
a) Haemolymph b) Haemozoin c) Sporogony d) Schizogony
- 6) The number of quill feathers in each wing of Pigeon is _____.
a) 11 b) 12 c) 18 d) 23
- 7) Lung cancer is caused by _____.
a) Cigarette smoking b) Shale oil c) radio active ores d) beta naphthylamine
- 8) One Angstrom (A) is equal to
a) 10^{-5} m b) 10^{-7} m c) 10^{-8} m d) 10^{-10} m
- 9) Mitochondria were first discovered by
a) Benda b) Kolliker c) Embden d) Mayerhof
- 10) The enzyme found in the peroxisomes is _____.
a) Proteases b) Phosphatases c) Nucleases d) Catalases
- 11) The excretory organs of Earthworms are _____.
a) Nephridia b) Skin c) Flame cells d) Kidneys
- 12) The respiratory structure of mollusca is _____.
a) Mantle b) Ctenidium c) Tentacle d) Trachea
- 13) The ribosomes are meant for
a) Phosphorylation b) respiration c) protein synthesis d) oxidation
- 14) The name cell was coined by _____.
a) Leeuwenhock b) Robert Brown c) Robert Hook d) Galileo
- 15) The number of facial bones are
a) 26 b) 25 c) 14 d) 22
- 16) Oil glands in our skin secrete _____.
a) Sebum b) Sweat c) Melanin pigment d) Hair

Section - B

8×3=24

Note: Answer any eight questions.

- 17) What are amniotes?
- 18) What are lateral hearts?
- 19) What is pecton?
- 20) What is karyotyping?
- 21) What is haemocoel?
- 22) What is metastasis?
- 23) What is autolysis?
- 24) What are RER and SER?
- 25) What is a trochophore?
- 26) What is Retino blastoma? How is it caused?
- 27) What is keratinization?
- 28) What are floating ribs?

Section - C

3×5=15

Note: i) Answer any three questions. ii) Each question carries 5 marks.

- 29) Write notes on primates.
- 30) Write a short notes on the Phylum Mollusca.
- 31) Provide the structure of golgi apparatus.
- 32) Explain the causes of Cancer.
- 33) Give an account of the Nail and its structure.

Section - D

2×10=20

Note: Answer any two questions.

- 34) Describe the external features of *Collumba livia*.
- 35) Describe the digestive system of earthworm with a neat labelled sketch.
- 36) What are the characteristic features of the Phylum Arthropoda? Describe its classes with examples.
- 37) Describe the various models proposed to explain the structure of plasma membrane.