

RANI PET - DIST

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11C14

COMMON HALF YEARLY EXAMINATION - 2022

Standard - XI

Reg.No.

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Time: 3.00 hrs.

BIOLOGY

Marks: 70

BIO - BOTANY

Marks: 35

PART - 1

Note : i) Answer all the questions. ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer: $8 \times 1 = 8$

- Identify the Archaeobacterium
a) Acetobacter b) Erwinia c) Treponema d) Methanobacterium
- Which of the following is a flowering plant with nodules containing filamentous nitrogen fixing micro organisms.
a) Crotalaria Juncea b) Cycas revoluta c) Cicer arietinum d) Casuarina equisetifolia
- _____ are called power house of a cell.
a) Chloroplast b) Mitochondria c) Golgi bodies d) Nucleus
- Colchicine prevents the mitosis of the cells at which of the following stage
a) Anaphase b) Prophase c) Metaphase d) Interphase
- The most basic amino acid is
a) Arginine b) Histidine c) Glycine d) Glutamine
- Refer to the given figure and select the correct statement:
a) Phloem occurs on both the outer and inner sides of xylem.
b) Phloem lies in the centre with Xylem surrounding it.
c) Cambium is absent between Xylem and Phloem
d) Xylem and Phloem are present in concentric circles one around the other in some stems.
- Which Chlorophyll molecule does not have a Phytol tail?
a) Chl - a b) Chl - b c) Chl - c d) Chl - d
- The number of ATP molecules formed by complete oxidation of one molecule of Pyruvic acid is
a) 12 b) 13 c) 14 d) 15



PART - 2

II. Note : Answer any four questions:

 $4 \times 2 = 8$

- Differentiate homoimerous and heteromerous lichens.
- What are called bisexual flower? Give example.
- Give an account of G₀ phase.
- Write the overall equation of respiration.
- Define apical dominance.
- What is Ascent of sap?

PART - 3

III. Note : Answer any three questions. Question No.19 is compulsory. $3 \times 3 = 9$

- Write the distinguishing features of monera.
- Differentiate between cyclic and non-cyclic photo phosphorylation.
- Respiratory quotient is zero in succulent plants. Why?
- Write the physiological effects of Cytokinins.
- Draw and label the structure of the Polytenic Chromosome.

PART - 4

IV. Answer the following questions:

 $2 \times 5 = 10$

- Distinguish between prokaryotes and eukaryotes.
Give the floral characters of Datura metal.
- Explain the insectivorous mode of nutrition in angiosperms?
Draw a flow chart of Calvin cycle.

(OR)

(OR)

2

XI - BIOLOGY

BIO - ZOOLOGY

Marks: 35

SECTION - I

Note : i) Answer all the questions. ii) Choose the most appropriate answer and write the option code and the corresponding answer. 8×1=8

- Sexually earthworms are
 - sexes are separate
 - Hermaphroditic but not self fertilizing
 - Hermaphroditic and self fertilizing
 - Pathogenic
- Match Column I with Column II and Choose the correct option.

Column I	Column II
P) Small intestine	i) Largest factory
Q) Pancreas	ii) Absorption of water
R) Liver	iii) Carrying electrolytic solution
S) Colon	iv) Digestion and Absorption
a) P - iv, Q - iii, R - i, S - ii	b) P - iii, Q - ii, R - i, S - iv
c) P - iv, Q - iii, R - ii, S - i	d) P - ii, Q - iv, R - iii, S - i
- Which one of the following is not involved in blood clotting?
 - Fibrin
 - Calcium
 - Platelets
 - Bilirubin
- The fundamental unit of muscle fibre is
 - Sarcomere
 - Sarcoplasm
 - Myosin
 - Actin
- The limbic system is called
 - Emotional brain
 - Cerebrum
 - Cerebellum
 - Brain stem
- Hyper secretion of GH in children leads to
 - Cretinism
 - Gigantism
 - Grave's disease
 - Tetany
- Which one of the following is not an endemic species of earthworm?
 - Perionyx
 - Lampito
 - Eudrillus
 - Octochaetona
- Which of the following is an egg laying mammal?
 - Delphinus
 - Macropus
 - Ornithorhynchus
 - Equus

SECTION - II

Answer any four of the following questions:

4×2=8

- What is the role of Charles Darwin in relation to concept of Species?
- What is gastro oesophagus reflex disorder?
- What is meant by juxta medullary nephrons?
- Cornea transplant in human is almost never rejected. State the reason.
- Name the hormones responsible for circadian rhythm.
- Write the advantages of Vermicomposting.

SECTION - III

Answer any three of the following. Question No.19 is compulsory. 3×3=9

- List the characteristic features that distinguish cartilaginous fishes with living jawless fishes.
- What are cell junction. Write its types.
- Write notes on Appendicitis.
- What is Cardio Pulmonary resuscitation? When it is done?
- Write any three uses of silk.

SECTION - IV

Answer the following questions:

2×5=10

- Write notes about classical taxonomical tools?
Differentiate male and female Cockroach.
- Describe the structure of a typical long bone.
Tabulate the different types of Silk Worm.

(OR)

(OR)