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(To be filled in by the candidate)

Biology

Inter (Part-I)-A-2021

Time : 20 Minutes

Paper : I

Objective - (III)

Marks : 17

Paper Code

6

4

6

5

SwL-21

Note: - You have four choices for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number in your answer book. Use marker or pen to fill the circles. Cutting or filling up two or more circles will result no mark.

Q.1	Questions	A	B	C	D
1.	Scientific name of Sago-palm is:	Cycas	Pinus	Taxus	Picea
2.	Colour of spores of smuts is:	brown	yellow	black	blue
3.	Euglenoids are thought to be closely related to:	zooflagellates	dinoflagellates	diatoms	brown algae
4.	Hepatitis is inflammation of:	Kidney	Heart	Liver	Lungs
5.	Which is composed of double stranded DNA molecules?	Mesosomes	Ribosomes	Plasmids	Granules
6.	Cell membrane is chemically composed of how much proteins?	20 - 40 %	40 - 60 %	60 - 80 %	80 - 100 %
7.	Enzymes involved in synthesis of protein are integral part of:	Mitochondria	Ribosomes	Chloroplast	Nucleolus
8.	Which of the given value is the heat capacity of water?	1.0	2.0	3.0	4.0
9.	In biological control an aphid is being controlled by:	Honey bee	Wasp	Mosquito	Dragon fly
10.	Plasmodesmata are found in:	symplast	apoplast	protoplast	chloroplast
11.	Which constitutes about 90% of plasma?	inorganic ion	water	proteins	organic nutrients
12.	Which help in voice production when vibrated by air?	spinal cord	vocal cord	trachea	bronchi
13.	All of the Insectivorous plants are true.	Prokaryotes	Heterotrophs	Autotrophs	Protists
14.	Calvin cycle is also known as:	C_2 - pathway	C_3 - pathway	C_4 - pathway	C_5 - pathway
15.	Molecular formula of chlorophyll "a" is:	$C_{55}H_{70}O_5N_4Mg$	$C_{50}H_{70}O_5N_4Mg$	$C_{54}H_{72}O_5N_4Mg$	$C_{55}H_{72}O_5N_4Mg$
16.	J-shaped stomach is found in:	Shark	Perch	Trout	Plaice
17.	The larvae such as bipinnaria are found in phylum.	Porifera	Coelentrata	Echinodermata	Annelida

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Biology

Inter (Part-I)-A-2021

Time : 2:40 Hours

Paper : I

Subjective SWL-21

Marks : 68

Note: Section I is compulsory. Attempt any 3 questions from Section II.

(SECTION-I)

2. Write short answers to any Eight parts. (8 x 2 = 16)
- Draw the formation of Glycylalanine showing peptide linkage.
 - Define Reversible and Irreversible Inhibitors.
 - Give a diagrammatic representation of an enzyme substrate reaction (Lock and key model).
 - Differentiate between enzyme and inhibitors.
 - Differentiate between obligate and facultative parasites.
 - How fungi is economically helpful in the manufacture of antibiotics and other drugs?
 - How sponges reproduce?
 - How Platyhelminthes have adapted themselves to the parasitic mode of life?
 - Differentiate between mantle and radula.
 - Write down three basic characteristics of Chordates.
 - What happens to pyruvic acid before entering into citric acid cycle?
 - Define Alcoholic Fermentation.
3. Write short answers to any Eight parts. (8 x 2 = 16)
- Differentiate between Microbiology and Biotechnology.
 - What are endangered species? Give example.
 - Differentiate between chromoplasts and leucoplasts.
 - Give any two functions of Nucleolus.
 - Name a parasitic amoeba. What disease does it cause?
 - Write two examples of zooflagellates.
 - Give two characters of green algae similar to green plants.
 - What are Euglenoids? Give their evolutionary significance.
 - Define Double Fertilization. How is it important for storage of food?
 - Differentiate between homosporous and heterosporous.
 - Differentiate between active and passive immunity.
 - Differentiate between thrombus and embolus.
4. Write short answers to any Six parts. (6 x 2 = 12)
- Give biological classification of Corn plant.
 - Define Cysts.
 - What is Swallowing?
 - Define Dyspepsia, also give its symptoms.
 - How does Sundew get its food?
 - Define Larynx.
 - Define Alveoli.
 - How do carbon dioxide and temperature affect the capacity of haemoglobin to combine with oxygen?
 - Define Carcinoma.

(SECTION-II)

(Each question carries Eight (4+4=8) Marks)

5. (a) Discuss biology and the service of mankind.
(b) Describe the hypothesis "Influx of K⁺ ions" about opening and closing of stomata.
6. (a) Write a note on amino acids.
(b) Discuss the importance of fungi in genetic research, food and pharmaceutical industry.
7. (a) Write a note on Nutrition in Bacteria.
(b) Write life cycle of an angiospermic plant.
8. (a) Write a note on any four viral diseases in man.
(b) Make a complete sketch of glycolysis.
9. (a) Describe in detail the structure and functions of Endoplasmic Reticulum.
(b) Write a note on Food poisoning.