

**BOARD OF INTERMEDIATE AND SECONDARY EDUCATION,
MULTAN**

OBJECTIVE KEY FOR INTER (PART I / II) Annual Examination, 2016.

Name of Subject 2015-2017

Session 2012-2014

Group: NEW

Group: OLD

Q. Nos.	Paper Code	Paper Code	Paper Code	Paper Code
	2461	2463	2465	2467
1.	B	D	A	A
2.	C	ABCD	D	B
3.	C	B	B	A
4.	B	A	A	C
5.	D	B	B	B
6.	ABCD	D	A	C
7.	B	A	C	
8.	A	D	B	B
9.	B	B	C	D
10.	D	A	C	ABCD
11.	A	B	B	B
12.	D	A	D	A
13.	B	C	ABCD	B
14.	A	B	B	D
15.	B	C	A	A
16.	A	C	B	D
17.	C	B	D	B
18.	/	/	/	/
19.	/	/	/	/
20.	/	/	/	/

Q. Nos.	Paper Code	Paper Code	Paper Code	Paper Code
	6461	6463	6465	6467
1.	A	B	C	B
2.	C	C	D	D
3.	C	B	B	A
4.	C	B	C	C
5.	B	B	B	D
6.	D	A	B	B
7.	A	A	B	C
8.	C	B	A	B
9.	D	A	A	B
10.	B	C	B	B
11.	C	C	A	A
12.	B	C	C	A
13.	B	B	C	B
14.	B	D	C	A
15.	A	A	B	C
16.	A	C	D	C
17.	B	D	A	C
18.	/	/	/	/
19.	/	/	/	/
20.	/	/	/	/

INTERMEDIATE PART-I (11th CLASS)

BIOLOGY PAPER-I

(SESSION 2012-2014)

TIME ALLOWED: 20 Minutes

OBJECTIVE

MAXIMUM MARKS: 17

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. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve question on this sheet of OBJECTIVE PAPER.

Q.No.1

- (1) Tentative explanation of the observation is called:-
 (A) Hypothesis (B) Deduction (C) Theory (D) Law
- (2) _____ is an unsaturated fatty acid.
 (A) Acetic acid (B) Butyric acid (C) Oleic acid (D) Palmitic acid
- (3) The loosely attached non protein part are:-
 (A) Activator (B) Prosthetic group (C) Coenzyme (D) Substrate
- (4) Lysosomes were discovered by:-
 (A) Sanger (B) Palade (C) De Duve (D) Brown
- (5) Mad Cow disease is caused by:-
 (A) Virus (B) Prion (C) Bacteria (D) Fungi
- (6) Structure involved in DNA replication in bacteria:-
 (A) Ribosomes (B) Cell membrane (C) Plasmid (D) Mesosomes
- (7) The shells of actinopods are made up of:-
 (A) Silica (B) $CaCO_3$ (C) Sponging fiber (D) $NaHCO_3$
- (8) _____ are poisonous fungi.
 (A) Morels (B) Truffles (C) Toadstools (D) Rust
- (9) The first action spectrum was obtained by:-
 (A) Calvin (B) Krebs (C) Van Neils (D) T.W. Engelmann
- (10) The pH of fresh Chyme in stomach is:-
 (A) 1 : 00 (B) 3 : 00 (C) 4 : 00 (D) 5 : 00
- (11) Respiratory organs in fishes are:-
 (A) Lungs (B) Air sac (C) Gills (D) Trachea
- (12) The presence of excessive fluid in the tissue is:-
 (A) Thalassaemia (B) Oedema (C) Leucaemia (D) Splenomegaly
- (13) _____ is the largest artery.
 (A) Coronary (B) Aorta (C) Iliac (D) Vena Cava
- (14) The seed of plants used as "ratti" is:-
 (A) Hypogaea (B) Abrus (C) Dalbergia (D) Clitoria
- (15) The leaves of plants used as blood purifier are:-
 (A) Acacia nilotica (B) Albizzia lebbek (C) Mimosa Pudica (D) Prosopis Cineraria
- (16) The excretory system of Arthropods is composed of:-
 (A) Malpighian tubules (B) Flame cell (C) Nephridia (D) Nephron
- (17) _____ is called shipworm.
 (A) Slug (B) Teredo (C) Loligo (D) Sepia

INTERMEDIATE PART-I (11th CLASS)
BIOLOGY PAPER-I (SESSION 2012-2014) TIME ALLOWED: 3.10 Hours
SUBJECTIVE MAXIMUM MARKS: 83

NOTE: - Write same question number and its part number on answer book,
as given in the question paper.

SECTION-I

2. Attempt any eight parts.

8 × 2 = 16

- (i) Define Molecular Biology.
- (ii) What do you mean by Hypothesis and Law?
- (iii) What are Waxes?
- (iv) Differentiate between Competitive Inhibitors and Non-Competitive Inhibitors.
- (v) What is Cofactor and Prosthetic Group?
- (vi) How does Enzyme concentration affect the rate of Enzyme action?
- (vii) What are Choanoflagellates? Give an example.
- (viii) What are Green Algae? Give its importance.
- (ix) What are Water Molds?
- (x) Give any two characters of Ciliates.
- (xi) What is Nuclear Mitoses?
- (xii) Define Mycorrhizae. Give its types.

3. Attempt any eight parts.

8 × 2 = 16

- (i) What are Storage Diseases? Give two examples.
- (ii) How is the cell wall of Prokaryotes different from that of Eukaryotes?
- (iii) Differentiate between Polyps and Medusae.
- (iv) Compare Ostia ad Osculum.
- (v) What is Haemocyanin? Which animal group does this possess?
- (vi) What is Marsupium? What role does it play?
- (vii) Name Accessory Pigments. Give their two roles.
- (viii) Differentiate between Absorption Spectrum and Action Spectrum.
- (ix) List the properties of respiratory surfaces in animals.
- (x) Give three major reactions of Photorespiration.
- (xi) How are the lungs of birds different from that of other vertebrates?
- (xii) Compare the concentration of CO_2 in Arterial and Venous blood.

4. Attempt any six parts.

6 × 2 = 12

- (i) What are Obligate Intracellular Parasites?
- (ii) Differentiate between Spores and Cysts.
- (iii) What is Double Fertilization?
- (iv) Write two significance of Alternation of Generations.
- (v) Define Heart burn or Pyrosis.
- (vi) How the gall stones are formed?
- (vii) What is the function of Trypsin?
- (viii) Distinguish between Osmotic Potential and Pressure Potential.
- (ix) What is Transpiration Pull?

P.T.O.

SECTION-II**NOTE: - Attempt any three questions of the following:-**

- | | | |
|-------|---|---|
| 5.(a) | Describe the role of Biology in increasing food production. | 4 |
| (b) | Describe life cycle of Adiantum. | 4 |
| 6.(a) | What are Proteins? Classify them on the basis of their structure. | 4 |
| (b) | Describe digestion in the stomach of man. | 4 |
| 7.(a) | Describe the structure and function of mitochondria. | 4 |
| (b) | What are the economic losses due to fungi? | 4 |
| 8.(a) | Describe the Lysogenic cycle of Bacteriophage. | 4 |
| (b) | Only sketch the Krebs Cycle. | 4 |
| 9.(a) | Describe any eight functions of Blood. | 4 |
| (b) | Write a note on Nutrition in bacteria. | 4 |

SECTION-III (PRACTICAL)**10. Attempt any three parts.**

- | | | | |
|---------|--|-------------|----------------------------|
| (A).(i) | You are provided with Iodine solution and Sugar solution.
Write biochemical test for its presence. | 3 | |
| (ii) | Write the name of two reducing sugars. | 2 | |
| (B).(i) | You are provided with (Rose) flower. Write the technical terms to describe the following parts of the flower:-
Calyx, Corolla, Androecium | 3 | |
| (ii) | Define Inflorescence. | 2 | |
| (C) | Draw the Sketch and label the diagram of digestive system of Frog. | 5 | |
| (D).(i) | Write the material and procedure for measuring the blood pressure during rest and after exercise. | 3 | |
| (ii) | Define blood pressure and diastolic blood pressure. | 2 | |
| (E) | Give one character of each to identify the specimen. | 5 | |
| (i) | Amoeba | (ii) Volvox | (iii) Female cone of pinus |
| (iv) | Funaria Male gametophyte | (v) | T.S of monocot stem |

BIOLOGY PAPER-I

(SESSION 2015-2017)

TIME ALLOWED: 20 Minutes

OBJECTIVE

MAXIMUM MARKS: 17

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. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve question on this sheet of OBJECTIVE PAPER.

Q.No.1

- (1) In Human gene therapy the normal genes are inserted into the host through:-
 (A) Blood cells (B) Bone marrow cells (C) Bone cells (D) Muscle cells
- (2) Haemoglobin is a:-
 (A) Fibrous proteins (B) Coiled proteins (C) Globular proteins (D) Double Coiled Proteins
- (3) Coenzymes are closely related to:-
 (A) Amino Acids (B) Non protein particles (C) Vitamins (D) Enzymes
- (4) "Omnis Cellula-e-Cellula" was hypothesized by:-
 (A) Schleiden (B) Rudolph Virchow (C) Louis Pasteur (D) Lorenz Oken
- (5) Solanum esculentum is the scientific name of:-
 (A) Potato (B) Tobacco (C) Onion (D) Tomato
- (6) Cell wall of Archaeobacteria do not contain:-
 (A) Peptidoglycan (B) Cellulose (C) Chitin (D) Cutin
- (7) Margulis and Schwartz accommodate the diverse assemblage of organisms of protista into:-
 (A) 37 Phyla (B) 27 Phyla (C) 10 Phyla (D) 5 Phyla
- (8) A Single Mycelium may produce upto a kilometer of new Hyphae in only:-
 (A) One day (B) Five days (C) Fifteen days (D) Twenty days
- (9) Amphibious plants belong to group:-
 (A) Angiospermae (B) Bryophyta (C) Pteridophyta (D) Filicinae
- (10) The Carbohydrate-digesting Enzyme is called:-
 (A) Isomerase (B) Lipase (C) Proteiase (D) Amylase
- (11) Respiratory pigment present in muscle is called:-
 (A) Myoglobin (B) Globin (C) Haemocyanin (D) Haemoglobin
- (12) The example of Phylum Hemichordata is:-
 (A) Molgula (B) Amhioxus (C) Aslerias (D) Balanoglossus
- (13) The inner layer of most sponges is called:-
 (A) Pinacoderm (B) Choanoderm (C) Endoderm (D) Epiderm
- (14) Pyruvic acid is the end product of:-
 (A) Glycolysis (B) Krebs cycle (C) ETC cycle (D) Calvin cycle
- (15) Haem portion of Haemoglobin contains:-
 (A) Magnesium atom (B) Iron atom (C) Phosphorous atom (D) Carbon atom
- (16) Cytoplasmic strands that extend through pores in adjacent cell wall are:-
 (A) Plasmodesmata (B) Plasmofibre (C) Plasmofilament (D) Plasmstrand
- (17) In the embryonic life red blood cells are formed in the:-
 (A) Sternum and ribs
 (B) Bone marrow and vertebrae (C) Liver and spleen (D) Heart and bone marrow

INTERMEDIATE PART-I (11th CLASS)**BIOLOGY PAPER-I****(SESSION 2015-2017)****TIME ALLOWED: 2.40 Hours****SUBJECTIVE****MAXIMUM MARKS: 68**

NOTE: - Write same question number and its part number on answer book, as given in the question paper.

SECTION-I**2. Attempt any eight parts.****8 × 2 = 16**

- (i) Differentiate between Fresh Water Biology and Marine Biology.
- (ii) What is Scientific Law?
- (iii) Why do lipids store double energy than Carbohydrates?
- (iv) What is Induce Fit Model of Enzyme action?
- (v) What are Competitive Inhibitors?
- (vi) What is Holoenzyme?
- (vii) Name four Phyla of Algae.
- (viii) What are Apicomplexans? How do they move?
- (ix) What is Chlorella? Give its importance.
- (x) What is Physarum Polycephalum?
- (xi) What is Ringworm? Which fungus is the cause of this disease?
- (xii) What is Endomycorrhizae?

3. Attempt any eight parts.**8 × 2 = 16**

- (i) Cell membrane is selectively permeable membrane. Justify it.
- (ii) Define Tay-sach's disease.
- (iii) Differentiate between Ostia and Osculum.
- (iv) Differentiate between Polyps and Medusae.
- (v) Write down two adaptations for parasitic mode of life in platyhelminthes.
- (vi) What are Placental Mammals? Give one example.
- (vii) Define Oxidative Phosphorylation.
- (viii) What is Alcoholic Fermentation?
- (ix) Why air is better medium for respiration than water?
- (x) Differentiate between Inhalation and Exhalation.
- (xi) What are Vocal Cords?
- (xii) Differentiate between Diaphragm and Pleura.

4. Attempt any six parts.**6 × 2 = 12**

- (i) What are Retroviruses?
- (ii) Differentiate between Gram-Positive and Gram-Negative Bacteria.
- (iii) What are Paraphyses?
- (iv) Define Arthropytes.
- (v) What is Chlorosis?
- (vi) Differentiate between Herbivores and Carnivores.
- (vii) Define Peristalsis.
- (viii) Define Blood Pressure.
- (ix) What is Passive Immunity?

SECTION-II**NOTE: - Attempt any three questions.**

- 5.(a) Describe the role of Biology in the field of health. 4
- (b) What is Alternation of Generation? Give its significance. 4
- 6.(a) Justify, that Carbon occupies the central position in the skeleton of life. 4
- (b) Classify the animals on the basis of methods of their nutrition. 4
- 7.(a) Write note on Mitochondria. 4
- (b) Write down economic gains by Fungi. 4
- 8.(a) Write a note on structure of Virus. 4
- (b) Sketch the Z-scheme. 4
- 9.(a) Explain about "use and misuse of Antibiotics". 4
- (b) Discuss transpiration as a necessary Evil. 4