

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

**OBJECTIVE KEY FOR INTER (PART I/II) SUPPLY Examination, 2016**

Name of Subject Biology Session 2016

Q. Nos.	Paper Code 8461	Paper Code 8463	Paper Code 8465	Paper Code 8467
1.	D	C	C	A
2.	C	B	A	B
3.	C	C	C	A
4.	C	D	C	C
5.	A	C	B	A
6.	B	C	A	C
7.	A	C	B	C
8.	C	A	C	B
9.	A	B	B	A
10.	C	A	C	B
11.	C	C	D	C
12.	B	A	C	B
13.	A	C	C	C
14.	B	C	C	D
15.		B	A	C
16.	B	A	B	C
17.	C	B	A	C
18.				
19.				
20.				

**سرٹیفکیٹ بابت صحیح سوالیہ پرچہ مارکنگ Key**

ہم نے مندرجہ ذیل پرچہ: II گروپ: New سیم 2016 کا سوالیہ پرچہ اٹائیہ اسٹریٹ (Subjective & Objective) کو نظر میں چیک کر لیا ہے۔ یہ پرچہ سلیبس کے عین مطابق Set کیا گیا ہے۔ اس سوالیہ پرچہ میں کسی قسم کی کوئی غلطی نہیں ہے۔ ہم نے سوالیہ پرچہ کا اردو اور انگریزی Version بھی چیک کر لیا ہے۔ یہ Version آؤٹس میں مطابقت رکھتے ہیں اور سلیبس (Syllabus) کے مطابق بھی ہیں۔ نیز اس پرچہ کی Key کی بابت بھی تصدیق کی جاتی ہے کہ یہ بھی درست بنائی گئی ہے۔ اس میں بھی کسی قسم کی کوئی غلطی نہیں ہے۔ مزید یہ کہ ہم نے Key بنانے سے متعلق دفتر کی جانب سے تیار کردہ ہدایات وصول کر کے ان کا بغور مطالعہ کر لیا ہے اور ان کی روشنی میں Key بنائی ہے۔

PREPARED & CHECKED BY

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## BIOLOGY PAPER-II

TIME ALLOWED: 20 Minutes

MAXIMUM MARKS: 17

OBJECTIVE

**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) Trimethylamine Oxide is produced in:-  
 (A) Hag fish (B) Bony fish (C) Marine fish (D) Cartilaginous fish
- (2) The tolerance of dehydration is:-  
 (A) Osmoconformers (B) Osmoregulators (C) Anhydrobiosis (D) Dehydration
- (3) The loss of water due to ex-osmosis from plant cells causes plant to:-  
 (A) Turgid (B) Swell (C) Wilt (D) Rupture
- (4) The sleep movements of plants fall under the category of:-  
 (A) Growth (B) Tactic (C) Turgor (D) Tropic
- (5) \_\_\_\_\_ are indole acetic acid or its variants.  
 (A) Auxins (B) Gibberellins (C) Cytokinins (D) Ethene
- (6) Ovulation is induced by:-  
 (A) FSH (B) LH (C) Estrogen (D) Progesterone
- (7) From beginning of the third month of pregnancy, the human embryo is referred to as the:-  
 (A) Foetus (B) Placenta (C) Neonate (D) Young one
- (8) The pigment free area that appears at the time of fertilization is called:-  
 (A) Embryo (B) Yolk (C) Gray crescent (D) White cytoplasm
- (9) Chromosomal part which uncoils, during inter phase is called:-  
 (A) Euchromatin (B) Heterochromatin (C) Chromatids (D) Satellite DNA
- (10) Unequal separation of chromosomes is called:-  
 (A) Disjunction (B) Separation (C) Non-disjunction (D) Metastasis
- (11) Nerve cells and eye lens cells remain in \_\_\_\_\_ stage for life time.  
 (A) G<sub>1</sub> (B) G<sub>2</sub> (C) G<sub>0</sub> (D) S
- (12) \_\_\_\_\_ is the form of appearance of a trait.  
 (A) Genotype (B) Phenotype (C) Pleiotropy (D) Epistasis
- (13) Persons with Huntington's disease have a unique site where a restriction enzyme cuts:-  
 (A) DNA (B) RNA (C) Lipids (D) Proteins
- (14) Ozone in the upper layer of atmosphere that filters:-  
 (A) IR radiation (B) UV radiation (C)  $\beta$  radiation (D)  $\gamma$ -radiation
- (15) Herbaceous stage in xerosere is the:-  
 (A) First stage (B) Third stage (C) Fourth stage (D) Last stage
- (16) A little light is left to power photosynthesis at the depth of:-  
 (A) 500 feet (B) 600 feet (C) 1000 feet (D) 1200 feet
- (17) CFCs are produced by:-  
 (A) Moving carts (B) Industrial machines (C) Air conditioners and refrigerators (D) Aeroplanes

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SUBJECTIVE

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) Draw metabolic pathways in urea cycle.
- (ii) What are Juxtamedullary Nephrons? Give their importance.
- (iii) Write structural adaptations for regulation of heat exchange between animals and environment.
- (iv) Differentiate between Fibres and Sclerieds.
- (v) Define Tactic Movements. Give its one type.
- (vi) What is Osteoporosis? Write its treatment.
- (vii) What is Apical Dominance? Give its cause.
- (viii) Differentiate between Primary Organizer and Primary Induction.
- (ix) Differentiate between Karyokinesis and Cytokinesis.
- (x) Write symptoms of Turner's Syndrome.
- (xi) What is meant by Genetic Drift?
- (xii) Define Endangered Species. How they are different from Threatened Species?

3. Attempt any Eight parts. 8 × 2 = 16

- (i) What are Biological Rhythms?
- (ii) Write Commercial applications of Cytokinins.
- (iii) Define Receptors.
- (iv) Define Fruit.
- (v) What is Parthenogenesis?
- (vi) Define Fraternal Twins.
- (vii) What is Genome?
- (viii) Define Bioreactors.
- (ix) Differentiate between Coniferous Alpine and Boreal Forests.
- (x) Define Desertification.
- (xi) What are Renewable Resources?
- (xii) Define Wild Life.

4. Attempt any Six parts. 6 × 2 = 12

- (i) Differentiate between Heterochromatin and Euchromatin.
- (ii) Draw formula of Cytosine.
- (iii) What is Chromosomal theory of Inheritance?
- (iv) What is incomplete Dominance?
- (v) What is XO - XX mechanism of sex determination?
- (vi) What is Haemophilia? Name its types.
- (vii) What are Biotic components of an ecosystem?
- (viii) What is Mycorrhiza?
- (ix) Differentiate between Micronutrients and Macronutrients.

SECTION-II

NOTE: - Attempt any three questions. 8 × 3 = 24

- 5.(a) Write note on Fossil Fuels. 4
- (b) Discuss Kidney problems and cures. 4
- 6.(a) What are Joints? Describe their different types. 4
- (b) Describe comparative anatomy as an evidence of evolution. 4
- 7.(a) Describe four different types of learning behaviour. 4
- (b) Write a note on Grazing. 4
- 8.(a) Explain human female reproductive system. 4
- (b) Give Meselson-Stahl experiment to show that replication of DNA is semi-conservative. 4
- 9.(a) Write a note on Regeneration. 4
- (b) Discuss sex-linkage in humans with one example. 4

SECTION-III (PRACTICAL)

10. Attempt any three parts.
- (A) Sketch and label the urino-genital system of male frog. 5
  - (B) Draw the labelled diagram of hind limb of frog. 5
  - (C) Write down the procedure to demonstrate the phenomenon of phototropism. 5  
Also write down the observations.
  - (D) Write the procedure to investigate the components of aquatic food web. 5
  - (E) Answer the following questions briefly:- 5
    - (i) Define food chain. 5
    - (ii) Give the name of single bone of upper arm. 5
    - (iii) What is the function of  $\alpha$  - cells in pancreas? 5
    - (iv) What is Phototropism? 5
    - (v) What is the status of fungi in ecosystem? 5