



Roll No. \_\_\_\_\_ to be filled in by the candidate

Paper Code 5 4 6 4

## Biology (Objective)

## Group - II

یادوی (مروجی)

Marks : 12

Time: 15 Minutes

Note: Write answers to the questions on the objective answer sheet provided. Four possible answers are given. Which answer you consider correct fill the corresponding circle A,B,C or D in front of each question with marker or ink on the answer sheet provided.

نوت: اس سوال کے چار جگہ جوابات D,C,B,A دیجئے گئے ہیں۔ جو اپنی کاپی پر درست جواب کا انتخاب کرتے ہوئے محققہ دائرے میں میں مار کر سے لٹک کر لے۔

- 1.1 The amount of energy released from one mole of ATP is: 1-1  
 (A) 7.02 K. cal 7.02 کلو کیلو جری 7.03 کلو کیلو جری  
 (B) 7.03 K. cal 7.03 کلو کیلو جری 7.04 کلو کیلو جری  
 (C) 7.20 K. cal 7.20 کلو کیلو جری 7.3 کلو کیلو جری  
 (D) 7.3 K. cal 7.3 کلو کیلو جری
- 1.2 How much percentage of lipids is present in milk: -2  
 (A) 12 % (B) 10 % (C) 0.9 %
- 1.3 Root hairs belong to: -3  
 (A) Pericycle cells ہیپر سائیکل سلے (B) Stomatal cells سٹوماٹیک سلے  
 (C) Root epidermal cells روٹ اپیڈرمیک سلے (D) Cortical cells کورٹیکل سلے
- 1.4 The scientific study of plants is called: -4  
 (A) Botany ہائیکولوژی (B) Zoology ہیڈیولوژی (C) Anatomy اٹھی (D) Histology ہیسٹولوژی
- 1.5 The study of fossils is called: -5  
 (A) Taxonomy ٹکسائونمی (B) Systematics سسیٹمیک (C) Paleontology پیلئونٹولوژی (D) Geology گیلولوژی
- 1.6 Tentative explanation of observations is called: -6  
 (A) Hypothesis ہیپوٹیسیس (B) Deduction ڈیڈکوشن (C) Experiment تجربات (D) Theory تھیوری
- 1.7 In Pakistan an endangered species is: -7  
 (A) Indian Dolphin ہندوستانی دلفین (B) Chinkara چینکارا (C) Sparrow سپارو (D) Markhor مارخور
- 1.8 Cells were first discovered by: -8  
 (A) Aristotle ارسطو (B) Robert Brown رابرت براؤن (C) Robert Hooke رابرت ہوک (D) Schwan شوان
- 1.9 In 1974 Nobel Prize in physiology and medicines won by: -9  
 (A) Rene de Duve رینے دی دوو (B) Camillo Golgi کامیلو گولجی (C) Lamarck لارمک (D) Aristotle ارسطو
- 1.10 During mitosis one cell divides into number of daughter cell: -10  
 (A) 1 (B) 2 (C) 4 (D) 8
- 1.11 Duplication of chromosomes occurs in: -11  
 (A) S-Phase فر-S (B) M-Phase فر-M (C) GI-Phase فر-GI (D) Prophase پروفیز
- 1.12 Enzymes are made up of: -12  
 (A) Fatty Acid نیٹی ایڈ (B) Nucleic Acid نوکلیک ایڈ (C) Carbohydrates کاربہائیڈرٹس (D) Amino Acids ایمینو ائسیدز

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Roll No \_\_\_\_\_ to be filled in by the candidate

Biology (Subjective)

Time: 1:45 Hours

Group - II

پاکستانی (انگریزی)

Marks : 48

Section - I

RWP-2-23

(2x5=10)

2. Attempt any five parts of the question.

- Define Biotechnology.
- Write down the scientific name of mustard plant and frog.
- What is parasite?
- Differentiate between qualitative and quantitative observations.
- Write down two important observations of A.F.A. King.
- Define hypothesis.
- What is micrograph?
- Differentiate between primary and secondary cell wall.

3. Attempt any five parts of the question. (2x5=10)

- Why viruses are at the border line of living and non living organisms?
- What is role of Eucalyptus plant in disturbing water table?
- Write the name of phases of Karyo kinesis? (In sequence)
- Differentiate between disjunction and non-disjunction.
- Define Metastasis?
- How does meiosis produce variations in next generation?
- What are pigments?
- Define fermentation? Write name of its types.

4. Attempt any five parts of the question. (2x5=10)

- Define metabolism.
- How value of pH affects the working of an enzyme? Give an example.
- What is meant by active site?
- What is reactivity? State its two functions.
- How does stomach produce chyme and chyme?
- Why human heart is called double pump?
- What is transpirational pull?
- Write two symptoms of dengue fever.

Note: Attempt any two questions from the following:

(9x2=18)

- Describe any ten branches of biology.
- Define mitochondria? Explain it with the help of diagram.
- Define Binomial Nomenclature and give its significance.
- Write note on Dark reaction of photosynthesis.
- What are Fertilizers? Give their importance and related environmental hazards.
- Write note on ABO Blood Group System.

Note: سچنریو میں سے کوئی سے دو سوالات کے جوابات تحریر کریں۔

5. (a) پاکستانی کی کوئی ہی دس شاخوں کی دشاخت کریں۔

(b) ماٹوں کو ٹاریا کی تحریر کریں۔ ڈاگریم کی مدد سے اس کی دشاخت کریں۔

6. (a) ہانویں کو من گیج کی تحریر کریں اور اہمیت کی دشاخت کریں۔

(b) فلزیستی سرکے ڈارک ری ایکشن پر نوٹ لکھیں۔

7. (a) فریلائز کیا ہے؟ ان کی اہمیت اور ان سے جڑے اخلاقی خدشات تحریر کریں۔

(b) ABO بلاکر ڈسٹریبیوشن پر نوٹ لکھیں۔