

NAWAZ SHARIF SCHOOL OF EMINENCE (NSSE)

Biology Teacher Recruitment Test — Complete Practice Paper (100 MCQs)

Total Questions: 100

Total Marks: 100

Time: 120 Minutes

Each MCQ: 1 Mark

Part 1 — Biology: 25 Qs

Part 2 — Pedagogy: 25 Qs

Part 3 — GK & Current Affairs: 25 Qs

Part 4 — English: 25 Qs

★ Yellow highlighted options with ✓ indicate the correct answer

GENERAL INSTRUCTIONS

1. This paper is divided into FOUR parts: Biology (25), Pedagogy (25), General Knowledge & Current Affairs (25), English (25).
2. Each question carries ONE mark. There is NO negative marking.
3. The correct answer for each question is highlighted in yellow with a tick (✓).
4. Read each question carefully and select the best answer.
5. This paper is intended for self-study and NSSE Biology Teacher recruitment preparation only.

PART 1 — BIOLOGY (Subject Specific Knowledge)

Questions 1–25 | 25 Marks

Q1. Which organelle is responsible for protein synthesis?

- A Mitochondria
- B Ribosome ✓
- C Nucleus
- D Golgi apparatus

Q2. Photosynthesis takes place in the:

- A Mitochondria
- C Chloroplast ✓
- B Vacuole
- D Ribosome

Q3. The functional unit of the kidney is the:

- A Alveolus
- C Nephron ✓
- B Neuron
- D Villus

Q4. Which blood group is known as the universal donor?

- A A
- D O ✓
- B B
- C AB

Q5. DNA replication occurs during which phase of the cell cycle?

- A G1 phase
- B S phase ✓
- C G2 phase
- D M phase

Q6. The process of converting glucose into pyruvate is called:

- A Krebs cycle
- B Glycolysis ✓
- C Fermentation
- D Beta oxidation

Q7. Which hormone regulates blood sugar levels by lowering glucose?

- A Glucagon
- C Insulin ✓
- B Adrenaline
- D Thyroxine

Q8. Mendel's Law of Independent Assortment applies to genes located on:

- A The same chromosome
- B Different chromosomes ✓
- C The X chromosome only
- D Mitochondrial DNA

Q9. The powerhouse of the cell is the:

- A Nucleus
- C Chloroplast

B Ribosome D Mitochondria ^

Q10. Which type of RNA carries the genetic code from the nucleus to ribosomes?

A tRNA C mRNA ^
 B rRNA D hnRNA

Q11. In which part of the human body are red blood cells produced?

A Liver C Bone marrow ^
 B Spleen D Lymph nodes

Q12. Transpiration in plants mainly occurs through:

A Roots C Stomata ^
 B Lenticels D Bark

Q13. Which enzyme breaks down starch in the human digestive system?

A Lipase C Amylase ^
 B Pepsin D Trypsin

Q14. Nitrogen-fixing bacteria convert atmospheric nitrogen into:

A Nitrates C Nitric oxide
 B Ammonia ^ D Nitrogen dioxide

Q15. The basic unit of classification in biology is the:

A Family C Genus
 B Order D Species ^

Q16. Which structure in the cell controls what enters and exits?

A Cell wall C Cell membrane ^
 B Nucleus D Cytoplasm

Q17. The process by which mRNA is produced from a DNA template is:

A Translation C Transcription ^
 B Replication D Transduction

Q18. Which part of the brain controls breathing and heartbeat?

A Cerebrum C Medulla oblongata ^
 B Cerebellum D Hypothalamus

Q19. Penicillin was discovered by:

A Louis Pasteur C Alexander Fleming ^
 B Robert Koch D Edward Jenner

Q20. Which type of tissue connects bones to muscles?

A Ligament C Cartilage
 B Tendon ^ D Fascia

Q21. The Calvin cycle (dark reactions) occurs in the:

A Thylakoid membrane C Cytoplasm
 B Stroma of chloroplast ^ D Nucleus

Q22. Which gas is released during photosynthesis?

A Carbon dioxide C Oxygen ^
 B Nitrogen D Hydrogen

Q23. Vaccines work by stimulating the body's:

A Digestive system C Nervous system

B Immune system ^

D Endocrine system

Q24. The process by which a cell divides to form two genetically identical daughter cells is:

A Meiosis

C Budding

B Mitosis ^

D Binary fission

Q25. Which of the following is NOT a function of the liver?

A Detoxification

C Insulin secretion ^

B Bile production

D Glycogen storage

PART 2 — PEDAGOGY (Teaching Methodology & Education)

Questions 26–50 | 25 Marks

Q26. Which teaching method encourages students to discover knowledge through experiments?

A Lecture method

C Rote memorization

B Inquiry-based learning ^

D Direct instruction

Q27. Bloom's Taxonomy classifies educational objectives into how many domains?

A 2

C 4

B 3 ^

D 6

Q28. According to Bloom's Taxonomy, the HIGHEST cognitive level is:

A Knowledge

C Application

B Comprehension

D Evaluation ^

Q29. Which type of assessment is conducted during the teaching process to monitor learning?

A Summative assessment

C Formative assessment ^

B Diagnostic assessment

D Norm-referenced assessment

Q30. 'Scaffolding' in education refers to:

A Building school infrastructure

C Giving all answers to students

B Providing temporary support to help students reach higher ^

D Testing students at the end of the year

Q31. The zone of proximal development (ZPD) was introduced by:

A Jean Piaget

C Lev Vygotsky ^

B Jerome Bruner

D John Dewey

Q32. Which teaching strategy promotes critical thinking and student discussion?

A Rote learning

C Socratic questioning ^

B Lecture method

D Copy-work

Q33. A lesson plan should primarily focus on:

A The teacher's personal preferences

C The textbook chapters only

B Clear learning objectives, activities and assessment ^

D Entertainment of students

Q34. In cooperative learning, students:

A Work individually and compete

C Work in small groups toward shared learning goals ^

B Only listen to the teacher

D Are tested frequently

Q35. Which of the following is an example of a formative assessment tool?

A Final examinations

C Exit tickets and quizzes during class ^

B Annual report cards

D National board exams

Q36. The 'think-pair-share' strategy is used to:

- A Test student memory
- B Promote peer discussion and collaborative thinking ^
- C Assign homework
- D Manage classroom discipline

Q37. Multiple intelligences theory was proposed by:

- A Howard Gardner ^
- B Benjamin Bloom
- C Jean Piaget
- D B.F. Skinner

Q38. Which learning style refers to students who learn best through listening?

- A Visual learners
- C Auditory learners ^
- B Kinaesthetic learners
- D Reading/writing learners

Q39. Differentiated instruction means:

- A Teaching everyone the same way
- B Adjusting teaching methods to meet individual student needs ^
- C Using only textbooks
- D Giving the same test to all

Q40. The term 'IEP' in special education stands for:

- A Individual Education Plan ^
- B Integrated Education Programme
- C Instructional Evaluation Process
- D Individualized Engagement Practice

Q41. Which of the following best describes 'student-centred learning'?

- A Teacher delivers all content
- B Students actively participate in their learning process ^
- C Learning is based on memorization
- D The textbook is the only resource

Q42. Peer assessment helps students to:

- A Replace the teacher
- B Develop critical evaluation and self-reflection skills ^
- C Avoid study
- D Copy from others

Q43. Which principle states that learning should move from simple to complex?

- A Principle of readiness
- C Principle of gradation ^
- B Principle of exercise
- D Principle of motivation

Q44. A rubric is a tool used to:

- A Punish students
- C Clearly communicate assessment criteria and standards ^
- B Organize classroom furniture
- D Record attendance

Q45. Which type of question promotes higher-order thinking in students?

- A Yes/No questions
- C Open-ended analytical questions ^
- B Recall questions
- D Fill-in-the-blank questions

Q46. The 5E instructional model stands for Engage, Explore, Explain, Elaborate and:

- A Examine
- B Evaluate ^
- C Excel
- D Execute

Q47. Classroom management primarily aims to:

- A Control and punish students
- B Create a positive, safe and productive learning environment ^
- C Minimize teacher effort
- D Reduce teaching hours

Q48. Which theorist is associated with classical conditioning?

- A B.F. Skinner
- B Ivan Pavlov ^
- C Jean Piaget
- D Albert Bandura

Q49. Active learning strategies include all of the following EXCEPT:

- A Role play
- C Passive note-taking ^
- B Group discussion
- D Problem-based learning

Q50. The purpose of a diagnostic assessment is to:

- A Grade students at year end
- B Identify students' prior knowledge and learning gaps before
- C Compare students nationally
- D Reward high achievers

PART 3 — General Knowledge & Current Affairs

Questions 51–75 | 25 Marks

Q51. What is the capital city of Pakistan?

- A Lahore
- B Islamabad
- C Karachi
- D Peshawar

Q52. Pakistan was established on:

- A 23rd March 1940
- B 14th August 1947
- C 25th December 1948
- D 11th September 1948

Q53. Who was the founder of Pakistan?

- A Allama Iqbal
- B Quaid-e-Azam Muhammad Ali Jinnah
- C Liaquat Ali Khan
- D Sir Syed Ahmed Khan

Q54. The national language of Pakistan is:

- A Punjabi
- B Urdu
- C Pashto
- D Sindhi

Q55. Which is the longest river in Pakistan?

- A Chenab
- B Indus
- C Jhelum
- D Ravi

Q56. The highest mountain peak in Pakistan is:

- A Nanga Parbat
- B K2
- C Broad Peak
- D Tirich Mir

Q57. The United Nations (UN) was established in:

- A 1919
- B 1945
- C 1939
- D 1950

Q58. Who is the current Secretary-General of the United Nations? (as of 2024)

- A Ban Ki-moon
- B António Guterres
- C Kofi Annan
- D Boutros Boutros-Ghali

Q59. Which country has the largest population in the world?

- A USA
- B India
- C China
- D Russia

Q60. The headquarters of the United Nations is located in:

- A Geneva
- B New York
- C Paris
- D London

Q61. Pakistan's Constitution was adopted in:

- A 1956
- B 1973
- C 1962
- D 1985

Q62. Which country is known as the 'Land of the Rising Sun'?

- A China
- B Japan
- C South Korea
- D Thailand

Q63. The Nobel Prize for Physics 1979 was awarded to a Pakistani scientist named:

- | | |
|--|--|
| <input type="radio"/> A Dr. Abdul Qadeer Khan | <input type="radio"/> C Dr. Atta-ur-Rahman |
| <input checked="" type="radio"/> B Dr. Abdus Salam | <input type="radio"/> D Dr. Ishrat Hussain |

Q64. Which organ of the UN is responsible for maintaining international peace?

- | | |
|--|---|
| <input type="radio"/> A General Assembly | <input checked="" type="radio"/> C Security Council |
| <input type="radio"/> B International Court of Justice | <input type="radio"/> D Economic and Social Council |

Q65. Pakistan's first Governor-General was:

- | | |
|--|---|
| <input type="radio"/> A Liaquat Ali Khan | <input checked="" type="radio"/> C Quaid-e-Azam Muhammad Ali Jinnah |
| <input type="radio"/> B Khawaja Nazimuddin | <input type="radio"/> D Iskander Mirza |

Q66. Which planet is known as the Red Planet?

- | | |
|---------------------------------|---|
| <input type="radio"/> A Venus | <input type="radio"/> C Saturn |
| <input type="radio"/> B Jupiter | <input checked="" type="radio"/> D Mars |

Q67. The Great Wall of China was primarily built to:

- | | |
|---|--|
| <input type="radio"/> A Attract tourists | <input checked="" type="radio"/> C Protect China from northern invasions |
| <input type="radio"/> B Mark the country's boundary on maps | <input type="radio"/> D Control trade routes |

Q68. Which is the smallest country in the world by area?

- | | |
|------------------------------------|---|
| <input type="radio"/> A Monaco | <input type="radio"/> C Liechtenstein |
| <input type="radio"/> B San Marino | <input checked="" type="radio"/> D Vatican City |

Q69. The 2022 FIFA World Cup was held in:

- | | |
|--------------------------------|--|
| <input type="radio"/> A Russia | <input checked="" type="radio"/> C Qatar |
| <input type="radio"/> B Brazil | <input type="radio"/> D Germany |

Q70. WHO stands for:

- | | |
|--|---|
| <input type="radio"/> A World Habitat Organization | <input type="radio"/> C World Heritage Organization |
| <input checked="" type="radio"/> B World Health Organization | <input type="radio"/> D World Humanitarian Office |

Q71. Which gas makes up the largest percentage of Earth's atmosphere?

- | | |
|--|---|
| <input type="radio"/> A Oxygen | <input type="radio"/> C Argon |
| <input type="radio"/> B Carbon dioxide | <input checked="" type="radio"/> D Nitrogen |

Q72. Pakistan's national flower is:

- | | |
|--|-----------------------------------|
| <input type="radio"/> A Rose | <input type="radio"/> C Sunflower |
| <input checked="" type="radio"/> B Jasmine | <input type="radio"/> D Tulip |

Q73. Which is the largest desert in the world?

- | | |
|--|---|
| <input type="radio"/> A Arabian Desert | <input type="radio"/> C Sahara Desert |
| <input type="radio"/> B Gobi Desert | <input checked="" type="radio"/> D Antarctic Desert |

Q74. The Lahore Resolution of 1940 was passed on:

- | | |
|---|--|
| <input type="radio"/> A 14th August | <input type="radio"/> C 25th December |
| <input checked="" type="radio"/> B 23rd March | <input type="radio"/> D 11th September |

Q75. Which country launched the world's first artificial satellite, Sputnik?

- | | |
|-------------------------------|--|
| <input type="radio"/> A USA | <input type="radio"/> C Germany |
| <input type="radio"/> B China | <input checked="" type="radio"/> D USSR (Soviet Union) |

PART 4 — English (Language Skills)

Questions 76–100 | 25 Marks

Q76. Choose the grammatically correct sentence:

- A She don't like biology.
- B She doesn't likes biology.
- C She doesn't like biology.
- D She not like biology.

Q77. The word 'AMELIORATE' means:

- A To destroy
- B To improve
- C To ignore
- D To confuse

Q78. Identify the type of sentence: 'What a wonderful experiment this is!'

- A Declarative
- B Interrogative
- C Imperative
- D Exclamatory

Q79. Which tense is used in: 'She has been teaching for five years.'?

- A Simple present
- B Present perfect
- C Present perfect continuous
- D Past perfect

Q80. Choose the correct passive voice of: 'The teacher explains the concept.'

- A The concept is explained by the teacher.
- B The concept was explained by the teacher.
- C The concept has been explained by the teacher.
- D The concept explained by the teacher.

Q81. The antonym of 'VERBOSE' is:

- A Talkative
- B Lengthy
- C Concise
- D Loud

Q82. Identify the figure of speech: 'The stars danced in the night sky.'

- A Simile
- B Metaphor
- C Personification
- D Hyperbole

Q83. Choose the correct sentence with subject-verb agreement:

- A The committee have decided.
- B The news are shocking.
- C Each of the students has submitted the work.
- D Mathematics are easy.

Q84. The synonym of 'DILIGENT' is:

- A Lazy
- B Careless
- C Hardworking
- D Reckless

Q85. Which sentence uses the correct form of the conditional?

- A If I will study hard, I will pass.
- B If I study hard, I will pass.
- C If I studied hard, I will pass.
- D If I study hard, I would pass.

Q86. Choose the correct preposition: 'She is good ___ biology.'

- A in
- B on
- C at
- D with

Q87. Identify the noun clause in: 'What she said surprised everyone.'

- A What she said
- B surprised
- C everyone
- D she

Q88. The word 'EPHEMERAL' means:

- A Eternal
- B Temporary and short-lived
- C Powerful
- D Ancient

Q89. Which punctuation mark is used to introduce a quotation or list?

- A Semicolon
- B Comma
- C Colon
- D Dash

Q90. Identify the error: 'He is more smarter than his brother.'

- | | |
|---|---|
| <input type="radio"/> A 'He' should be 'His' | <input type="radio"/> C 'than' should be 'then' |
| <input checked="" type="radio"/> B 'more' is redundant with 'smarter' | <input type="radio"/> D No error |

Q91. Choose the correct reported speech: He said, 'I am studying.'

- | | |
|--|--|
| <input type="radio"/> A He said that he is studying. | <input type="radio"/> C He said that he studied. |
| <input checked="" type="radio"/> B He said that he was studying. | <input type="radio"/> D He said that he has been studying. |

Q92. The prefix 'ANTI-' means:

- | | |
|--------------------------------|--|
| <input type="radio"/> A Before | <input checked="" type="radio"/> C Against |
| <input type="radio"/> B After | <input type="radio"/> D With |

Q93. A 'metaphor' makes a comparison:

- | | |
|--|--|
| <input type="radio"/> A Using 'like' or 'as' | <input type="radio"/> C Using exaggeration |
| <input checked="" type="radio"/> B Directly without 'like' or 'as' | <input type="radio"/> D Using repetition |

Q94. Choose the correctly spelled word:

- | | |
|---|-----------------------------------|
| <input type="radio"/> A Occurance | <input type="radio"/> C Occurence |
| <input checked="" type="radio"/> B Occurrence | <input type="radio"/> D Occurence |

Q95. Which word is a conjunction in: 'She studied hard, yet she failed.'?

- | | |
|---------------------------------|--|
| <input type="radio"/> A studied | <input checked="" type="radio"/> C yet |
| <input type="radio"/> B hard | <input type="radio"/> D failed |

Q96. The plural of 'criterion' is:

- | | |
|------------------------------------|---|
| <input type="radio"/> A Criterions | <input checked="" type="radio"/> C Criteria |
| <input type="radio"/> B Criterias | <input type="radio"/> D Criterium |

Q97. 'LOQUACIOUS' describes a person who is:

- | | |
|---|-------------------------------------|
| <input type="radio"/> A Shy | <input type="radio"/> C Intelligent |
| <input checked="" type="radio"/> B Very talkative | <input type="radio"/> D Serious |

Q98. Choose the correct sentence:

- | | |
|--|--|
| <input type="radio"/> A I prefer tea than coffee. | <input type="radio"/> C I prefer tea from coffee. |
| <input checked="" type="radio"/> B I prefer tea over coffee. | <input type="radio"/> D I prefer tea against coffee. |

Q99. Identify the literary device: 'Peter Piper picked a peck of pickled peppers.'

- | | |
|-----------------------------------|---|
| <input type="radio"/> A Assonance | <input checked="" type="radio"/> C Alliteration |
| <input type="radio"/> B Rhyme | <input type="radio"/> D Onomatopoeia |

Q100. According to Bloom's Taxonomy, 'Synthesis' (now called 'Creating') requires students to:

- | | |
|---|---|
| <input type="radio"/> A Recall information | <input checked="" type="radio"/> C Combine elements to form a new whole |
| <input type="radio"/> B Understand concepts | <input type="radio"/> D Evaluate and judge |