



Class: IX

MODEL PAPER 2026

Time Allowed: 20 minutes

SUBJECT: GENERAL SCIENCE

Q1:

SECTION "A" (MULTIPLE CHOICE QUESTIONS)

Marks 15

Note: Attempt **ALL** the MCQs from Section "A". Each MCQ carries **ONE** mark.

1. Which of the following is a contribution of Muslim scientists to science?
 - A. Discovery of gravity
 - B. Development of algebra
 - C. Invention of the telescope
 - D. Discovery of the concept of evolution
2. Who wrote the book "Kitab al-Shifa"?
 - A. Bu Ali Sina
 - B. Muhammad Bin Zikrya Al-Razi
 - C. Abni-ul-Haitham
 - D. Al-Bairuni
3. Who is known for his contributions to the field of optics?
 - A. Jabir Bin Hayyan.
 - B. Muhammad Bin Zakariya Al-Razi.
 - C. Ibn-ul-Haitham.
 - D. Bu Ali Sina.
4. What is the relationship between biology and chemistry?
 - A. Biology is a branch of chemistry.
 - B. Chemistry is a branch of biology.
 - C. Biology and chemistry are unrelated fields.
 - D. Biology and chemistry are interconnected fields.
5. What is the primary component of plastic?
 - A. Carbon.
 - B. Oxygen.
 - C. Nitrogen.
 - D. Silicon.
6. What is the impact of aerosol sprays on the environment?
 - A. They contribute to air pollution.
 - B. They deplete the ozone layer.
 - C. They pollute water bodies.
 - D. They damage soil quality.
7. Which chemical process occurs when iron rusts?
 - A. Combustion.
 - B. Fermentation.
 - C. Oxidation.
 - D. Polymerization.
8. What is the primary cause of malaria?
 - A. Virus.
 - B. Bacteria.
 - C. Fungus.
 - D. Parasite.
9. What is the treatment for ringworm infection?
 - A. Antibiotics.
 - B. Antiviral medication.
 - C. Antifungal cream.
 - D. Anti-parasitic medication.
10. What is the first step in providing first aid for a dog bite?
 - A. Apply a tourniquet.
 - B. Clean the wound with soap and water.
 - C. Apply antibiotic ointment.
 - D. Suture the wound immediately.
11. What is the term for the number of people moving into a country from another country?
 - A. Emigration.
 - B. Immigration.
 - C. Birth rate.
 - D. Death rate.
12. What is the impact of overpopulation on the environment?
 - A. Conservation of natural resources.
 - B. Reduction in greenhouse gases.
 - C. Increased pollution and resource depletion.
 - D. Preservation of biodiversity.
13. What is the primary source of energy in fossil fuels?
 - A. Solar energy.
 - B. Ancient plants and animals.
 - C. Wind energy
 - D. Nuclear energy
14. Which of the following is an example of pure science?
 - A. Studying the properties of metals
 - B. Developing new medicines
 - C. Studying the behavior of animals
 - D. Designing a new bridge
15. What is the chemical composition of polyester?
 - A. Carbon, hydrogen, and oxygen
 - B. Carbon, hydrogen, and nitrogen
 - C. Carbon, oxygen, and nitrogen
 - D. Hydrogen, oxygen, and nitrogen

END OF SECTION "A"



Class: IX

MODEL PAPER 2026

Time: 2 hours 40 minutes

SUBJECT: GENERAL SCIENCE (SECTION "B" & SECTION "C")

Total Marks 60

SECTION "B" (SHORT ANSWER QUESTIONS)

30 Marks

Note: Attempt any **SIX** questions from Section "B". Each question carries **FIVE** marks.

Q.2 Mention Jabar Bin Hayyan's contributions to the field of chemistry.

Q.3 Describe the impact of scientific advancements on social structures and institutions.

Q.4 List the chemical changes that occur during the rusting of iron and how it can be prevented.

Q.5 Explain how the recycling of metals such as copper, iron, and aluminum helps conserve natural resources.

Q.6 Describe the benefits and drawbacks of using fertilizers in agriculture.

Q.7 Describe the composition of blood and explain the function of each component.

Q.8 Mention the life cycle of the malaria parasite and explain how it is transmitted to humans.

Q.9 Explain the mode of transmission and symptoms of ringworm infection.

Q.10 Identify the benefits of using renewable energy sources.

Q.11 Explain the concept of thermal pollution and its impact on the environment.

SECTION "C" (DETAILED ANSWER QUESTIONS)

30 Marks

Note: Attempt any **THREE** questions from Section "C". Each question carries **TEN** marks.

Q.12 Suggest ways in which science can address societal issues.

Q.13 Examine how advances in medical technology have improved the diagnosis and treatment of diseases.

Q.14 Evaluate the effects of overpopulation on environmental degradation.

Q.15 Reflect on the global use of nuclear energy and its implications for the environment and human health.

Q.16 Evaluate the impact of fossil fuel pollution on human health and the environment.

END OF PAPER



ZIAUDDIN UNIVERSITY

EXAMINATION BOARD

Answer Key- Sec A

General Science IX Model Examination Paper 2026

S #	Option
1	B
2	A
3	C
4	D
5	A
6	B
7	C
8	D
9	C
10	B
11	B
12	C
13	B
14	A
15	A

Rubric

Model Examination Paper 2026

Class: IX

Subject: General Science

Section: B

Q.2 Mention Jabar Bin Hayyan's contributions to the field of chemistry.

Level	Unsatisfactory	Marginal	Good	Exemplary
Max. Marks	0	1-2	3-4	5
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none">- Attempts to mention contributions but incorrect or vague- Shows limited understanding of Jabar Bin Hayyan's work- Lacks specific examples of his contributions- Fails to address the question	<ul style="list-style-type: none">- Mentions some contributions (like discovery of acids)- Shows some understanding of his impact on chemistry- Provides limited examples of his work- Addresses most parts of the question	<ul style="list-style-type: none">- Correctly mentions key contributions (like discovery of acids, processes like distillation)- Shows clear understanding of his importance in chemistry- Provides specific examples of his contributions- Addresses all parts of the question effectively

Q.3 Describe the impact of scientific advancements on social structures and institutions.

Level	Unsatisfactory	Marginal	Good	Exemplary
Max. Marks	0	1-2	3-4	5
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none">- Attempts to describe impact but vague or incorrect- Shows limited understanding of science-society link- Lacks specific examples of impacts- Fails to address the question	<ul style="list-style-type: none">- Describes some impacts (like healthcare improvements)- Shows some understanding of science-society connection- Provides limited examples of institutional changes- Addresses most parts of the question	<ul style="list-style-type: none">- Correctly describes multiple impacts (healthcare, communication, industry)- Shows clear understanding of science-society interplay- Provides specific examples of institutional changes- Addresses all parts of the question effectively

Q.4 Discuss the chemical changes that occur during the rusting of iron and how it can be prevented.

Level	Unsatisfactory	Marginal	Good	Exemplary
Max. Marks	0	1-2	3-4	5
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Fails to describe rusting process. - Does not recognize chemical changes. - Lacks understanding of prevention methods. 	<ul style="list-style-type: none"> - Describes basic chemical reaction (e.g., oxidation, iron + oxygen + water). - Recognizes role of moisture and oxygen. - Identifies basic prevention methods (e.g., painting, coating). 	<ul style="list-style-type: none"> - Thoroughly discusses chemical changes during rusting (e.g., formation of iron oxide, redox reaction). - Provides nuanced understanding of factors influencing rusting (e.g., humidity, salt). - Offers insightful prevention strategies (e.g., galvanization, cathodic protection, alloying). - Demonstrates in-depth understanding of rusting's chemical mechanisms and prevention methods.

Q.5 Explain how the recycling of metals such as copper, iron, and aluminum helps conserve natural resources.

Level	Unsatisfactory	Marginal	Good	Exemplary
Max. Marks	0	1-2	3-4	5
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Fails to describe metal recycling benefits. - Does not recognize resource conservation. - Lacks understanding of recycling process. 	<ul style="list-style-type: none"> - Describes basic benefits (e.g., saves raw materials, reduces waste). - Recognizes energy savings. - Identifies role in reducing mining impacts. 	<ul style="list-style-type: none"> - Thoroughly explains how metal recycling conserves natural resources (e.g., reduces ore extraction, preserves ecosystems). - Provides nuanced understanding of environmental benefits (e.g., reduced pollution, greenhouse gas emissions). - Offers insightful analysis of economic benefits (e.g., cost savings, job creation). - Demonstrates in-depth understanding of metal recycling's impact on sustainability and resource management.

Q.6 Describe the benefits and drawbacks of using fertilizers in agriculture.

Level	Unsatisfactory	Marginal	Good	Exemplary
Max. Marks	0	1-2	3-4	5
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Fails to describe benefits. - Does not recognize drawbacks. - Lacks understanding of fertilizer impact. 	<ul style="list-style-type: none"> - Describes basic benefits (e.g., increased crop yield, improved plant growth). - Recognizes potential drawbacks (e.g., water pollution, soil degradation). - Identifies importance of balanced use. 	<ul style="list-style-type: none"> - Thoroughly explains benefits (e.g., enhanced nutrient supply, improved crop quality). - Provides nuanced understanding of drawbacks (e.g., environmental impact, health risks). - Offers insightful analysis of sustainable fertilizer use practices (e.g., organic alternatives, precision application). - Demonstrates in-depth understanding of fertilizer's role in agriculture and environmental sustainability.

Q.7 Describe the composition of blood and explain the function of each component.

Level	Unsatisfactory	Marginal	Good	Exemplary
Max. Marks	0	1-2	3-4	5
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Fails to identify blood components. - Does not recognize functions. - Lacks understanding of blood's role. 	<ul style="list-style-type: none"> - Identifies basic components (e.g., red blood cells, white blood cells, plasma). - Describes basic functions (e.g., oxygen transport, immune response). - Recognizes role of platelets. 	<ul style="list-style-type: none"> - Thoroughly describes blood composition (e.g., plasma proteins, blood cell types). - Provides nuanced understanding of each component's function (e.g., red blood cells: oxygen delivery, white blood cells: immune defense). - Offers insightful analysis of interactions between components (e.g., clotting, immune response). - Demonstrates in-depth understanding of blood's physiological role in maintaining homeostasis.

Q.8 Mention the life cycle of the malaria parasite and explain how it is transmitted to humans.

Level	Unsatisfactory	Marginal	Good	Exemplary
Max. Marks	0	1-2	3-4	5
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Fails to mention life cycle. - Does not recognize transmission method. - Lacks understanding of parasite's role. 	<ul style="list-style-type: none"> - Describes basic life cycle stages (e.g., sporozoite, merozoite, gametocyte). - Recognizes mosquito vector's role. - Identifies transmission through mosquito bite. 	<ul style="list-style-type: none"> - Thoroughly describes life cycle stages (e.g., liver stage, erythrocytic stage). - Provides nuanced understanding of transmission process (e.g., mosquito feeding, sporozoite injection). - Offers insightful analysis of parasite's lifecycle and its implications for disease prevention and treatment. - Demonstrates in-depth understanding of malaria parasite's biology and epidemiology.

Q.9 Explain the mode of transmission and symptoms of ringworm infection.

Level	Unsatisfactory	Marginal	Good	Exemplary
Max. Marks	0	1-2	3-4	5
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Fails to describe transmission method. - Does not recognize symptoms. - Lacks understanding of infection. 	<ul style="list-style-type: none"> - Describes basic transmission methods (e.g., direct contact, contaminated objects). - Recognizes common symptoms (e.g., itchy rash, circular lesions). - Identifies fungal cause. 	<ul style="list-style-type: none"> - Thoroughly explains transmission methods (e.g., person-to-person, animal-to-person, contaminated soil). - Provides nuanced understanding of symptoms (e.g., varying appearance, affected areas). - Offers insightful analysis of prevention strategies (e.g., hygiene, avoiding contact). - Demonstrates in-depth understanding of ringworm infection's epidemiology and clinical presentation.

Q.10 Identify the benefits of using renewable energy sources.

Level	Unsatisfactory	Marginal	Good	Exemplary
Max. Marks	0	1-2	3-4	5
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Attempts to identify benefits but vague or incorrect - Shows limited understanding of renewable energy - Lacks specific examples of benefits - Fails to address the question 	<ul style="list-style-type: none"> - Identifies some benefits (like sustainable, less pollution) - Shows some understanding of renewable energy uses - Provides limited examples of benefits - Addresses most parts of the question 	<ul style="list-style-type: none"> - Correctly identifies key benefits (clean, abundant, reduces climate change) - Shows clear understanding of renewable energy importance - Provides specific examples of benefits - Addresses all parts of the question effectively

Q.11 Explain the concept of thermal pollution and its impact on the environment.

Level	Unsatisfactory	Marginal	Good	Exemplary
Max. Marks	0	1-2	3-4	5
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Attempts to explain thermal pollution but incorrect - Shows limited understanding of concept - Lacks specific examples of impacts - Fails to address the question 	<ul style="list-style-type: none"> - Explains thermal pollution (heat release into water/air) - Shows some understanding of environmental impacts - Provides limited examples of effects on ecosystems - Addresses most parts of the question 	<ul style="list-style-type: none"> - Correctly explains thermal pollution and its causes - Shows clear understanding of impacts on aquatic life - Provides specific examples of environmental effects - Addresses all parts of the question effectively

Rubric

Class: IX

Subject: General Science

Section: C

Q.12 Suggest ways in which science can address societal issues.

Level	Unsatisfactory	Marginal	Satisfactory	Good	Exemplary
Max. Marks	0	1-3	4-5	6-7	8-10
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none">- Attempts to suggest ways but vague or incorrect- Shows little understanding of science-society link- Lacks specific examples of applications- Fails to address the question	<ul style="list-style-type: none">- Suggests some ways science helps society (like healthcare)- Shows some understanding of practical applications- Provides limited examples of science solutions- Addresses some parts of the question	<ul style="list-style-type: none">- Suggests multiple ways science addresses issues (health, environment, tech)- Shows clear understanding of science's role in society- Provides some examples of real-world applications- Addresses most parts of the question	<ul style="list-style-type: none">- Correctly suggests various ways science addresses societal issues- Shows in-depth understanding of science-society interplay- Provides specific, relevant examples of applications- Addresses all parts of the question effectively

Q.13 Examine how advances in medical technology have improved the diagnosis and treatment of diseases.

Level	Unsatisfactory	Marginal	Satisfactory	Good	Exemplary
Max. Marks	0	1-3	4-5	6-7	8-10
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Fails to describe medical technology's role. - Does not recognize diagnostic improvements. - Lacks understanding of treatment advancements. 	<ul style="list-style-type: none"> - Describes basic diagnostic improvements (e.g., imaging technologies). - Recognizes treatment advancements (e.g., targeted therapies). - Identifies some benefits (e.g., increased accuracy, reduced recovery time). 	<ul style="list-style-type: none"> - Examines diagnostic improvements (e.g., genetic testing, biomarkers). - Analyzes treatment advancements (e.g., personalized medicine, robotic surgery). - Identifies impact on patient outcomes (e.g., improved survival rates, quality of life). - Recognizes potential for future advancements. 	<ul style="list-style-type: none"> - Thoroughly examines diagnostic and treatment advancements. - Provides nuanced understanding of impact on disease management (e.g., early detection, tailored treatments). - Offers insightful analysis of benefits and limitations. - Demonstrates in-depth understanding of medical technology's transformative role in healthcare.

Q.14 Evaluate the effects of overpopulation on environmental degradation, including factors such as pollution and climate change.

Level	Unsatisfactory	Marginal	Satisfactory	Good	Exemplary
Max. Marks	0	1-3	4-5	6-7	8-10
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Fails to describe overpopulation's impact. - Does not recognize environmental degradation. - Lacks understanding of pollution and climate change. 	<ul style="list-style-type: none"> - Describes basic effects (e.g., resource depletion, increased waste). - Recognizes pollution's impact (e.g., air, water). - Identifies climate change connection. 	<ul style="list-style-type: none"> - Evaluates effects on environmental degradation (e.g., deforestation, loss of biodiversity). - Analyzes pollution's impact (e.g., health risks, ecosystem disruption). - Identifies climate change consequences (e.g., rising temperatures, extreme weather). - Recognizes need for sustainable solutions. 	<ul style="list-style-type: none"> - Thoroughly evaluates overpopulation's impact on environmental degradation. - Provides nuanced understanding of complex relationships (e.g., population growth, resource consumption, pollution). - Offers insightful analysis of potential solutions (e.g., family planning, sustainable practices, policy changes). - Demonstrates in-depth understanding of overpopulation's far-reaching consequences for the environment.

Q.15 Reflect on the global use of nuclear energy and its implications for the environment and human health.

Level	Unsatisfactory	Marginal	Satisfactory	Good	Exemplary
Max. Marks	0	1-3	4-5	6-7	8-10
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Fails to describe nuclear energy's role. - Does not recognize environmental implications. - Lacks understanding of health risks. 	<ul style="list-style-type: none"> - Describes basic benefits (e.g., electricity generation). - Recognizes environmental concerns (e.g., radioactive waste). - Identifies health risks (e.g., radiation exposure). 	<ul style="list-style-type: none"> - Reflects on global use and implications. - Analyzes environmental impact (e.g., nuclear accidents, waste disposal). - Identifies health consequences (e.g., cancer risk, genetic mutations). - Recognizes need for safety measures. 	<ul style="list-style-type: none"> - Thoroughly reflects on global nuclear energy use. - Provides nuanced understanding of complex implications (e.g., energy security, climate change mitigation, waste management). - Offers insightful analysis of benefits and drawbacks. - Demonstrates in-depth understanding of nuclear energy's multifaceted impact on environment and human health.

Q. 16 Evaluate the impact of fossil fuel pollution on human health and the environment.

Level	Unsatisfactory	Marginal	Satisfactory	Good	Exemplary
Max. Marks	0	1-3	4- 5	6-7	8-10
Description	Provides no response or provides irrelevant response	<ul style="list-style-type: none"> - Attempts to evaluate impact but vague or incorrect - Shows little understanding of pollution effects - Lacks specific examples of health/environment impacts - Fails to address the question 	<ul style="list-style-type: none"> - Evaluates some impacts of fossil fuel pollution (air pollution, climate change) - Shows some understanding of health and environment effects - Provides limited examples of specific impacts - Addresses some parts of the question 	<ul style="list-style-type: none"> - Evaluates multiple impacts on health (respiratory issues, etc.) and environment (climate change, etc.) - Shows clear understanding of pollution consequences - Provides some examples of specific impacts - Addresses most parts of the question 	<ul style="list-style-type: none"> - Correctly evaluates significant impacts on health (diseases, etc.) and environment (biodiversity loss, etc.) - Shows in-depth understanding of pollution effects - Provides specific, relevant examples of impacts - Addresses all parts of the question effectively