Class - 12th Science

Date-7.1.26

English

The Roadside Stand – Key Points
Poet: Robert Frost
Genre: Poem (Social concern)

Central Idea
The poem highlights the suffering and exploitation of poor rural people.
It contrasts the comfort of city people with the misery of villagers.
The roadside stand represents hope, poverty, and helplessness.

Key Points
Poor villagers set up a small roadside stand to earn a little money.
They hope passing city people will stop and buy something.
City people are selfish and insensitive; they rarely stop.
Instead of helping, they complain about:
The stand being ugly
The signboards blocking their view
The villagers' dream of prosperity is shattered.
The poet criticizes false promises made by the government to help villagers.
The poet feels deep sympathy for the villagers.
He wishes to end their suffering, even imagining death as a release (without glorifying it).
The poem ends with the villagers still waiting hopelessly.

Themes / Messages
Rich–poor divide
Exploitation of the rural poor
Insensitivity of modern society
False hopes given to villagers
Need for social justice and empathy

Poetic Devices (Important for Exams)
Alliteration: "pathetic sound"
Metaphor: Roadside stand as symbol of rural poverty
Irony: Help promised but never given
Imagery: Clear picture of the rural setting

Tone of the Poem
Sympathetic
Critical
Sad and thoughtful

Why is the poem relevant today?
Even today, rural people struggle for fair opportunities.
Development often ignores the poorCompetency-Based Questions
Poem: The Roadside Stand

1. Case-Based Question
The villagers set up a roadside stand to earn money from city travellers.
Question:
If the government truly wanted to improve the villagers' condition, what two practical steps should it take instead of making false promises?
Competency Tested: Problem-solving & real-life application

2. Analytical Question
City people complain about the roadside stand spoiling the view.
Question:
What does this complaint reveal about the attitude of urban people towards rural poverty?
Competency Tested: Analysis & interpretation

3. Inference-Based Question
The poet says that "greedy good-doers" plan to help villagers.
Question:
Why does the poet use this ironic phrase? What can you infer about such helpers?
Competency Tested: Inference & critical thinking

4. Value-Based Question
The poet feels disturbed by the villagers' suffering.
Question:
What values does the poem promote that students should follow in their daily lives? Mention any two.
Competency Tested: Values & life skills

5. Cause-and-Effect Question
The roadside stand fails to attract customers.
Question:
Identify two causes and two effects of the failure of the roadside stand.
Competency Tested: Logical reasoning

6. Assertion–Reason Question
Assertion (A): The poet criticizes modern development in the poem.
Reason (R): Development often benefits the rich while ignoring the rural poor.
a) Both A and R are true and R is the correct explanation
b) Both A and R are true but R is not the correct explanation
c) A is true and R is false
d) A is false and R is true
Competency Tested: Reasoning

7. Creative Competency Question
Imagine a city traveller who finally understands the villagers' pain.
Question:
What change in attitude or action should such a traveller show after reading the poem?
Competency Tested: Creative & empathetic thinking

8. Comparison Question
Compare the dreams of the villagers with the lifestyle of city people.

Question:
How does this contrast strengthen the central message of the poem?
Competency Tested: Comparison & interpretation

9. Life-Skill Based Question
Question:
How can students contribute to reducing the rural–urban divide highlighted in the poem?
Competency Tested: Life skills & social responsibility

10. Extract-Based Competency Question
“The polished traffic passed with a mind ahead”
Question:
What does this line suggest about the priorities of city people?
Competency Tested: Textual interpretation

12th chemistry

Instructions
1. Solve all the questions on sheets.
2. Write answers according to marks mention above the question .

Questions
1.Out of 2-chloroethanol and ethanol which is more acidic and why?(2)
2.Out of o-nitrophenol and p-nitrophenol, which is more volatile? Explain.(2)
3.Arrange the following compounds in increasing order of acidity and give a suitable explanation. Phenol, o-nitrophenol, o-cresol.(2)
4.Explain why the OH group in phenols is more strongly held as compared to OH group in alcohols.(3)

Biology

Chapter: Biotechnology – Principles and Processes (Class XII)
1. Case-Based / Application
1.A scientist wants to insert a human insulin gene into a bacterial plasmid.
Which properties should the plasmid possess to ensure successful cloning? Explain.
2.During gene cloning, a student used E. coli as a host cell.Justify why E. coli is preferred over other organisms.
3.A restriction enzyme cuts DNA at a specific palindromic sequence.
How does this property help in producing recombinant DNA?
2. Assertion–Reason Based
4.Assertion (A): Restriction endonucleases are known as molecular scissors.
Reason (R): They cut DNA at specific recognition sites.
(a) Both A and R are true and R explains A
(b) Both A and R are true but R does not explain A
(c) A is true, R is false
(d) A is false, R is true
5.Assertion: Ligase enzyme is essential during cloning.
Reason: It helps in cutting DNA into fragments.
3. Analytical / Reasoning
6.Why is heat-stable DNA polymerase used in PCR instead of normal DNA polymerase?
7.If a plasmid lacks a selectable marker gene, how will it affect the cloning experiment?
8.Explain how gel electrophoresis helps in the separation of DNA fragments of different sizes.
4. Diagram / Process Based
9.Arrange the following steps of PCR in correct sequence:
(i) Annealing

(ii) Extension
(iii) Denaturation
10.A bacterial cell containing recombinant plasmid is grown in a nutrient medium.
Predict what will happen to the foreign gene after multiple cell divisions.

Subject : Math

General Instructions:
Do all questions neatly in the fair notebook.
Mention Date, and Day on each day's work.
All steps must be shown clearly.
Each question carrying 3 marks.
Part A: Learning Work
A relation is a connection or association between elements of two sets.
Formally:
If A and B are two sets, a relation R from A to B is a subset of the Cartesian product A×B.
Key Points
Ordered Pair: The relation is made of ordered pairs (a,b) showing a connection from a to b.
Subset of Cartesian Product: Not all pairs need to be included; only the connected ones.
Types of Relations
1.Reflexive
2.Symmetric
3.Transitive
Equivalence Relation: Relation that is reflexive, symmetric, and transitive.
Part B : Written Work
1. Check whether the relation R defined on the set A = {1, 2, 3, 4, 5, 6} as R = {(a, b): b = a + 1} is reflexive, symmetric or transitive.
2. If Z is the set of all integers and R is the relation on Z defined as R = {(a, b):a,b ∈ Z and a – b is divisible by 5}. Prove that R is an equivalence relation.
3.Give an example of relation which is reflexive, symmetric but not transitive.

Physics

Dear students please read carefully all the key details of chapter and at the end there is quiz related to topic . it is must to solve all quiz questions .
Electromagnetic Waves
Content Summary
Electromagnetic waves are transverse waves produced by accelerated electric charges. They consist of mutually perpendicular oscillating electric (E) and magnetic (B) fields, which are also perpendicular to the direction of propagation. These waves do not require any material medium and can travel through vacuum with the speed of light.
Electromagnetic waves carry energy and momentum and exert radiation pressure. The complete range of electromagnetic waves arranged according to wavelength or frequency is called the electromagnetic spectrum, which includes radio waves, microwaves, infrared, visible light, ultraviolet, X-rays, and gamma rays. Each type has specific sources and applications in daily life, communication, medicine, and scientific research.

Key Concepts
Electromagnetic waves
Maxwell's prediction
Displacement current
Nature of EM waves (transverse)
Speed of electromagnetic waves

Electromagnetic spectrum
Uses of different EM waves
Important Formulae
1. Speed of Electromagnetic Waves
Where:
= speed of light in vacuum
= permeability of free space
= permittivity of free space
2. Relation Between Electric and Magnetic Fields
3. Energy Density of EM Wave
4. Intensity of Electromagnetic Wave
5. Radiation Pressure
Electromagnetic Spectrum (Order)
Radio waves → Microwaves → Infrared → Visible light → Ultraviolet → X-rays → Gamma rays
Important Points for Exams
EM waves do not require a medium
Produced by accelerated charges
Electric and magnetic fields are in phase
Carry energy and momentum
Instructions
Students you have t use the following link to start the quiz. After completion of quiz you will get the certificate of participation and grade marks .you have to save it for further assessment in future .
Link of quiz- https://www.proprofs.com/quiz-school/ugc/story.php?title=ndu2mdi5mqntrc