Class 12th Science
Date- 9.1.26

English

Key Points: “A Thing of Beauty”

A thing of beauty gives everlasting joy and its beauty increases with time.

Beautiful things provide peace, comfort, and relief from sorrow and suffering.

Human life is full of pain, disappointment, and negativity, but beauty helps us survive these hardships.

Examples of beauty include nature (sun, moon, trees, flowers), myths, and noble deeds of the past.

Beauty acts like a healing force, binding humans to life despite misery.

The poet believes beauty is immortal and leaves a permanent impact on the human soul.

Keats emphasizes that art, nature, and literature nourish the human spirit.

Competency-Based Questions (Unsolved)

1.How does the poet justify the idea that beauty has the power to remove human suffering? Support your answer with examples from the poem.

2.Explain how “a thing of beauty” acts as a source of motivation for human beings in difficult times.

3.Why does the poet call beauty a “bower quiet for us”? What human need does it fulfill?

4.Analyze how Keats connects beauty with immortality. What message does this convey about human life?

5.In today’s stressful world, how can the poet’s idea of beauty help individuals maintain emotional balance?

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

Definition of Continuity: The graph has no breaks, jumps, or holes at x=a.You can draw it without lifting your pen.

Definition of Differentiability : The function has a well-defined slope at x=a. The graph is smooth there—no sharp corners or cusps.

Key Relationship (Very Important)

Differentiable $\Rightarrow$ Continuous

Continuous $\not\Rightarrow$ Differentiable

So:

If a function is differentiable at a point, it must be continuous there.

A function can be continuous but not differentiable.

Part B: Written Work

1.For what value of k is the function defined by

f(x) =

4x+1, if x>0 continuous at x=0? What about continuity at x=1?

12th chemistry

Instructions

1. Solve all the questions on sheets.

2. Write answers according to marks mention above the question .

Questions

1.A complex of the type $[M(AA)_2X_2]n+$ is known to be optically active. What does this indicate about the structure of the complex? Give one example of such a complex.(3)

2.Magnetic moment of [MnCl4]2- is 5.92 BM. Explain why(3)

3.On the basis of crystal field theory explains why Co (III) forms a paramagnetic octahedral complex with weak field ligands whereas it forms a diamagnetic octahedral complex with strong field ligands.(3)

4.Give the electronic configuration of the following complexes on the basis of Crystal Field Splitting theory.

[CoF6]3-, [Fe(CN)6]4- and [Cu(NH3)6]2+. (3)

Physics

Chapter: Dual Nature of Radiation and Matter

Introduction

This chapter explains that radiation (light) and matter (electrons) show dual nature—both wave and particle behavior.

Classical physics failed to explain certain phenomena, leading to quantum theory.

Dual Nature of Radiation

Particle Nature of Light

Light consists of photons.

Energy of a photon:

Where:

h = Planck's constant

ν = frequency of light

Photoelectric Effect

Emission of electrons from a metal surface when light of sufficient frequency falls on it.

Laws of Photoelectric Effect

Emission occurs only if frequency ≥ threshold frequency (ν_o).

Photoelectric current ∝ intensity of light.

Maximum kinetic energy depends on frequency, not intensity.

Emission is instantaneous.

Einstein's Photoelectric Equation

Wave Nature of Matter

de Broglie Hypothesis

Every moving particle has an associated wavelength.

de Broglie Wavelength

For electron accelerated through potential V:

Experimental Verification

Davisson–Germer experiment confirmed wave nature of electrons through diffraction.

Significance of Dual Nature

Explains behavior of microscopic particles.

Foundation of quantum mechanics.

Important in electron microscopes and modern technology.

Important Formula Summary

Energy of photon:

Einstein photoelectric equation:

Maximum kinetic energy:

de Broglie wavelength:

Electron wavelength (accelerated by V):

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=ndu2mtqyma1elc

Biology

https://drive.google.com/file/d/1A3YTgP5ECElyVvqCqh7jfCg2PTN81udE/view?usp=drivesdk

Kindly do the work given in above link.