

SHREE VASISHTHA VIDHYALAYA
 (English Medium, CBSE affiliated, Member-NPSC, Recipient-International School Award)
PA-III Assignment: 2026 27
Class-XII Science
DATE OF SUBMISSION: 22-10-2026 (Thursday)

1.	ENGLISH CORE
	Level 1: Easy - Who was Rajkumar Shukla? - Where did Gandhi first meet Rajkumar Shukla? - What crop were the sharecroppers of Champaran forced to grow for their landlords? - Who wrote <i>Poets and Pancakes</i>? - What was Gemini Studios? - Who wrote <i>On the Face of It</i>? - Why was Derry unwilling to meet people? - What did Mr Lamb have in place of one of his legs? - Who wrote <i>A Roadside Stand</i>? - What do the farmers sell at the roadside stand? Level 2: Intermediate (40–50 words each) - Why did Gandhi refuse to leave Champaran when the magistrate ordered him to? - Why did Gandhi accept a settlement of 25 per cent refund to the sharecroppers? - How did Gandhi's stay in Champaran help the peasants overcome their fear? - Explain the title <i>Poets and Pancakes</i>. - How does the narrator describe his own job at Gemini Studios, and what does this tell us about the studio? - How does Mr Lamb's attitude towards life differ from Derry's at the start of <i>On the Face of It</i>? - What is the significance of the garden in <i>On the Face of It</i>? - What is the poet's attitude towards the farmers in <i>A Roadside Stand</i>? - How do the city people behave towards the farmers in <i>A Roadside Stand</i>? What does this show about them? - Why does the poet say that the poor farmers' hope is in vain? Explain with reference to the poem. Level 3: Advanced (120–150 words each) "The Champaran episode was Gandhi's first lesson in civil disobedience and self-reliance." Discuss with evidence from <i>Indigo</i>. - According to Gandhi, freedom from fear mattered more than legal relief for the peasants. Do you agree? Justify your view. - Evaluate the role played by the lawyers and other Indians in Gandhi's Champaran campaign. How did their attitude change? - How does Asokamitran use humour and gentle satire in <i>Poets and Pancakes</i> to comment on the world of cinema? - Mr Lamb is both a friend and a teacher to Derry. Justify this statement with evidence from <i>On the Face of It</i>. "Derry's struggle is not only with his scarred face but also with society's attitude towards it." Discuss. <i>A Roadside Stand</i> is a poem about rural poverty and urban indifference. Discuss how the poet presents this contrast.

	28. Compare how <i>A Roadside Stand</i> and <i>On the Face of It</i> present society's treatment of the vulnerable. 29. Compare Gandhi in <i>Indigo</i> and Mr Lamb in <i>On the Face of It</i> as people who restore the confidence of others. 30. Write a diary entry of 120 words by Derry after his first visit to Mr Lamb's garden, describing how his feelings change.
2.	PHYSICS
	SECTION A Q1. The magnetic dipole moment of a current-carrying circular loop of radius r carrying current I is proportional to: (A) r (B) r^2 (C) r^{-2} (D) r^{-1} Q2. Which of the following curves correctly represents the variation of capacitive reactance (X_c) with the frequency (ν) of an AC source? (A) A straight line passing through the origin (B) A parabola opening upwards (C) A rectangular hyperbola (D) A line parallel to the frequency axis Q3. The magnetic flux linked with a coil is given by $\phi = 3t^2 - 6t + 9$ weber. The magnitude of induced emf at $t = 2$ s is: (A) 0 V (B) 3 V (C) 6 V (D) 12 V Q4. A ferromagnetic substance becomes a paramagnetic substance when it is heated above its: (A) Critical temperature (B) Curie temperature (C) Inversion temperature (D) Melting point Q5. In a purely inductive AC circuit, the phase difference between the alternating voltage and alternating current is: (A) 0° (B) $\pi/4$ radians (C) $\pi/2$ radians (D) π radians Q6. The primary and secondary coils of an ideal transformer have 100 and 500 turns respectively. If the primary voltage is 120 V, the secondary voltage is: (A) 24 V (B) 120 V (C) 600 V (D) 2400 V Q7. • Assertion (A): An induced emf appears in any circuit whenever the magnetic flux linked with the circuit changes. • Reason (R): The magnitude of the induced emf is directly proportional to the rate of change of magnetic flux (Faraday's Law). Q8. • Assertion (A): A capacitor blocks direct current (DC) in a steady-state condition. • Reason (R): The capacitive reactance for direct current (zero frequency) is infinite. SECTION B (4 Marks) <i>Questions 9 and 10 carry 2 marks each.</i> Q9. (a) Define intensity of magnetizing field (H) and write its SI unit. (b) How does the magnetic susceptibility of a ferromagnetic material change with an increase in temperature? Q10. A circular copper loop of radius r is placed in a uniform magnetic field B perpendicular to its plane. If the loop is pulled out of the region of magnetic field with a velocity v, state the direction and expression for the induced current in the loop (assuming total resistance of the loop is R). SECTION C (9 Marks) <i>Questions 11 to 13 carry 3 marks each.</i> Q11. (a) Define mutual inductance between a pair of coils and write its SI unit. (b) Derive an expression for the mutual inductance of two long co-axial solenoids of same length l, having radii r_1 and r_2 ($r_1 < r_2$) and total turns N_1 and N_2 wound one over the other.

Q12. A bulb of resistance $10\ \Omega$ and inductance L is connected in series with an AC source of 220 V, 50 Hz. If the phase angle between voltage and current is $\pi/3$ radians, calculate:

- (i) The impedance of the circuit.
- (ii) The inductive reactance of the inductor.

Q13. A short bar magnet placed with its axis at 30° with a uniform external magnetic field of 0.25 T experiences a torque of magnitude equal to 4.5×10^{-2} J.

- (i) Calculate the magnetic moment of the bar magnet.
- (ii) If the magnet is free to rotate, find the work done in turning it from its stable equilibrium position to its unstable equilibrium position.

Q.14 Distinguish between diamagnetic, paramagnetic, and ferromagnetic substances based on their:

- (i) Behavior in a non-uniform magnetic field.
- (ii) Effect of temperature on magnetic susceptibility (Curie's Law).

Q.15 A series LCR circuit consisting of resistance $R = 10\ \Omega$, inductor $L = 0.2$ H, and capacitor $C = 50\ \mu\text{F}$ is connected across a 220 V, 50 Hz AC supply. Calculate:

- (i) The impedance of the circuit.
- (ii) The rms value of current flowing through the circuit.

SECTION D (4 Marks)

Case Study Based Question

Read the paragraph and answer the questions that follow:

The performance of a transformer depends heavily on the materials used for its core and windings. To minimize energy losses due to eddy currents, transformer cores are laminated using thin sheets of silicon steel coated with insulating varnish. Copper losses occur due to the Joule heating in the primary and secondary winding wires. Hysteresis losses happen because of repeated magnetization and demagnetization of the core material by the alternating current, which can be minimized by using a core material with low coercivity and narrow hysteresis loop area. Flux leakage also occurs when all the magnetic flux linked with the primary does not pass through the secondary.

(i) Transformer cores are laminated primarily to reduce energy losses due to:

- (A) Hysteresis
- (B) Eddy currents
- (C) Copper loss (Joule heating)
- (D) Flux leakage

(ii) Why is soft iron preferred over steel for making the core of a transformer?

- (A) Soft iron has high retentivity and high coercivity
- (B) Soft iron has low retentivity and low coercivity
- (C) Soft iron is a bad conductor of electricity
- (D) Soft iron has a very wide hysteresis loop

(iii) The material used for the transformer core should ideally have:

- (A) Large hysteresis area
- (B) High magnetic permeability and low hysteresis loss
- (C) Low electrical resistivity
- (D) High coercivity

(iv) If the copper wire used for transformer windings is extremely thick, what primary problem is avoided?

- (A) Eddy current loss in the core
- (B) Copper loss due to resistance of the windings
- (C) Flux leakage between coils
- (D) Hysteresis loss

SECTION E (10 Marks)

Questions 14 and 15 carry 5 marks each (Internal choice available).

Q16. (a) An AC source $v = v_m \sin(\omega t)$ is connected across a series combination of a resistor R , an inductor L , and a capacitor C . Use the phasor diagram method to derive an expression for the impedance (Z) of the circuit and the phase angle (ϕ) between voltage and current.

(b) Write the condition for resonance in this circuit and give the formula for resonant frequency.

	Q.17(a) State Faraday's laws of electromagnetic induction. Write the mathematical formula representing these laws. (b) A metal rod of length 1 m is rotated with an angular frequency of 50 rad/s in a plane perpendicular to a uniform magnetic field of 0.5 T about one of its ends. Find the emf induced between the ends of the rod. Q.18. (a) Explain the construction and working principle of an AC generator (dynamo). Mention the role of slip rings and brushes. (b) An ideal inductor of inductance 0.5 H is connected in series with a 100 Ω resistor and a 220 V, 50 Hz AC source. Calculate the current flowing in the circuit. Q.19 (a) Define self-inductance of a coil. Show that the magnetic potential energy stored in an inductor of inductance L carrying current I is given by $U = \frac{1}{2}LI^2$ (b) A step-up transformer has a transformation ratio of 1: 10. It is connected to a 200 V AC supply drawing a primary current of 2 A. If the efficiency of the transformer is 90%, calculate the secondary current and the secondary voltage. Q.20 (a) Derive an expression for the impedance of a series LCR circuit connected to an AC voltage source using the phasor diagram method, and obtain the expression for the phase angle. (b) Write down the frequency condition for electrical resonance in a series LCR circuit.
3.	CHEMISTRY
	- Explain why the boiling point of alcohols is higher than that of corresponding hydrocarbons. - Write the mechanism of dehydration of ethanol to ethene using concentrated H_2SO_4. - How will you distinguish between ethanol and phenol using a chemical test? - Explain why phenol is more acidic than ethanol. - Write the reactions of phenol with: (a) NaOH (b) Br_2 water (c) conc. HNO_3 - What happens when ethanol is heated with (a) excess HI (b) acidified $K_2Cr_2O_7$? - Give the IUPAC names of: (a) CH_3CH_2OH (b) C_6H_5OH (c) CH_3OCH_3 (d) $C_6H_5OCH_3$ - Explain Williamson ether synthesis with an example. - What happens when anisole reacts with HI? Explain the reaction. - Arrange the following in increasing order of acidity: ethanol, phenol, p-nitrophenol, p-cresol. - Convert phenol into benzene. - Convert ethanol into ethoxyethane (diethyl ether). - Why does phenol give a violet colour with neutral $FeCl_3$? - What is Kolbe's reaction? Write the reaction of sodium phenoxide with CO_2. - What is Reimer–Tiemann reaction? Write the reaction of phenol with $CHCl_3/NaOH$. - Explain why aldehydes are generally more reactive than ketones towards nucleophilic addition reactions. - Write the mechanism of the reaction between ethanal and HCN. - How will you distinguish between an aldehyde and a ketone using Tollens' reagent? - What is Fehling's test? Which compounds give a positive Fehling's test? - Write the products formed when ethanal undergoes: (a) oxidation (b) reduction (c) aldol condensation - Explain aldol condensation with a suitable example. - What is Cannizzaro reaction? Give an example. - Why do aldehydes and ketones have higher boiling points than hydrocarbons of comparable molecular mass? - Write the IUPAC names of: (a) CH_3CHO (b) CH_3COCH_3 (c) CH_3CH_2COOH (d) C_6H_5CHO - Convert ethanal into ethanol. - Convert ethanoic acid into ethanol. - Convert benzoic acid into benzene.

	28. Explain why carboxylic acids are more acidic than alcohols. 29. What happens when ethanoic acid reacts with: (a) NaHCO_3 (b) ethanol in the presence of conc. H_2SO_4 (c) SOCl_2? 30. Give suitable chemical tests to distinguish between: (a) Ethanal and propanone (b) Ethanol and ethanoic acid (c) Phenol and benzoic acid
4.	MATHEMATICS Integration Level 1: Basic Integration Find the following integrals: 1. $\int (3x^2 + 4x - 5) dx$ 2. $\int \left(2x^3 + \frac{1}{x^2} \right) dx$ 3. $\int \frac{1}{\sqrt{x}} dx$ 4. $\int (x + 1)^2 dx$ 5. $\int \left(\sqrt{x} + \frac{1}{\sqrt{x}} \right) dx$ Evaluate $\int_0^1 \frac{\log x}{\log x + \log(1-x)} dx$ Evaluate a) $\int e^x [x^2 + 2x] dx$ b) $\int e^x \left[\log x + \frac{1}{x} \right] dx$ c) $\int e^x \left[\frac{x-1}{x^2} \right] dx$ d) $\int \left[\frac{1}{\log x} - \frac{1}{(\log x)^2} \right] dx$ $\int_0^1 \frac{x}{x^2 + 1} dx$ $\int_0^{\pi/2} \sin^3 x dx$ $\int_0^{\pi/2} \cos^2 x dx$ $\int_0^{\pi} x \sin x dx$ $\int_0^1 x e^{x^2} dx$ $\int_0^1 \frac{dx}{1+x^2}$ $\int_0^{\pi/2} \frac{\sin x}{\sin x + \cos x} dx$ Find the area bounded by the curve $y = x^2$, the x-axis, and the lines $x = 0$ and $x =$ Find the area bounded by $y = 4x - x^2$ and the x-axis. Find the area under $y = \sqrt{x}$ between $x = 0$ and $x = 4$. Find the area bounded by $y = x^3$, the x-axis, $x = 0$, and $x = 2$. Find the area enclosed by $y = 6x - x^2$ and the x-axis.
5.	BIOLOGY 1. Name the source of Taq polymerase. Explain the advantage of its use in biotechnology. (C.B.S.E. 2009) 2. Name the source organism from which T1 plasmid is isolated. Explain the use of this plasmid in biotechnology. (C.B.S.E. 2009) 3. What is EcoRI? What does 'R' represent in this? (C.B.S.E. 2009)

	4. EcoRI is used to cut a segment of foreign DNA and that of a vector DNA to form a recombinant DNA. Show with the help of schematic diagrams. (i) The set of palindromic nucleotide sequence of base pairs the EcoRI will recognize in both the DNA segments. Mark the site at which EcoRI will act and cut both the segments. (ii) Sticky end formed on both the segments where the two DNA and foreign DNA join later to form a recombinant DNA. (C.B.S.E. 2010) 5. A recombinant DNA is formed when sticky ends of vector DNA and foreign DNA Join. Explain how the sticky ends are formed and get jointed. (C.B.S.E. 2010) 6. (i) Mention the number of primers required in each cycle of polymerase chain reaction (PCR). Write the role of primers and DNA polymerase in PCR. (ii) Give the characteristic feature and source of DNA polymerase used in PCR. What is ADA deficiency? Describe three methods to cure it. (C.B.S.E. 2009 comptt.) 7. (a) Name the source from which insulin was extracted earlier. Why is this insulin no more in use by diabetic people? (b) Explain the process of synthesis of insulin by Eli Lilly company. Name the technique used by the company. (c) How is insulin produced by human body different from the insulin produced by the above mentioned company. (C.B.S.E. 2011) 8. Name the process involved in the production of nematode resistant tobacco plants, using genetic engineering. Explain the strategy adapted to develop such plants. (C.B.S.E. 2011) 9. Describe the various stages involved in gene transfer for commercial production of human insulin by Eli Lilly. (C.B.S.E. 2011) 10. How did the process of RNA interference help to control the nematode from infecting the roots of tobacco plants? (C.B.S.E. 2014) 11. What is bio-piracy? State the initiative taken by the Indian Parliament against it. 2014 Why do predators avoid eating Monarch Butterfly? How does the butterfly develop the protective feature? (C.B.S.E. 2010) 12. Why are green plants not found beyond a certain depth in the ocean? (C.B.S.E. 2011) 13. Pollinating species of wasps show mutualism with specific fig plants. Mention the benefits the females wasps derive from the fig trees from such an interaction. (C.B.S.E. 2011) 14. Why are cattle and goats not seen browsing on Calotropis growing in the fields? (C.B.S.E. 2011) 15. Why are some organisms called eurythermals and some others are stenohaline. (C.B.S.E. 2011) 16. Write what do phytophagous insects feed on. (C.B.S.E. 2012) 17. (i) Cuscuta and Shoe flower (ii) Orchid growing on Mango tree. (iii) Whale and Barnacle growing on its back.
6.	INFORMATICS PRACTICES
	Q1. What is the fundamental structural difference between a Series and a DataFrame object in the Pandas library? Provide a short Python snippet demonstrating how to check their dimensions. Q2. Explain the distinct operational difference between the loc[] and iloc[] indexing indexing methods in a Pandas DataFrame. Q3. Write a Python code snippet to locate and drop all rows containing NaN missing values specifically within the 'Salary' column of a DataFrame named emp_df. Q4. Imagine a DataFrame sales_df has columns: 'Region', 'Product', and 'Revenue'. Provide the Pandas statement required to compute the total revenue grouped by each Region. Q5. What are the two primary methods to append or join new data rows to an existing DataFrame structure, and how do they differ in practice? Q6. When communicating data patterns, what categorical scenarios dictate choosing a Histogram over a standard Bar Chart? Q7. What is the explicit purpose of the plt.legend() function in a multi-series graph, and how do you customize its position on the canvas? Q8. Conduct a comparative structural analysis between a Hub and a Network Switch operating inside a local area topology. Q9. What is the core structural purpose of the Domain Name System (DNS) infrastructure in web networking architecture?

	Q10. Define the conceptual boundary and operational utility separating a Router from a network Gateway.
7.	PHYSICAL EDUCATION
	Level 1: Easy Questions 1 mark each Basic concepts and definitions 1. Define test, measurement, and evaluation in sports. 2. What is the full form of BMI? 3. Name any two tests included in the SAI Khelo India Fitness Test for students aged 9–18 years. 4. What is the purpose of the Harvard Step Test? 5. What is Basal Metabolic Rate (BMR)? 6. Define biomechanics in sports. 7. State Newton's First Law of Motion. 8. What is a lever? 9. Define equilibrium in sports. 10. What is the centre of gravity of a body? 11. What is friction? Give one example from sports. 12. What is projectile motion in sports? Level 2: Intermediate Questions 2–3 marks each Understanding and application 13. Differentiate between a test, measurement, and evaluation with suitable examples. 14. Explain any three components of the SAI Khelo India Fitness Test for students aged 9–18 years. 15. Explain the procedure and purpose of the Harvard Step Test. 16. Describe any three tests included in the Rikli and Jones Senior Citizen Fitness Test and state what each measures. 17. Explain the importance of the Johnson–Metheny Test of Motor Educability. 18. Explain Newton's Second Law of Motion with two examples from sports. 19. Differentiate between static equilibrium and dynamic equilibrium with suitable examples. 20. Explain the three classes of levers with one sporting example of each. 21. Describe the role of friction in sports, giving two examples where it is beneficial. 22. Explain Newton's Third Law of Motion with suitable examples from athletics or swimming. 23. Explain any three factors that affect the trajectory of a projectile in sports. 24. Describe how biomechanics helps athletes improve performance and reduce the risk of injury. Level 3: Advanced Questions 5 marks each Detailed answers, calculations and case studies 25. Explain the SAI Khelo India Fitness Test for students aged 9–18 years. Describe the tests used to assess speed, endurance, flexibility, strength, and body composition. 26. Explain the Harvard Step Test and write its fitness index formula. Calculate the fitness index of a student who exercises for 300 seconds and has a pulse count of 90 during the specified recovery period. 27. Describe the six components of the Rikli and Jones Senior Citizen Fitness Test. Explain how each test assesses a different aspect of functional fitness. 28. Explain the meaning of BMR and discuss the factors that influence an individual's basal metabolic rate. Describe how BMR measurement is useful in understanding energy requirements. 29. Explain Newton's three laws of motion and discuss their applications in different sports, using suitable examples for each law. 30. Describe the three classes of levers with their fulcrum, effort, and resistance positions. Explain how these levers operate in human movement with sporting examples. 31. Explain static and dynamic equilibrium. Discuss the role of the centre of gravity and base of

	support in maintaining balance during gymnastics, wrestling, or other sports. 32. Explain projectile motion in sports. Discuss how the angle of release, speed of release, and height of release influence the trajectory of a thrown or kicked object. 33. Discuss the importance of friction in sports. Explain how athletes and sports equipment use friction to improve performance, and describe situations in which excessive friction can be disadvantageous. 34. A student scores poorly in the 50-metre speed test, sit-and-reach test, and partial curl-up test. Identify the fitness components being assessed and suggest suitable activities to improve each component. 35. A long jumper adjusts the angle of take-off, increases running speed before take-off, and changes body position during flight. Analyse these actions using the principles of projectile motion and Newton's laws of motion. 36. Case study: During a school sports assessment, a student performs the Harvard Step Test, completes the sit-and-reach test, and participates in a standing long jump. The physical education teacher then explains how the student's jumping technique can be improved by applying biomechanical principles. Answer the following: (a) What does the Harvard Step Test measure? (b) Which component of fitness is assessed by the sit-and-reach test? (c) Explain how Newton's Third Law applies during the take-off phase of the standing long jump. (d) Explain how the angle of take-off can influence the distance achieved in the long jump.
8.	ARTIFICIAL INTELLIGENCE
	Q1. Differentiate between an 'Entrepreneur' and an 'Intrapreneur' based on resource dependency and financial risk liability. Q2. A passionate graduate wants to set up a plastic recycling enterprise in their hometown, but faces complex registration rules, high commercial power tariffs, and a severe shortage of organized waste collectors. Categorize these barriers and explain their impact. Q3. Why is 'Persistence' considered an absolute non-negotiable quality for an entrepreneur? Explain using a realistic startup scenario. Q4. Outline how a local 'Social Entrepreneur' creates balanced community value compared to a pure 'Technopreneur' Q5. Identify the barrier to entrepreneurship when an individual possesses a brilliant, viable product concept but refuses to launch due to an extreme fear of failure and anxiety regarding public criticism Q6. Explain the fundamental difference between Generative AI and Discriminative AI models regarding their learning objectives. Q7. Describe the distinct, competitive roles of the Generator and the Discriminator during the training process of a Generative Adversarial Network (GAN). Q8. How does the continuous feedback loop in a GAN drive quality improvements over successive training epochs? Q9. Explain the explicit structural functions of the Encoder and Decoder components within a Variational Autoencoder (VAE) architecture. Q10. Why are Transformer models uniquely superior to traditional Recurrent Neural Networks (RNNs) when processing long natural language paragraphs? Q11. Define the phenomenon of 'Hallucination' in Large Language Models (LLMs) and suggest one standard engineering method to mitigate it. Q12. [Competency-Based] A tech firm wants to build an automated AI tool to examine architectural blueprints for safety violations and simultaneously auto-generate alternative, compliant floor plan sketches. Recommend the specific AI paradigms needed for each task. Q13. [Competency-Based] An online retail site wants a system that can take a customer's textual description (e.g., 'vintage 1970s leather jacket with silver zippers') and produce a highly realistic,

	novel image of the garment. Identify the appropriate Generative AI architecture and explain why it fits. Q14. [Competency-Based] A medical lab notices that their image generation AI tool creates beautiful synthetic chest X-ray images, but completely misses small, rare tumor anomalies that were present in the training set. Evaluate why a traditional VAE might cause this issue. Q15. [Competency-Based] A developer inputs a complex prompt into an LLM to draft a legal contract, but the model outputs generic text, completely ignoring specific clauses requested in the middle of the prompt. Analyze this behavior using Transformer architecture principles. Q16. Identify the three core foundational components required to build an impactful Data Story, and describe their collective goal. Q17. Explain the concept of 'Context' in data storytelling and why presenting raw data without context can be highly misleading. Q18. Distinguish between 'Exploratory Data Analysis (EDA)' and 'Explanatory Data Analysis' within a business intelligence workflow. Q19. Define the term 'Cognitive Load' in the context of data visualization and state how an analyst can minimize it for executives Q20. What is Edward Tufte's 'Data-Ink Ratio'? Explain why a high data-ink ratio is desirable when building operational dashboards.
9.	PSYCHOLOGY
	Level 1: 1. What is meant by a psychological disorder? 2. Explain any two criteria used to identify abnormal behaviour. 3. What is the difference between normal and abnormal behaviour? 4. What are the DSM and ICD systems used for? 5. Define anxiety disorders. 6. What is obsessive-compulsive disorder (OCD)? 7. Differentiate between obsessions and compulsions. 8. What is depression? Mention any two symptoms. 9. Define schizophrenia. 10. What are dissociative disorders? Level 2: Intermediate 1. Explain the four Ds used to understand abnormal behaviour: deviance, distress, dysfunction, and danger. 2. Differentiate between anxiety disorders and obsessive-compulsive disorders. 3. Explain the major symptoms of depressive disorders. 4. Differentiate between depressive disorders and bipolar and related disorders. 5. Explain any three factors that may contribute to the development of psychological disorders. 6. How can trauma and stressful life events contribute to psychological difficulties? 7. Explain the role of biological, psychological, and socio-cultural factors in understanding abnormal behaviour. 8. Distinguish between somatic symptom-related disorders and dissociative disorders. 9. Why is it important to use systematic classification systems when studying psychological disorders? 10. Case study: Riya repeatedly checks whether her schoolbag is locked, even after checking it several times. She experiences anxiety when she tries to stop checking. a. Which disorder-related concept might this behaviour illustrate? b. Differentiate between an obsession and a compulsion. c. Why should a proper assessment be conducted before making a diagnosis? Level 3: Hard 1. "Behaviour that appears unusual is not necessarily abnormal." Critically explain this statement with reference to the four Ds. 2. Compare the biological, psychological, and socio-cultural models of abnormal behaviour. Explain how each model may interpret the same problem differently. 3. Evaluate the importance and limitations of classification systems such as the DSM and ICD in understanding psychological disorders.

4. Explain how biological predispositions, psychological experiences, and socio-cultural conditions may interact in the development of a psychological disorder.
5. Differentiate between schizophrenia spectrum disorders, mood disorders, and anxiety disorders on the basis of their major features.
6. Explain why psychological disorders should not be understood only in terms of an individual's personal weakness or lack of willpower.
7. Discuss how the symptoms of a psychological disorder may affect academic performance, interpersonal relationships, and everyday functioning.
8. Case study: Meera has been experiencing persistent fear about several everyday situations. She finds it difficult to control her worries, has trouble sleeping, and struggles to concentrate in class. Her family believes she is simply overthinking.
 - a. Identify the broad category of psychological disorders that may require assessment.
 - b. Explain how distress and dysfunction are reflected in the case.
 - c. Discuss why family attitudes and environmental conditions may be relevant to understanding her difficulties.
 - d. Explain why the available information is insufficient for a definitive diagnosis.
9. Case study: Following a highly stressful experience, Kabir reports gaps in his memory concerning important personal events. His behavior has changed, and he is finding it difficult to manage his usual routine.
 - a. Which broad category of psychological disorders may be relevant for assessment?
 - b. Explain how stress may be associated with the development of psychological difficulties.
 - c. Discuss why alternative explanations must be considered before reaching a conclusion.
 - d. Explain the importance of a comprehensive psychological assessment.
10. A student displays unusual behavior during a cultural celebration but functions well in everyday life. Another student behaves in socially accepted ways but experiences severe distress and struggles to complete daily tasks. Compare the two situations using the four Ds and explain why cultural context matters.