

# CTET Solved Paper

Paper-2  
30<sup>th</sup> January 2023

Time: 2 hours 30 mins.

Total Marks: 150

## Child Development and Pedagogy

- Development is a ..... process that begins .....
  - continuous life-long; at the time of conception
  - continuous life-long; at birth
  - process during childhood; at the time of conception
  - process during childhood; at birth
- Assertion (A)** : A child has to have some neuromotor maturation before she learns to catch a ball.  
**Reason (R)** : Learning is dependent upon development.  
Choose the correct option.
  - Both (A) and (R) are true and (R) is the correct explanation of (A)
  - Both (A) and (R) are true but (R) is not the correct explanation of (A)
  - (A) is true but (R) is false
  - Both (A) and (R) are false
- Socialization is a ..... process in which connections among various agencies of socialization are .....
  - simple; important
  - simple; not so important
  - complex; important
  - complex; not so important
- Children in ..... stage can solve concrete problems in a logical fashion but have difficulty thinking hypothetically.
  - Sensorimotor
  - Pre-operational
  - Concrete operational
  - Formal operational
- According to Jean Piaget, children learn meaningfully:
  - through the process of conditioning of stimuli and response.
  - when offered rewards and punishment.
  - when adults take control and provide explanations.
  - through self-initiated activity and discovery.
- Which of the following statements in **not** correct about Piaget's proposal about sequence of stages ?
  - All aspects of cognitive change in an integrated fashion, following a similar course.
  - Stages can be skipped.
  - Stages occur in a fixed order.
  - Stages are universal; they are assumed to characterize children everywhere.
- According to Kohlberg the pre-conventional level of moral development is characterised by :
  - focus on how cultural factors and gender influences moral development
  - good or bad is determined by the consequences of obeying or disobeying rules
  - the individual strives to maintain the expectations of others rather than focus on the consequences of one's actions
  - Self-chosen ethical principles that are universal
- Lev Vygotsky suggested that children's cognitive development is ..... by interactions with people who are more capable.
  - not impacted
  - negatively impacted
  - facilitated
  - decreased
- According to Lev Vygotsky, learning :
  - is a measurable change in behaviour.
  - cannot be separated from it's social context.
  - depends on positive and negative reinforcement.
  - includes attentional processes and stores of memory.
- The abilities in Intrapersonal intelligence include :
  - capacity to think in images and pictures, to visualise accurately and abstractly.
  - awareness of one's feelings and knowing one's capabilities.
  - sensitivity to rhythm, pitch, meter, tone, melody.
  - ability to distinguish between specific pitches, tones and rhythms that other may miss.
- An architect designing a city and an artist working on an intricate drawing would require high :
  - Spatial intelligence
  - Linguistic intelligence
  - Musical intelligence
  - Intrapersonal intelligence
- In a progressive classroom, the curriculum :
  - is rigid and highly structured without giving any autonomy to the child.
  - is organized into fragmented subjects with no correlation amongst them.
  - is organized according to the capabilities and interests of the children.
  - is presented in disconnected chunks of information.
- A teacher tells the boys in a co-education class- "Do not take up home science in co-curricular activities, you are not a girl". This would encourage :
  - gender equity
  - gender stereotyping
  - gender role flexibility
  - gender equality
- Assessment of conceptual clarity of a student can be effectively done by :
  - Asking the student to recite the definition
  - Asking the student to think of application of the concept to daily life
  - Asking the student to copy from the board
  - Asking the student to memorize another student's response

15. To encourage critical thinking a teacher should :
- Accept multiple perspectives
  - Discourage discussions
  - Be intolerant to dissent
  - Emphasise convergent thinking
16. Inclusion as a philosophy and practice is situated in the context of diversity which includes :
- Linguistic diversity
  - Gender diversity
  - Socio-cultural diversity
  - 'Ability' and 'disability'
- (i), (iii)
  - (i), (iv)
  - (ii), (iii), (iv)
  - (i), (ii), (iii), (iv)
17. Which of the following is NOT an effective pedagogical strategy to cater to students from disadvantaged backgrounds ?
- Link learning activities with the social and cultural environment of the students
  - Dismiss expression in local language
  - Make it compulsory for them to take tuitions at home
  - Focus on reproduction of school knowledge as it through repeated practice
18. Students struggling with ..... often face difficulties in mathematical concepts and computation.
- Dyscalculia
  - Dyslexia
  - Dysgraphia
  - Autism
19. An assistive technology to aid vision is :
- Large print worksheets
  - Voice activated computer
  - Calculators
  - Magnifying glass
20. Typical identifying characteristics of creative children include :
- Flexibility, fluency and originality of ideas
  - High intellectual, social and emotional maturity
  - Preference for simple tasks and low risk taking
  - Convergent and rigid thinking
21. Multiple ways of ..... are of importance for successful implementation of Universal Design for Learning ?
- Representation
  - Action
  - Engagement
  - Labelling
22. What skills do contemporary policies of education such as National Education Policy 2020 propose should be developed in children ?
- Critical thinking
  - Recall and reproduction
  - Learning for exams
  - Rote memorisation
23. Meaningful learning of students is NOT promoted by encouraging children for :
- Exploration and experimentation
  - Metacognition
  - Discussion and debate
  - Passive listening
24. The broad perspective of schools and especially teachers to understand failure of students should be that it :
- reflects poorly on the students' academic capabilities.
  - reflects poorly on the teacher's abilities.
  - is a systemic issue and there is need to reflect on the schools systems.
  - is an issue of communities since children belonging to poor economic class cannot be educated in the same set-up as other children.
25. Children form naive theories or alternative conceptions because :
- their thinking is much inferior to adults.
  - they are blank slates.
  - they are thinking beings who are constructing knowledge by interacting with the world.
  - their thinking is illogical and irrational.
26. When a student is stuck on one way of representing a problem it is called :
- working backward strategy
  - functional fixedness
  - response set
  - analogical thinking
27. **Assertion (A) :** While teaching problem-solving, teachers should discourage the children to think about their own thinking and focusing on how to learn.  
**Reason (R) :** Development of metacognitive abilities hinder problem-solving.  
 Choose the correct option.
- Both (A) and (R) are true and (R) is the correct explanation of (A)
  - Both (A) and (R) are true but (R) is not the correct explanation of (A)
  - (A) is true but (R) is false
  - Both (A) and (R) are false
28. **Assertion (A) :** Teachers should tell middle school students exactly in details what they have to do including what, how and when to learn.  
**Reason (R) :** Middle school children do not have the capacity to self-regulate their learning.  
 Choose the correct option.
- Both (A) and (R) are true and (R) is the correct explanation of (A)
  - Both (A) and (R) are true but (R) is not the correct explanation of (A)
  - (A) is true but (R) is false
  - Both (A) and (R) are false
29. Thinking of ability as ..... as failure as ..... motivates the students to work harder by putting in more efforts.
- Fixed; humiliating
  - Fixed; an opportunity to learn
  - Incremental; humiliating
  - Incremental; opportunity to learn
30. Which of the following factors influences learning ?
- Socio-cultural context of the student
  - Age of the student
  - Pedagogical strategies to teach a concept
  - Teacher's beliefs about the student's ability
- (i), (iii)
  - (ii), (iii)
  - (i), (ii), (iii)
  - (i), (ii), (iii), (iv)
- Mathematics and Science**
31. The value of  $18 \div 3 + 5 \times 6 - 1$  is:
- 31
  - 65
  - 40
  - 35

32. If  $\left(\frac{3}{5}\right)^5 \times \left(\frac{3}{5}\right)^{-3} = \left(\frac{3}{5}\right)^{5x-3}$ , then the value of  $x$  is:

- (1) 1 (2) 0  
(3) 2 (4)  $\frac{2}{5}$

33. If  $21168 = p^4 q^3 r^2$ , where  $p, q$  and  $r$  are prime numbers, then the value of  $(4p + 3q - 2r)$  is:

- (1) 6 (2) 7  
(3) 2 (4) 3

34. The value of  $[(-20) \div 4] \times (-2) + 6 \times 3 - 1$  is:

- (1) 27 (2) 22  
(3) 32 (4) 30

35. The fractions  $\frac{30}{25}, \frac{27}{81}, \frac{22}{25}$  and  $\frac{45}{22}$  are written in ascending order as:

- (1)  $\frac{27}{81}, \frac{30}{25}, \frac{45}{22}, \frac{22}{25}$  (2)  $\frac{27}{81}, \frac{45}{22}, \frac{22}{25}, \frac{30}{25}$   
(3)  $\frac{45}{22}, \frac{30}{25}, \frac{22}{25}, \frac{27}{81}$  (4)  $\frac{27}{81}, \frac{22}{25}, \frac{30}{25}, \frac{45}{22}$

36. The marked price of an article is ₹ 420. A shopkeeper gives a discount of 15% on the marked price and still makes a profit of 19%. What is the cost price of the article?

- (1) ₹ 270 (2) ₹ 290  
(3) ₹ 300 (4) ₹ 320

37. If  $x + \frac{1}{x} = 4$ , then the value of  $x^4 + \frac{1}{x^4}$  is:

- (1) 128 (2) 194  
(3) 196 (4) 256

38. One of the factors of the expression  $x^2y - xy^2 + x - y$  is:

- (1)  $x^2 - y^2$  (2)  $x + y$   
(3)  $xy + 1$  (4)  $xy$

39. In the product  $(x - 2)(x - 3)(x - 5)$ , the co-efficient of  $x^2$  is:

- (1) -30 (2) 10  
(3) 1 (4) -10

40. If  $x^2 + y^2 = 6$  and  $x^3y + xy^3 + x^2 + y^2 = 36$ , then the value of  $xy$  is:

- (1) 4 (2) 3  
(3) 5 (4) 6

41. Which of the following is a Pythagorean triplet?

- (1) 12, 15, 19 (2) 8, 13, 18  
(3) 5, 12, 13 (4) 14, 20, 24

42. If one of the angles of a triangle is  $120^\circ$ , then the angle between the bisectors of the other two angles is:

- (1)  $160^\circ$  (2)  $120^\circ$   
(3)  $130^\circ$  (4)  $150^\circ$

43. A regular polygon of 6 sides has:

- (1) 3 lines of symmetry (2) 6 lines of symmetry  
(3) 12 lines of symmetry (4) 9 lines of symmetry

44. In triangles ABC and DEF,  $\angle C = \angle F$ ,  $AC = DF$  and  $BC = EF$ . If  $AB = 4x - 2$  and  $DE = 3x - 1$ , then the value of  $x$  is:

- (1) 1 (2) 2  
(3) 3 (4) 4

45. Which of the following triplets can form a polyhedron, if the numbers represent the number of faces, vertices and edges respectively?

- (1) 4, 4 and 5 (2) 6, 8 and 12  
(3) 6, 8 and 10 (4) 5, 6 and 8

46. The heights of two right circular cylinders are in the ratio of 8 : 5 and their radii of bases are in the ratio of 1 : 2. The ratio of their volumes is:

- (1) 2 : 5 (2) 1 : 4  
(3) 16 : 25 (4) 9 : 7

47. If each edge of a solid cube is increased by 100%, then the percentage increase in its surface area is:

- (1) 100 (2) 200  
(3) 300 (4) 400

48. If the sum of the parallel sides of a trapezium is 40 cm and its height is 10 cm, then the area of the trapezium is:

- (1)  $400 \text{ cm}^2$  (2)  $200 \text{ cm}^2$   
(3)  $40 \text{ cm}^2$  (4)  $100 \text{ cm}^2$

49. Following table shows marks obtained by 40 students. What is the mode of this data?

Marks obtained	42	36	30	45	50
No. of students	7	10	13	8	2

- (1) 50 (2) 30  
(3) 10 (4) 36

50. Cards numbered as 12, 13, 14, ..., 51, (one number on one card) are kept in a box and mixed thoroughly. One card is chosen at random from the box. What is the probability that the number on the chosen card is a composite number between 21 and 42?

- (1)  $\frac{1}{2}$  (2)  $\frac{7}{20}$   
(3)  $\frac{3}{8}$  (4)  $\frac{17}{40}$

51. Great Indian mathematician who gave approximate value of  $\pi$  correct to 4 decimal places as 3.1416 is:

- (1) Aryabhatta (2) Mahavira  
(3) Brahmagupta (4) Srinivasa Ramanujan

52. Which of the following method is most suitable in establishing the formula for compound interest in class 8?

- (1) Laboratory  
(2) Deductive method  
(3) Problem solving method  
(4) Inductive method

53. According to Van Hiele's levels of geometric thinking at which level students will be able to draw a right-angled triangle and also name it as Right Scalene Triangle?

- (1) Visualization (2) Analysis  
(3) Relationship (4) Axiomatic

54. Which of the following is Not a preventive method for rectifying careless error?

- (1) Teaching a concept in multiple ways  
(2) Encourage learners to learn different steps in problem solving  
(3) Encourage learners to take the help of calculator and pay attention during problem solving  
(4) Encourage learners to practice a number of similar questions



55. Which of the following statement is NOT true about errors in a mathematics class?
- Children's errors are natural and inevitable part of their process of learning
  - Children's errors are reflections of how children think and learn.
  - Children's errors can play a constructive role in helping the teacher to develop mathematical thinking in them.
  - Children learn only when there is no error in their responses for a given problem
56. In accordance with the nature of mathematics, which of the following can not be proven false?
- Theorem
  - Conjecture
  - Hypothesis
  - Proposition
57. A teacher draws a rectangle on a graph paper and asks the students to draw some more rectangles but using the same number of squares in graph sheet as in the rectangle drawn by her. Which of the following describes the most appropriate objective of doing this activity?
- Differentiate between a rectangle and a square
  - Rectangles with equal area can have different perimeter
  - Rectangles with different area can have same perimeter
  - Rectangles with same area always have same perimeter
58. Which of the following is NOT true about mathematics curriculum?
- To create positive attitude towards mathematics among children is a major objective of primary stage mathematics curriculum.
  - Primary stage mathematics curriculum focuses on teaching abstract concepts through formal algorithm.
  - To think, reason, analyse and articulate logically is an objective of mathematics curriculum at secondary level.
  - Mathematics curriculum at the higher secondary stage should make the students realise a wide variety of mathematical applications.
59. Which of the following mathematical reasoning proceeds from concrete to abstract?
- Deductive reasoning
  - Inductive reasoning
  - Reduction and Absurdum
  - Analytical reasoning
60. Which of the following is the most appropriate method of teaching experimental probability in a mathematics class?
- Use more examples from the textbook
  - Ask children to toss the coin 5 times and note the outcomes
  - Ask children to toss the coin 50 times and note the outcomes
  - Discuss the topic in the class
61. How does a periscope work in a submarine? Choose the correct options.
- Light from an object strikes the top mirror at  $45^\circ$  and bounces off at the same angle to the lower mirror so that a person can see the view outside.
  - Light from the lower mirror enters the top mirror at  $90^\circ$  and bounces off at  $90^\circ$  to the top mirror to make the top view visible.
  - It is based on laws of reflection.
  - It is based on laws of refraction.
- (A) and (B)
  - (B) and (C)
  - (C) and (D)
  - (A) and (C)
62. Ice floats on water because:
- Being a solid, density of ice is lower than water.
  - Ice combines with air which helps it float due to buoyancy.
  - Ice undergoes break in hydrogen bonding which makes it float.
  - Molecular arrangement in ice is different than in water molecules.
- Only (A)
  - (A) and (C)
  - (A) and (D)
  - Only (D)
63. **Assertion:** Copper and aluminium wires are usually used for transmission of electricity.  
**Reason:** Copper and aluminium are good conductors and have a high resistivity.
- Both assertion and reason are correct and reason is the correct explanation of the assertion
  - Both assertion and reason are correct but reason is not the correct explanation of the assertion
  - Assertion is true but reason is false
  - Assertion is false but reason is true
64. What is the reason for boiling of water at lower temperature at high altitudes?
- There is increase in atmospheric pressure at higher altitude which leads to lowering of boiling point of water.
  - There is decrease in atmospheric pressure at high altitudes which leads to lowering of boiling point of water.
  - The energy required to heat water increases at higher altitude leading to lowering of the boiling point of water.
  - The energy required for boiling water is higher at higher altitude due to low temperature leading to lowering of boiling point.
65. Read the table below and answer the following question.
- | Substance | Melting Point ( $^\circ\text{C}$ ) | Boiling Point ( $^\circ\text{C}$ ) |
|-----------|------------------------------------|------------------------------------|
| Sodium    | 98                                 | 882                                |
| Sulphur   | 115                                | 444                                |
- At what temperature would both the elements be in liquid state?
- Above  $444^\circ\text{C}$
  - Above  $98^\circ\text{C}$
  - Above  $882^\circ\text{C}$
  - Above  $115^\circ\text{C}$

66. Which of the following statements are correct?  
 (A) Electrostatic force is a non-contact force.  
 (B) Ability to lift things with a magnet is an example of contact force.  
 (C) Airplane flying through the air is an example of non-contact force.  
 (D) Gravitational force is a non-contact force.  
 (1) (A) and (D) (2) (B) and (C)  
 (3) (C) and (D) (4) (A) and (B)
67. Which one of the following statements is NOT correct about sound?  
 (1) Vibration produces sound in humans.  
 (2) Sound can travel through vacuum.  
 (3) If amplitude becomes twice, loudness will be four times.  
 (4) Higher the frequency of vibration, shriller the sound.
68. The pH of four solutions A, B, C and D is 9, 2, 7, 4 respectively. Arrange them in the correct order of acidic strength.  
 (1)  $A > C > D > B$   
 (2)  $B > D > C > A$   
 (3)  $C > D > B > A$   
 (4)  $D > B > C > A$
69. Specify the order of methods that you will use to separate salt mixed in oil and water?  
 (1) Evaporation of oil followed by evaporation of water from salt.  
 (2) Use separating funnel to remove water and oil, followed by evaporating water from salt.  
 (3) Using decantation of water followed by evaporation of oil from salt.  
 (4) Using filtration method to remove salt and letting it dry.
70. Consider the following set of reactions:  
 (A)  $Mg + CuO \rightarrow MgO + Cu$   
 (B)  $2Na + MgO \rightarrow Na_2O + Mg$   
 (C)  $Zn + CuO \rightarrow ZnO + Cu$   
 What can you infer from the above set of reactions?  
 (1) Reactivity of Cu is more than Mg but less than Na  
 (2) Reactivity of Cu is greater than Zn  
 (3) Reactivity of Mg is more than Cu but less than Na  
 (4) Reactivity of Mg is more than Na
71. Gold is preferred for making jewellery because it is:  
 (a) Malleable  
 (b) Resistant to corrosion  
 (c) Highly reactive  
 (d) Sonorous  
 (1) (a) only (2) Only (b)  
 (3) (a) and (b) (4) (a), (b) and (c)
72. From the following, identify the set with only physical changes:  
 (1) Rusting of iron, melting of ice cream, freezing of wax  
 (2) Freezing of ice cream, melting of chocolate, dissolving of candy  
 (3) Cooking of food, boiling of oil, pounding a herb  
 (4) Rusting of iron, burning of paper, digestion of food
73. S1: Esters are the chemicals which give fruity smell.  
 S2: Polyester is actually a polymer with repeating units of esters.  
 (1) Both S1 and S2 are correct  
 (2) Both S1 and S2 are incorrect  
 (3) S1 is correct and S2 is incorrect  
 (4) S2 is correct and S1 is incorrect
74. Match the following with their uses.
- |                       |                  |
|-----------------------|------------------|
| (A) Paraffin wax      | (i) Paints       |
| (B) Bitumen           | (ii) Ointments   |
| (C) Sulphur phosphate | (iii) Weedicides |
| (D) 2, 4-D            | (iv) Fertilizer  |
- Codes:**
- |         |    |     |     |
|---------|----|-----|-----|
| A       | B  | C   | D   |
| (1) ii  | i  | iv  | iii |
| (2) i   | ii | iv  | iii |
| (3) iii | iv | i   | ii  |
| (4) iv  | ii | iii | i   |
75. Vaccines provide immunity to our body by:  
 (1) Increasing the number of antigen in our body  
 (2) Providing antibiotics to our body  
 (3) Programming our body to produce anti-inflammatory cells  
 (4) Programming our body to produce suitable antibodies
76. Which of the following statements is incorrect with respect to cells?  
 (1) Prokaryotic cells have nuclear material but no cell membrane.  
 (2) Plastids are present in plant and animal cells.  
 (3) Cell membrane is present in both animal plant cells.  
 (4) Cell wall is present in plant cell only.
77. Which one of the following statements is true about the human circulatory system?  
 (1) Veins have thick walls and no valves present.  
 (2) Deoxygenated blood is blue in colour.  
 (3) Dark clot formed over a cut is due to white blood cells.  
 (4) Veins carry deoxygenated blood.
78. Study the table and identify A, B, C and D.
- | Human and plant diseases   | Causative micro-organism | Mode of transmission |
|----------------------------|--------------------------|----------------------|
| Citrus canker              | Bacteria                 | A                    |
| Hepatitis-B                | Virus                    | B                    |
| Malaria                    | Protozoa                 | C                    |
| Yellow vein Mosaic of okra | Virus                    | D                    |
- (1) A-Air, B-Water, C-Mosquito, D-Insect  
 (2) A-Water, B-Air, C-Mosquito, D-Insect  
 (3) A-Water, B-Water, C-Mosquito, D-Air  
 (4) A-Air, B-Water, C-Mosquito, D-Water

79. Identify the correct word for the following:  
 (A) Animals which give birth to young ones  
 (B) Animals which lay eggs  
 (C) Forms due to fusion of the egg and the sperm  
 (D) Transformation of larva to adult through drastic change  
 (A), (B) (C) and (D) respectively are:  
 (1) (A) oviparous,  
 (B) asexual reproduction,  
 (C) zygote,  
 (D) metamorphosis  
 (2) (A) viviparous,  
 (B) oviparous,  
 (C) zygote,  
 (D) metamorphosis  
 (3) (A) oviparous,  
 (B) viviparous,  
 (C) asexual reproduction,  
 (D) proteins  
 (4) (A) viviparous,  
 (B) asexual reproduction,  
 (C) metamorphosis,  
 (D) zygote
80. Sehaj's observation about a new plant is that its stem is thick with waxy layers and roots are very deep. Identify the correct habitat of the plant.  
 (1) Desert (2) Mountain  
 (3) Water (4) Grassland
81. From the following, identify the statements that are false about science.  
 (a) All scientific ideas are discovered and tested by controlled experiments.  
 (b) When a theory has been supported by a great deal of scientific evidence, it becomes law.  
 (c) Scientific ideas are tentative and can be modified or disproved.  
 (d) Science is a creative field and scientists need imagination to carry out their work.  
 (1) (a) and (b) (2) (b) and (c)  
 (3) (c) and (d) (4) (a) and (d)
82. Concept mapping is NOT used as a tool for:  
 (1) eliciting ideas of learners  
 (2) lesson planning  
 (3) assessment  
 (4) mapping student's progress
83. The NCERT, Grade 8, Science textbook asks children to talk to grandparents and other elderly people in the neighbourhood and find out from them the sewage disposal systems available in their time. What is the purpose of such kind of activities?  
 (a) It helps students to understand the changes that have taken place during recent years.  
 (b) It helps students be thankful for new advancements and judge the past.  
 (c) It helps students to go out for a fun activity and break the monotony of classroom activities.  
 (d) It helps students to develop skills of making a question, asking questions, gathering information, etc.  
 (e) It helps students explore different sources of information other than textbooks.  
 (1) (a), (b), (c) (2) (b), (d), (e)  
 (3) (a), (d), (e) (4) (a), (b), (d), (e)
84. Which of the following are recommendations of NCF 2005 for upper primary science teaching and learning?  
 (A) Creating learning situations in the context of children.  
 (B) Creating situations for children to construct their own knowledge.  
 (C) Vocational education needs to be integrated with science.  
 (D) Concepts should be taught through a disciplinary approach.  
 (1) (A) and (B) (2) (A) and (C)  
 (3) (A), (B) and (C) (4) (B) and (D)
85. A teacher begins with a discussion of acid and base, their properties, occurrence in everyday life, pH and indicators. After teaching acid-bases the teacher arranges verification activities of acid-bases. This approach to sequencing of teaching-learning activity will be termed as:  
 (1) Inductive (2) Deductive  
 (3) Constructivist (4) Inquiry based
86. Samar has the following views on open book questions for assessment.  
 (a) It reduces fear of assessment in students.  
 (b) It gives full opportunity to students to explore the book.  
 (c) It reduces burden of memorizing any answer and is unfair to bright students.  
 (d) It helps to gauge the conceptual understanding of the student.  
 Select the view/views that are aligned with the spirit of open book questions.  
 (1) (a), (b) (2) (a), (c) and (d)  
 (3) (a), (b) and (c) (4) (a), (b) and (d)
87. Divergent questions in science help learners to:  
 (a) Develop multiple views  
 (b) Improve their thinking strategies  
 (c) Engage in classroom discussions  
 (d) Arrive at one answer  
 (1) (a), (b), (c) (2) (a), (c), (d)  
 (3) (b), (c), (d) (4) (a) and (b) only
88. Which of the following is NOT an objective of using discrepant events in science classroom?  
 (1) It helps teachers to elicit misconceptions in students.  
 (2) It helps to create cognitive conflict in students.  
 (3) It helps students to view their ideas differently.  
 (4) It helps weak students to perform well in assessment.
89. The science textbooks often have coloured boxes with interesting stories of the past. There is information about William Harvey (A.D. 1578-1657) who discovered the circulation of the blood and how it was not accepted at that time. He was ridiculed for his ideas. (NCERT, Grade-7)  
 What are the objectives of science teaching-learning that are fulfilled by including the above in the textbook?  
 (a) To develop a historical perspective for the development of a concept.  
 (b) To develop a sense that new ideas take time to be accepted.  
 (c) To develop open-mindedness in science.  
 (d) To include fun element in science which are not testing.  
 (1) Only (a) and (c) (2) Only (c) and (d)  
 (3) Only (a) and (d) (4) (a), (b) and (c)



90. **Assertion:** The facts of science serve as the foundation for concepts, principles and theories.

**Reason:** Facts in science are static and do not change.

- (1) Both assertion and reason are correct and reason is the correct explanation of the assertion
- (2) Both assertion and reason are correct but reason is not the correct explanation of the assertion
- (3) Assertion is true but reason is false
- (4) Assertion is false but reason is true

### Language: Hindi

**निर्देश (91-99):** दिए गए गद्यांश को ध्यानपूर्वक पढ़िए तथा पूछे गए प्रश्न के लिए सबसे उपयुक्त विकल्प का चयन कीजिए।

भारतीय समाज बहुभाषिक है। इस समाज के सभी बच्चे बहुभाषिक होते हैं, लेकिन कक्षाओं में समाज की भाषिक वास्तविकता को नजर अंदाज करके उन पर लक्ष्य भाषा के रूप लाद दिए जाते हैं इससे बच्चों की सृजनात्मकता तथा समझ पर नकारात्मक प्रभाव पड़ता है। कक्षा में बच्चों की बहुभाषिक क्षमताओं का उपयोग करना, सीखने-सिखाने की बहुभाषिक दृष्टि का महत्वपूर्ण पहलू है। बहुभाषिकता ऐसी प्रक्रिया है जिसमें एक से अधिक भाषाओं के उपयोग को स्वीकार किया जाता है। एक ही समय में मातृभाषा के साथ-साथ क्षेत्रीय भाषा/भाषाओं तथा अन्य भाषा को सुनने व समझने, बोलने व व्यक्त करने, लिखने तथा पढ़ने को महत्व दिया जाना बहुभाषिकता का उद्देश्य है। भाषाविदों का मानना है कि कोई भी अन्य भाषाओं से मिलकर विकसित होती है। भाषा के विकास का मतलब उसके शब्द भंडार में वृद्धि का होना, उसकी अभिव्यक्ति की विधाओं का विस्तार होना, उसमें ज्ञान के नए अवसरों की संभावनाओं का खुलना आदि होता है। एक से अधिक भाषाओं/भाषिक व्यवहार करने वालों के पास बिम्ब, विधा, शब्द-चयन, उदाहरण आदि का भंडार एक ही भाषा जानने वाले की तुलना में अधिक होता है।

91. सही कथन की पहचान करें।

- (1) भारतीय समाज एकलभाषी है।
- (2) भाषाएँ एक-दूसरे के विकास को अवरुद्ध करती हैं।
- (3) समाज के सभी बच्चे बहुभाषिक होते हैं।
- (4) बहुभाषिक क्षमताओं का उपयोग करना आवश्यक नहीं है।

92. बहुभाषिकता का क्या उद्देश्य है?

- (1) विभिन्न भाषाओं को बोलना व उनमें व्यक्त कर पाना।
- (2) केवल लक्ष्य भाषा में शिक्षण अधिगम करना।
- (3) देश की कार्यालयी भाषा में लिखना व पढ़ना।
- (4) हिन्दी में साहित्य सृजन करना।

93. कक्षा में बच्चों की बहुभाषिकता क्षमता का उपयोग क्यों करना चाहिए? क्योंकि:

- (1) बच्चों की सृजनात्मकता बाधित होती है।
- (2) बच्चे एकल भाषी होते हैं।
- (3) बच्चों में समझ बनाने की क्षमता सीमित होती है।
- (4) बच्चों की समझ का विस्तार होता है।

94. भाषा के विकास से क्या अभिप्राय है?

- (1) शब्द भंडार का सीमित होना
- (2) अभिव्यक्ति के लिए अपार संभावनाएँ होना
- (3) संविधान की सूची में स्थान प्राप्त करना
- (4) भाषा संबंधी पाठ्यक्रमों में वृद्धि होना

95. एकलभाषी विद्यार्थी की तुलना में बहुभाषी विद्यार्थी के पास क्या-क्या अधिक होने की सम्भावनाएँ अधिक हैं?

- (1) शब्दचयन, अधिकार, बिम्ब
- (2) ज्ञान, सत्ता, उदाहरणों का भंडार
- (3) शब्द चयन, बिम्ब, विधाएँ
- (4) पठन में रुचि, बिम्ब व शब्द भंडार

96. कक्षाओं में बहुभाषिक स्थिति को नजरअंदाज करने से क्या अभिप्राय है?

- (1) बच्चों को किसी भी भाषा में बोलने की अनुमति।
- (2) बच्चों को मातृभाषा व लक्ष्य भाषा में शिक्षण अधिगम करवाना।
- (3) त्रिभाषा सूत्र का पालन करना।
- (4) केवल लक्ष्य भाषा का ही प्रयोग करना।

97. कौन-सा शब्द भिन्न है?

- (1) बोलना
- (2) सुनना
- (3) पढ़ना
- (4) खुलना

98. किस शब्द में 'ता' प्रत्यय लगाकर नया सार्थक शब्द बनाया जा सकता है?

- (1) क्षेत्रीय
- (2) संभावना
- (3) प्रक्रिया
- (4) उद्देश्य

99. 'बिम्ब' का अर्थ क्या है?

- (1) सूक्ष्म कण
- (2) गोल टीका
- (3) व्यंजना शक्ति से निकलने वाला अर्थ
- (4) अत्यंत सूक्ष्म गोल आकृति का चिह्न

**निर्देश (100-105):** दिए गए काव्यांश को ध्यानपूर्वक पढ़िए और पूछे गए प्रश्न के लिए सबसे उपयुक्त विकल्प का चयन करें।

ज्योतिर्मय यह देश हमारा,  
धवल हिमालय के ललाट पर, अरुण तिलक अति न्यारा।  
कोटि-कोटि संवत्सर से यह चलता पथिक सनातन।  
अंधकारमय पतन-निशा में,  
दीप्तिमान स्वप्नों से पावन॥  
पुण्य श्लोक यह श्रेय पंथ का, कोटि-कोटि जन-गण का प्यारा  
महिमामय स्मृतियों से जगमग,  
अजर-अमर यह चिर-चिर सुन्दर॥  
जगत्-वन्द्य, विश्रुत गतिमामय,  
यह पुराण नित नूतन गतिमय, जीवन-मरण सहारा।  
घोर मूर्छना में स्पन्दनमय,  
जागृति में कम्पित पीड़ामय॥

100. किन पंक्तियों से भाव निकलता है कि हमारा देश समूचे संसार में वंदनीय है?

- (1) दीप्तिमान स्वप्नों से पावन॥
- (2) जगत्-वन्द्य विश्रुत गतिमामय,
- (3) कोटि-कोटि संवत्सर से यह
- (4) ज्योतिर्मय यह देश हमारा

101. प्रस्तुत काव्यांश का केन्द्रीय भाव क्या है?

- (1) देश के संघर्ष काल का चित्रण
- (2) देश के निर्माण काल का चित्रण
- (3) देश के गौरवमय यश का चित्रण
- (4) देश की चुनौतियों का चित्रण

102. कवि ने देश के कल्याणकारी मार्ग को किसके समान माना है?

- (1) स्वर्ग भूमि
- (2) हिमालय पर्वत
- (3) चलते रहनेवाला पथिक
- (4) पवित्र श्लोक

103. कवि के अनुसार देश की कौन-सी बात मन को हर लेती है?

- (1) अनेक गुण गाथाएँ
- (2) महिमामय स्मृति
- (3) धवल हिमालय
- (4) पुण्य श्लोक

104. 'विश्रुत' का अर्थ है :

- (1) मोहक
- (2) प्रसिद्ध
- (3) विशेषता
- (4) महिमा

105. 'अरूण तिलक' में रेखांकित शब्द क्या है?  
 (1) विशेषण (2) संज्ञा  
 (3) सर्वनाम (4) क्रिया
106. बच्चों को अपने परिवेश में दो भाषाएँ सुनने को मिलती हैं। दो भाषाओं का सुना .....  
 (1) बच्चों के लिए लाभकारी है।  
 (2) बच्चों के लिए हानिकारक है।  
 (3) इससे कोई भी प्रभाव नहीं पड़ेगा।  
 (4) पारस्परिक रूप से बाधित करेगा।
107. निम्नलिखित में से कौन-सा सिद्धान्त मातृभाषा के अधिगम के दौरान भाषा अधिगम की स्वाभाविक प्रक्रिया का मूलभूत सिद्धान्त नहीं है?  
 (1) बोलना सीखने से पहले साक्षरता सीख लेना  
 (2) अपने परिवेश में परिवार के सदस्यों से सीखना  
 (3) रटने तथा कंठस्थीकरण के स्थान पर अवधारणात्मक समझ पर बल देना  
 (4) परिवेश में बोली जा रही दूसरी भाषाओं से अधिगम की संगतता नहीं होती
108. कौन-सा कथन सही नहीं है?  
 (1) भाषा अधिगम संज्ञानात्मक गतिविधि है।  
 (2) अधिगम विकलांगता भाषा अधिगम से संबंधित नहीं है।  
 (3) बच्चों को उनकी अपनी गति के अनुसार काम करने देना शिक्षकों की ओर से एक बड़ी मदद है।  
 (4) अधिगम विकलांगता की शुरू में ही पहचान कर लेना सफल परिणाम की कुँजी है।
109. सबसे खराब कक्षा प्रणाली की पहचान करें :  
 (1) मैं अपने विद्यार्थियों को गलतियाँ करने की अनुमति देती हूँ।  
 (2) मैं अपने विद्यार्थियों को कक्षा में विचरने और चर्चा करने की अनुमति देती हूँ।  
 (3) मैं विद्यार्थियों को कक्षा में भाषा कार्य के लिए बोलने के लिए प्रोत्साहित करती हूँ।  
 (4) मैं लेखन कार्य के लिए प्रारूप तैयार करने पर बल नहीं देती हूँ।
110. निम्नलिखित में से कौन-सा 'पठन' का विशिष्ट चरण नहीं है?  
 (1) पाठ्य सामग्री में से किसी विशिष्ट वाक्य से निष्कर्ष निकालना  
 (2) अनुच्छेद का सारांश लिखना  
 (3) अनुच्छेद में भिन्न-भिन्न विचारों के बीच संबंध (जुड़ाव) को समझना  
 (4) अनुच्छेद में अलग-अलग शब्दों के वाक्य भेद (पार्ट ऑफ स्पीच) की पहचान करना
111. निम्नलिखित में से कौन-सी भाषा शिक्षा की अवधारणा नहीं है?  
 (1) भाषा अन्तरण (ट्रांसलैंग्वेजिंग)  
 (2) समूह/संग्रह  
 (3) संस्कृति प्रघात  
 (4) शब्दअनुक्रमणिका
112. दूसरी भाषा (अंग्रेजी) की तुलना में प्रथम भाषा का अर्जन अपेक्षाकृत आसान है क्योंकि—  
 (1) अंग्रेजी जटिल भाषा है।  
 (2) हमें हमारी प्रथम भाषा के बेहतर अवसर प्राप्त होते हैं।  
 (3) प्रथम भाषा भारतीय भाषा है।  
 (4) अंग्रेजी औपनिवेशिक भाषा है।
113. यह किसने कहा कि "बच्चों में सहजात भाषिक क्षमता होती है और बच्चों का विकास ठीक उसी प्रकार से होता है जैसा कि शेष जैवकीय कार्यों का विकास।"  
 (1) बी.एफ. स्किनर (2) नॉम चॉमस्की  
 (3) लेव व्यागोत्सकी (4) जीन पियाजे
114. व्याकरण के प्रभावशाली शिक्षण के बारे में कौन-सा कथन सही नहीं है?  
 (1) वास्तविक संवाद में नियमों का प्रस्तुतीकरण  
 (2) संदर्भ में व्याकरण के प्रासंगिक नियमों को दर्शाना  
 (3) वास्तविक जीवन से जुड़े सम्प्रेषण में नियमों के अभ्यास करने के अवसर देना  
 (4) नियमों को रटकर और ड्रिल द्वारा व्याकरण सीखना
115. कौन-सा सिद्धान्त राष्ट्रीय शिक्षा नीति 2020 के अनुसार शिक्षा का मूलभूत सिद्धान्त नहीं है?  
 (1) कक्षा तीन तक बुनियादी साक्षरता हासिल कर लेना  
 (2) कलाओं और विज्ञान में सम्बद्धता  
 (3) रटने की प्रवृत्ति और परीक्षाओं के लिए पढ़ने के स्थान पर अवधारणात्मक समझ पर बल देना  
 (4) सतत आकलन के लिए योगात्मक आकलन एक मुख्य प्रक्रिया के रूप में
116. निम्नलिखित में से कौन-सा कथन भाषा की कक्षा के संदर्भ में सही नहीं है?  
 (1) ऐसी कक्षा जिसमें शोर हो रहा है, उससे संकेत मिलता है कि शिक्षार्थी सीख रहे हैं।  
 (2) अनुशासित कक्षा का तात्पर्य है कि जहाँ शिक्षार्थी चुपचाप बैठे हैं और अध्यापक अच्छी तरह से पढ़ा रहे हैं।  
 (3) "विचार करो, समूह में कार्य करो, साझा करो" ये वे तरीके हैं। जिनसे पूरी कक्षा को गतिविधि में संलग्न किया जा सकता है।  
 (4) एक अध्यापिका विद्यार्थियों को कहानी का रोल प्ले करने के लिए कहती है।
117. अनुभवजन्य अधिगम में क्या शामिल नहीं है?  
 (1) कथावाचन आधारित शिक्षणशास्त्र  
 (2) कला एवं खेल समावेशित शिक्षणशास्त्र  
 (3) दक्षता आधारित अधिगम और शिक्षा  
 (4) विषयों के बारे में अंग्रेजी में सोचना और बोलना
118. निम्नलिखित में से कौन-सी युक्ति चुनौतीपूर्ण बच्चों को सहायता देने के संदर्भ में संगतपूर्ण नहीं है?  
 (1) अध्यापक को कक्षा में अधिगम विकलांगता की पहचान करने के लिए अभिभावकों और सहयोगी अध्यापकों से मदद लेनी चाहिए।  
 (2) अधिगम विकलांगताओं की पहचान जितना जल्दी हो सके कर लेनी चाहिए।  
 (3) अध्यापक को चाहिए कि वह अधिगम विकलांगता वाले शिक्षार्थियों को उनकी गति के अनुसार कार्य करने दे और आत्मनिर्भर बनने में मदद करें।  
 (4) अध्यापक को विशेष आवश्यकता वाले शिक्षार्थियों की दूसरे सहपाठियों द्वारा मदद करने के लिए निरुत्साहित करना चाहिए जिससे वे आत्मनिर्भर बन सकें।
119. सबसे निकृष्ट/अनुचित कक्षा प्रणाली की पहचान करें।  
 (1) पाठ्यपुस्तक में अगला क्या लिखा है, अध्यापक उसके अनुसार योजना बनाती है।  
 (2) अध्यापक को प्रामाणिक पाठ्य सामग्री जैसा कुछ समाचारपत्र से लेना चाहिए और उसका इस्तेमाल करना चाहिए।  
 (3) अध्यापक को कुछ अधिक विचार करने की जरूरत नहीं है, वह कक्षा में जाए और देखे क्या किया जा सकता है।  
 (4) अध्यापक पिछली कक्षा में पढ़ाए गए पाठों के संदर्भ का प्रयोग करती है।
120. पाठ योजना बनाते समय कौन-सी बात ध्यान में नहीं रखनी चाहिए?  
 (1) विद्यार्थियों के सीखने की गति  
 (2) आपके पीठ के दिन का समय  
 (3) गतिविधियों का क्रम  
 (4) अनुच्छेद के बारे में अभिभावकों की पसन्द



**Language: English**

**Directions (121-129):** Read the passage given below and answer the question that follow by choosing the most appropriate option from the given one.

1. One evening I wandered much further down the Tehri Road than I had intended to, and by the time I returned, it was very late. The shop fronts were shuttered. The people living on either side of the narrow street could hear my footsteps, perhaps, or they might have been asleep, for it was a cold night; doors and windows were shut. A three-quarter moon was up, and the tin roofs of the bazaar, drenched with dew, glistened in the moonlight.
2. As I passed along the deserted street, under the shadow of the clock tower, I saw a boy huddled in a recess, a thin shawl wrapped around his shoulders. He was awake and shivering. He was aware of my presence, but he did not look up at me; at me; he kept looking down and continued to shiver. As I passed by, my thoughts were already on the warmth of the little cottage. Until something stopped me-it wasn't anything I had seen in his face, there wasn't light enough for that. I think it was the fact that he hadn't looked up-he was resigned to his abandonment; he expected nothing at all from the world.
3. I walked back to the shadows where the boy was crouched. He didn't say anything when I sat down next to him, but this time he did look up, puzzled and a little apprehensive, ready to shrink away or even to beg forgiveness for a crime he hadn't committed. I could tell from his features that he had come from the hills beyond Tehri. He had come here looking for work and he was yet to find any.
4. "Have you somewhere to stay?" I asked. He shook his head; but something about my tone of voice gave him confidence, because now there was a glimmer of hope, a friendly appeal in his eyes.
5. "If you can walk some way," I offered, "I can give you a bed and blanket."
121. When the author was wandering down the Tehri Road, it was a/an .....  
 (1) moonless night                      (2) full moon night  
 (3) moon-lit night                      (4) eclipse
122. Study the given statements carefully. On the basis of the passage, choose the correct option that correctly state the Facts (f) and Opinion/(s) (O).  
**Statement (1) :** The author was kind-hearted.  
**Statement (2) :** The author offered to help the poor boy.  
**Statement (3) :** The boy was very poor.  
**Statement (4) :** The boy was very scared.  
 (1) F-1, 3 ; O-2, 4                      (2) F-1, 2 ; O-3, 4  
 (3) F-3, 4 ; O-1, 2                      (4) F-2, 4 ; O-1, 3
123. Why does the author say that the boy would 'beg forgiveness' ?  
 (1) He had come here without permission.  
 (2) He was poor, alone and could be misconstrued as a thief.  
 (3) He was sleeping on the street.  
 (4) He did not belong to Tehri.

124. What does the phrase, "he was resigned to his abandonment" means ?  
 (1) He had accepted that nobody would help him.  
 (2) He had left his job, so now nobody would help him.  
 (3) Being an outsider, the people of Tehri would not accept him.  
 (4) He had committed a crime, so he was scared.
125. How can one conclude that the author was walking in an evening of winter season ?  
 (1) The shop fronts were shuttered.  
 (2) It was a cold night, doors and windows were shut.  
 (3) There was a hustle-bustle of people on streets.  
 (4) The residents were asleep.
126. Which of the following is the correct meaning of the word, 'recess' as used in para 2 of the passage ?  
 (1) break time in school  
 (2) supper time at home  
 (3) interval during a formal occasion  
 (4) hollowed out space in a building
127. Which of the following statements is NOT correct in light of the usage of idiom 'glimmer of hope' in the passage ?  
 (1) There is a glimmer of hope in the latest medical report.  
 (2) A glimmer of hope prevailed when it became known that the enemy had advanced.  
 (3) I saw a glimmer of hope in what he said just now.  
 (4) Contrary to earlier speculation, a new glimmer of hope now appeared on the horizon.
128. Which of the following words is opposite in meaning to the word, 'apprehensive' as used in para 3 of the passage ?  
 (1) uneasy                                      (2) anxious  
 (3) composed                                  (4) nervous
129. Which part of speech is the underlined word in the sentence given below ?  
 "As I passed along the deserted street, under the shadow of clock tower, I saw a boy".  
 (1) Conjunction                              (2) Preposition  
 (3) Determiner                                (4) Modal

**Directions (130-135):** Read the following poem and answer the question that follow by choosing the most appropriate option out of those given below.

Wind, come softly,  
 Don't break the shutters of the windows.  
 Don't scatter the papers.  
 Don't throw down the books on the shelf.  
 There, look what you did-you threw them all down.  
 You tore the papers of the books. You brought rain again.  
 You're very clever at poking fun at weaklings. Trial  
 crumbling houses,  
 Crumbling doors, crumbling rafters, crumbling wood.  
 Crumbling bodies, crumbling lives, crumbling hearts-  
 The wind God winnows and crushes them all.  
 He won't do what you tell him. So, come, let's build  
 strong homes,  
 Let's join the doors firmly, Practice to firm the body.

130. How may wind affect the windows ?  
 (1) crack the glass panes.  
 (2) open them wide.  
 (3) bang them loudly.  
 (4) break the shutters.

131. What is the wind good at ?  
 (1) averting the rain  
 (2) bullying the powerless  
 (3) spreading love among the weaklings  
 (4) making the weather pleasant.
132. Whose fury crushes everything ?  
 (1) wind God (2) rain God  
 (3) poet's (4) sun God.
133. How does wind make its presence feel on books ?  
 (1) shakes them and tear their pages to pieces.  
 (2) tears the pages and scatters them on shelf.  
 (3) throws them down the shelf and tears their pages.  
 (4) scatters the papers all over.
134. Which poetic device has been used in the first four lines of the poem ?  
 (1) Oxymoron (2) Simile  
 (3) Metaphor (4) Anaphora
135. Find the word from the poem (lines 7-12) that has the same meaning as the word, 'disintegrate.'  
 (1) crumbling (2) rafters  
 (3) trail (4) winnows
136. If children hear two languages spoken around them, this exposure to two languages will :  
 (1) place children at an advantage  
 (2) place children at a disadvantage  
 (3) not make any difference  
 (4) interfere mutually with the other
137. Which one of the following is NOT among the fundamental principles guiding the natural process of language learning during the learning of the mother tongue :  
 (1) Achieving literacy before speech  
 (2) Learning from family members in the surroundings  
 (3) Emphasis on conceptual understanding rather than rote learning and memorization  
 (4) Learning has no correspondence with other language in the surroundings
138. Which one is NOT true ?  
 (1) Language learning is a cognitive activity.  
 (2) Learning disabilities are not related to language learning.  
 (3) Teachers help learners by letting children work at their own pace.  
 (4) Early identification of learning disabilities is the key to successful intervention.
139. Identify the most inappropriate classroom practice :  
 (1) I allow my students to make mistakes.  
 (2) I allow students to move around in the class and discuss.  
 (3) I encourage students to talk in class for language work.  
 (4) I do not insist on doing drafts of the writing work.
140. Which one of the following is NOT a typical step in a reading lesson ?  
 (1) Inferencing from a specific sentence in the passage  
 (2) Writing a summary of the passage  
 (3) Understanding the connections between different ideas in a paragraph  
 (4) Identifying parts of speech of individual words in the passage
141. One of these is NOT a concept from language education ?  
 (1) Translanguaging (2) Corpus  
 (3) Culture shock (4) Concordance
142. A first language is easier to acquire as compared to a second language (English) because :  
 (1) English is a complicated language.  
 (2) We have better exposure in our first language.  
 (3) The first language is an Indian language.  
 (4) English is the language of colonizers.
143. Who said that children are biologically programmed for language and that language develops in the child in just the same way as other biological functions develop ?  
 (1) B.F Skinner (2) Noam Chomsky  
 (3) Lev Vygotsky (4) Jean Piaget
144. Which one of the following is NOT correct about teaching grammar effectively ?  
 (1) Present the form in genuine communication  
 (2) Elicit relevant rules of grammar in contexts  
 (3) Provide the form in practice in real life-like communication  
 (4) Learn grammar by memorizing its rule and through drills
145. One of the following is NOT among the fundamental principles guiding education according to National Education Policy (NEP) 2020 :  
 (1) Achieving foundational literacy by grade 3  
 (2) Correspondence between arts and sciences  
 (3) Emphasis on conceptual understanding rather than rote learning and studying for examinations  
 (4) Summative Assessment as a major process of continuous assessment
146. Which one of the following statement is NOT true about a language classroom ?  
 (1) A noisy class means a class has involved learners in learning.  
 (2) A disciplined class is one where learners sit quietly and teacher teaches well.  
 (3) Think, pair, share are the ways to engage the whole class in an activity.  
 (4) A teacher makes learners to role play the story.
147. Experiential learning does NOT include :  
 (1) Pedagogy based on story-telling  
 (2) Arts and sports-integrated pedagogy  
 (3) Competency-based learning and education  
 (4) Thinking and speaking about subjects in English
148. Which one of the following is NOT an advisable strategy or method for supporting children with special needs ?  
 (1) Teachers must seek help of parents and fellow teachers to identify learning disabilities in class.  
 (2) Learning disabilities should be identified as early as possible.  
 (3) Teachers may help learners with learning disabilities by letting children work at their own pace and become autonomous.  
 (4) Teacher should discourage other learners helping special needs learners so that they become independent.

149. Identify the most inappropriate classroom practice.
- (1) Teacher does whatever is next in the textbook
  - (2) Teacher grabs an authentic text-usually something in the newspaper-and use that
  - (3) Teacher does not plan much. She goes into the classroom and sees what happens.
  - (4) Teacher uses the lessons from the last time she taught the class
150. When planning a lesson, one of the things below is NOT kept in mind :
- (1) Students' learning pace
  - (2) The time of day of your lesson
  - (3) Sequencing of activities
  - (4) Parent's preference of passages

### ANSWER KEY

#### Child Development and Pedagogy

1. (1)	2. (1)	3. (3)	4. (3)	5. (4)
6. (2)	7. (2)	8. (3)	9. (2)	10. (2)
11. (1)	12. (3)	13. (2)	14. (2)	15. (1)
16. (4)	17. (3)	18. (1)	19. (4)	20. (1)
21. (2)	22. (1)	23. (4)	24. (3)	25. (3)
26. (2)	27. (3)	28. (4)	29. (4)	30. (3)

#### Mathematics & Science

31. (4)	32. (1)	33. (4)	34. (1)	35. (4)
36. (3)	37. (2)	38. (3)	39. (4)	40. (3)

41. (3)	42. (4)	43. (2)	44. (1)	45. (2)
46. (1)	47. (3)	48. (2)	49. (2)	50. (3)
51. (1)	52. (4)	53. (3)	54. (3)	55. (4)
56. (1)	57. (3)	58. (2)	59. (2)	60. (2)
61. (4)	62. (3)	63. (3)	64. (2)	65. (4)
66. (1)	67. (2)	68. (2)	69. (4)	70. (3)
71. (3)	72. (2)	73. (1)	74. (1)	75. (4)
76. (2)	77. (4)	78. (1)	79. (2)	80. (1)
81. (1)	82. (2)	83. (3)	84. (1)	85. (4)
86. (4)	87. (1)	88. (4)	89. (4)	90. (2)

#### Language: Hindi

91. (3)	92. (1)	93. (4)	94. (2)	95. (3)
96. (3)	97. (4)	98. (2)	99. (1)	100. (3)
101. (3)	102. (4)	103. (2)	104. (4)	105. (2)
106. (1)	107. (1)	108. (2)	109. (3)	110. (1)
111. (3)	112. (2)	113. (2)	114. (4)	115. (4)
116. (2)	117. (1)	118. (4)	119. (3)	120. (1)

#### Language: English

121. (3)	122. (4)	123. (2)	124. (1)	125. (2)
126. (4)	127. (2)	128. (3)	129. (1)	130. (4)
131. (2)	132. (1)	133. (3)	134. (4)	135. (1)
136. (1)	137. (1)	138. (2)	139. (4)	140. (4)
141. (3)	142. (2)	143. (2)	144. (4)	145. (4)
146. (2)	147. (4)	148. (4)	149. (1)	150. (4)



**Child Development and Pedagogy**

**1. Option (1) is correct.**

**Explanation:** Development is a life-long process that begins at the time of conception. From the moment of fertilization, when an egg is fertilized by sperm, the process of development starts. It involves a series of complex changes and transformations that occur throughout an individual's entire life. Development encompasses physical, cognitive, emotional, and social aspects, and it continues from conception until death.

**2. Option (1) is correct.**

**Explanation:** (A) A child has to have some neuromotor maturation before she learns to catch a ball. This statement is true because the ability to catch a ball requires certain neuromotor skills such as hand-eye coordination, depth perception, and motor control. These skills develop over time as the child's nervous system matures.

(R) Learning is dependent upon development. This statement is also true. Learning is a complex process, that relies on various aspects of development, including physical, cognitive, and emotional development. Development provides the foundation and necessary prerequisites for learning. In the context of the given assertion, the neuromotor maturation required for catching a ball is a developmental milestone that enables the child to learn and acquire the skill of catching. Therefore, (R) is the correct explanation of (A), and both statements are true.

**3. Option (3) is correct.**

**Explanation:** Socialization is a process through which individuals acquire the knowledge, norms, values, and behaviors of their society or culture. It involves the interactions and connections among various agencies of socialization, such as the family, school, peers, media, and religious institutions. These agencies play a crucial role in shaping an individual's social development and integration into society.

The process of socialization is complex because it involves a dynamic interplay between different socializing agents, each contributing to the individual's socialization

uniquely. For example, the family provides primary socialization during early childhood, while schools and peers become more influential during later stages of development. Additionally, media and other cultural institutions also contribute to the socialization process.

The importance of socialization cannot be understated, as it helps individuals develop a sense of self, learn social norms and values, acquire social skills, and become functional members of society. It is through socialization that individuals learn how to navigate and participate in their social environment effectively.

**4. Option (3) is correct.**

**Explanation:** Concrete operational stage is the third stage of Jean Piaget's theory of cognitive development. It typically occurs between the ages of 7 and 11 years old. During this stage, children demonstrate the ability to think logically and solve concrete problems using logical reasoning. They can understand concepts such as conservation, reversibility, and classification.

However, children in the concrete operational stage have difficulty thinking hypothetically or abstractly. They struggle with hypothetical situations or possibilities that are not directly observable or concrete. This type of thinking becomes more prominent in the next stage, the formal operational stage, which typically begins around age 11 and continues into adulthood. In the formal operational stage, individuals develop the ability to think abstractly, reason deductively, and consider hypothetical scenarios.

**5. Option (4) is correct.**

**Explanation:** According to Jean Piaget's constructivist theory of cognitive development, children learn meaningfully through self-initiated activity and discovery. Piaget emphasized the importance of active engagement and exploration in the learning process. He believed that children construct their knowledge and understanding of the world through interactions with their environment.

In Piaget's view, children are active learners who actively explore their surroundings, manipulate objects, and engage in hands-on experiences. Through these self-initiated activities,

they encounter new information, and cognitive conflicts, and engage in mental processes such as assimilation and accommodation to make sense of their experiences.

Piaget argued that meaningful learning occurs when children actively construct their own understanding by integrating new information with their existing cognitive structures or schemas. This process of constructing knowledge through personal discovery and active engagement leads to deeper and more meaningful learning experiences.

Therefore, according to Piaget, children learn meaningfully through self-initiated activity and discovery rather than through passive conditioning, adult explanations, or control.

**6. Option (2) is correct.**

**Explanation:** According to Piaget's proposal about the sequence of stages in cognitive development, stages cannot be skipped. Each stage builds upon the previous one, and cognitive development progresses through a fixed order of stages.

Piaget believed that children need to successfully complete one stage before progressing to the next. Each stage represents a qualitatively different way of thinking and understanding of the world. The skills and cognitive abilities developed in one stage provide the foundation for the next stage.

Therefore, statement (2) is not correct, as Piaget's theory does not allow for the skipping of stages in the sequence of cognitive development.

**7. Option (2) is correct.**

**Explanation:** According to Lawrence Kohlberg's theory of moral development, the pre-conventional level is the first stage of moral development. During this stage, individuals make moral judgments based on self-interest and the consequences of their actions. They focus on obeying or disobeying rules to avoid punishment or gain rewards. At the pre-conventional level, moral reasoning is primarily guided by external factors such as authority figures and rules. The individual's primary concern is to avoid punishment or seek personal rewards. The concept of right and wrong is defined in terms of the immediate consequences of their actions. They may view an action as good if it leads

to a positive outcome for themselves or bad if it results in punishment or negative consequences.

In summary, the pre-conventional level of moral development, according to Kohlberg, is characterized by the focus on how the consequences of obeying or disobeying rules determine what is considered as right or wrong.

8. **Option (3) is correct.**

**Explanation:** Lev Vygotsky proposed the sociocultural theory of cognitive development, which emphasizes the role of social interactions in children's cognitive development. According to Vygotsky, children's cognitive development is facilitated by interactions with people who are more capable or knowledgeable than them, such as parents, teachers, or peers.

Vygotsky introduced the concept of the "zone of proximal development" (ZPD), which refers to the difference between what a learner can accomplish independently and what they can achieve with the guidance or assistance of a more skilled individual. Through social interactions and collaborative activities, more capable individuals can provide support, scaffolding, and guidance to help children bridge the gap between their current abilities and their potential abilities within the ZPD.

Vygotsky believed that through these social interactions and guidance, children internalize knowledge, develop higher-level cognitive processes, and acquire new skills and understanding. Therefore, interactions with more capable individuals facilitate children's cognitive development by providing the necessary support and opportunities for learning and growth.

9. **Option (2) is correct.**

**Explanation:** According to Lev Vygotsky's sociocultural theory, learning cannot be separated from its social context. Vygotsky emphasized the importance of social interactions, cultural tools, and the influence of the social environment in the process of learning and cognitive development.

Vygotsky argued that learning is a social activity and that individuals acquire knowledge and skills through interactions with others. These interactions can involve collaboration, instruction, guidance, and participation in cultural practices and activities. The social context provides the necessary support, guidance, and cultural resources that shape and facilitate learning.

In Vygotsky's view, learning is not solely focused on individual behavior or measurable changes in behavior,

as mentioned in option (1). It goes beyond the individual and involves the social and cultural aspects of the learning process.

Options (3) and (4) mention specific factors such as positive and negative reinforcement, attentional processes, and memory stores, but Vygotsky's theory does not primarily focus on these factors as the main drivers of learning. Instead, Vygotsky emphasizes the social interactions and cultural context in which learning takes place.

Therefore, the correct answer is (2) cannot be separated from its social context.

10. **Option (2) is correct.**

**Explanation:** Intrapersonal intelligence, as proposed by Howard Gardner's theory of multiple intelligences, refers to an individual's ability to understand oneself, including their emotions, strengths, weaknesses, desires, and motivations. It involves self-reflection, self-awareness, and the capacity to accurately perceive and understand one's own inner world.

People with strong intrapersonal intelligence have a deep understanding of their own feelings, thoughts, and experiences. They are able to reflect on their emotions, analyze their own motivations and goals, and have a strong sense of self. They are often skilled at introspection and have a heightened self-awareness.

11. **Option (1) is correct.**

**Explanation:** Spatial intelligence, as proposed by Howard Gardner's theory of multiple intelligences, refers to the ability to think in three-dimensional space, visualize objects and their spatial relationships accurately, and manipulate mental images. People with high spatial intelligence have a strong sense of spatial awareness, are skilled at mentally rotating objects, and can effectively navigate and understand spatial information.

Both an architect designing a city and an artist working on an intricate drawing require a high level of spatial intelligence. Architects need to visualize and plan the layout of buildings, structures, and urban spaces in relation to one another. They must consider factors such as proportions, scale, aesthetics, and functionality, which all involve spatial reasoning.

Similarly, artists working on intricate drawings often need to carefully consider the spatial arrangement of objects, lines, and shapes. They must have a keen sense of proportion, perspective, and visual composition. Spatial intelligence allows them to

create realistic or abstract representations that effectively convey their artistic vision.

Therefore, in both cases, the individuals would require high spatial intelligence to excel in their respective fields.

12. **Option (3) is correct.**

**Explanation:** In a progressive classroom, the curriculum is typically designed to accommodate the capabilities and interests of the children. Progressive education approaches emphasize student-centered learning, individualized instruction, and a focus on the holistic development of students.

Instead of rigidly structured and standardized curriculum, progressive classrooms often prioritize flexibility and adaptability. The curriculum is tailored to meet the needs, abilities, and interests of the students. It takes into account their diverse learning styles, strengths, and areas for growth.

Progressive educators believe in fostering students' autonomy, critical thinking skills, and active participation in their own learning. The curriculum is designed to be engaging, relevant, and connected to real-world contexts. It often integrates different subject areas and encourages interdisciplinary approaches to learning.

13. **Option (2) is correct.**

**Explanation:** The statement made by the teacher promotes gender stereotyping. By stating that boys should not take up home science, the teacher is reinforcing the notion that certain activities are exclusively for girls and perpetuating gender stereotypes. Gender stereotyping refers to the generalizations and expectations placed upon individuals based on their gender, limiting their choices and opportunities. This option accurately describes the situation. The teacher's statement encourages gender stereotyping by implying that home science is only suitable for girls and not for boys.

14. **Option (2) is correct.**

**Explanation:** Asking the student to think of the application of the concept to daily life: This option is more effective in assessing conceptual clarity. By asking the student to apply the concept to real-life situations, you can evaluate their ability to understand and connect the concept to practical scenarios. It demonstrates whether the student can apply the concept in meaningful and relevant ways. Asking the student to think of the application of the concept to daily life - is a more effective way to assess conceptual clarity, as it

encourages students to apply their understanding in practical contexts.

15. **Option (1) is correct.**

**Explanation:** Encouraging multiple perspectives is crucial for fostering critical thinking. It involves creating an inclusive and open environment where students feel comfortable expressing their opinions, ideas, and viewpoints. By accepting and respecting diverse perspectives, teachers can promote critical thinking by encouraging students to analyze different viewpoints, consider alternative explanations, and evaluate the strengths and weaknesses of various arguments. In conclusion, to encourage critical thinking, teachers should accept multiple perspectives, encourage discussions, be open to dissenting opinions, and emphasize both convergent and divergent thinking. These approaches empower students to think critically, analyze information, evaluate arguments, and develop independent thought processes.

16. **Option (4) is correct.**

**Explanation:** Inclusion as a philosophy and practice is rooted in the context of diversity, encompassing various dimensions such as language, gender, socio-cultural backgrounds, and both abilities and disabilities. This comprehensive approach acknowledges and values the unique qualities and experiences that individuals bring to the learning environment. It emphasizes creating inclusive spaces that cater to the needs and identities of everyone, fostering a sense of belonging and equality for all.

17. **Option (3) is correct.**

**Explanation:** This strategy assumes that students from disadvantaged backgrounds need additional private tutoring to compensate for their educational disadvantages. However, making it compulsory for students to take tuition at home may further marginalize them and create additional financial burdens on their families. It does not address the root causes of their disadvantages or provide inclusive and equitable educational opportunities. In conclusion, option 3 (making it compulsory for students to take tuitions at home) is not an effective pedagogical strategy for serving students from disadvantaged backgrounds. Conversely, the other options mentioned can be beneficial in providing an inclusive and supportive learning environment.

18. **Option (1) is correct.**

**Explanation:** Dyscalculia is a specific learning disability that affects individual's ability to understand

and work with numbers and mathematical concepts. Individuals with dyscalculia may have difficulty comprehending arithmetic operations, recognizing numerical patterns, and understanding mathematical symbols. They often struggle with basic math skills, including addition, subtraction, multiplication, and division, which can significantly impact their overall mathematical proficiency.

19. **Option (4) is correct.**

**Explanation:** A magnifying glass is a handheld optical device that aids individuals with visual impairments by enlarging text and images, making them easier to see and comprehend. This assistive technology is particularly useful for tasks that require close examination, such as reading small print or examining details in pictures. It helps individuals with low vision to access and engage with visual information more effectively.

20. **Option (1) is correct.**

**Explanation:** Creative children typically exhibit characteristics such as flexibility, fluency, and originality of ideas. These traits reflect their ability to think outside the box and generate unique solutions. While high intellectual, social, and emotional maturity can contribute to creativity, they are not defining characteristics. Preference for complex tasks and moderate risk-taking, not simple tasks and low risk-taking, align more accurately with creative tendencies. Convergent and rigid thinking is contrary to the adaptable and innovative nature of creative individuals.

21. **Option (2) is correct.**

**Explanation:** The action component of UDL involves providing learners with multiple means of expression and action. It allows students to demonstrate their understanding and knowledge through various means, such as written work, oral presentations, projects, multimedia creations, or physical demonstrations. By offering multiple options for demonstrating learning, UDL supports students in showcasing their strengths and preferences.

(3) **Engagement:** Engagement in UDL refers to the provision of multiple means of engagement to increase motivation and involvement in the learning process. It involves tapping into students' interests, providing meaningful and relevant content, offering choices, and incorporating interactive and engaging elements that promote active participation

and personal connection with the material.

(4) **Labelling:** Labelling is not typically considered a key component of Universal Design for Learning. While labeling can be important in organizing and structuring information, it is not a fundamental principle of UDL. UDL primarily focuses on the design and delivery of instruction to address learner variability and provide multiple means of representation, action, and engagement.

In summary, the three key components of Universal Design for Learning (UDL) that are important for its successful implementation are representation, action, and engagement. Labelling is not typically included as a core principle of UDL.

22. **Option (1) is correct.**

**Explanation:** The National Education Policy 2020 (NEP 2020) of India emphasizes the development of a holistic and comprehensive education system. While it does not explicitly mention specific skills, it promotes a shift in the approach to education to foster the overall development of children. Based on the goals and principles outlined in the NEP 2020, here are some skills that it encourages:

(1) **Critical thinking:** NEP 2020 emphasizes the importance of critical thinking, problem-solving, and analytical skills. It encourages students to think independently, question, analyze information, and develop logical reasoning abilities.

(2) **Creativity and innovation:** The policy promotes creativity, imagination, and originality. It emphasizes the need to foster an environment where students can explore their creative potential, engage in innovative thinking, and develop entrepreneurial skills.

(3) **Communication and collaboration:** NEP 2020 recognizes the significance of effective communication and collaboration skills. It encourages students to engage in group activities, teamwork, and social interaction to enhance their interpersonal and communication abilities.

(4) **Life skills and experiential learning:** The policy advocates for a shift from rote learning to experiential and hands-on learning approaches. It emphasizes the importance of developing life skills, such as empathy, resilience, adaptability, and problem-solving abilities, to



- prepare students for real-world challenges.
- (5) **Digital literacy:** NEP 2020 recognizes the need for digital literacy and proficiency in the modern age. It aims to integrate technology in education and equip students with the necessary skills to navigate the digital world, access information, and use digital tools effectively. It's important to note that while the NEP 2020 promotes a more comprehensive and skill-oriented approach to education, the implementation and emphasis on these skills may vary across different schools and educational institutions.
23. **Option (4) is correct.**  
**Explanation:** Meaningful learning of students is not promoted by encouraging children for passive listening. Passive listening refers to a one-way flow of information where students receive information without actively engaging with it or being encouraged to think critically or reflect on the content. It does not stimulate deeper understanding, critical thinking, or active participation in the learning process. On the other hand, the options (1) exploration and experimentation, (2) metacognition, and (3) discussion and debate are all approaches that promote meaningful learning.
24. **Option (3) is correct.**  
**Explanation:** The broad perspective of schools and teachers to understand the failure of students should be that it is a systemic issue, and there is a need to reflect on the school systems. This approach recognizes that student failure can be influenced by various factors beyond individual academic capabilities. It encourages schools and teachers to critically examine teaching methods, curriculum design, assessment practices, resources, and overall school environment. By reflecting on and addressing these systemic factors, schools can create a more supportive and inclusive learning environment that helps students succeed. This perspective shifts the focus from solely blaming students to considering broader factors that contribute to their academic challenges.
25. **Option (3) is correct.**  
**Explanation:** Children form naive theories or alternative conceptions because they are active participants in the process of constructing knowledge. They engage with their environment, observe and experience various phenomena, and make sense of the world around them based on their limited prior knowledge and experiences. Their thinking is not inferior to that of adults, nor are they blank slates. Instead, children actively construct their understanding of concepts and develop theories or alternative conceptions that may differ from established scientific or adult perspectives. These naive theories or alternative conceptions are a result of their cognitive development and ongoing attempts to make sense of the world based on their own observations and experiences. Through education and interactions with knowledgeable adults, children can refine their understanding and align it with more accurate and scientifically accepted concepts.
26. **Option (2) is correct.**  
**Explanation:** Functional fixedness refers to the cognitive bias or tendency of an individual to perceive an object or concept as having only one fixed function or purpose. When a student is stuck on one way of representing a problem, they may be experiencing functional fixedness, where they are unable to see alternative ways of approaching or solving the problem. This can limit their ability to think creatively or consider different perspectives, hindering problem-solving and critical thinking skills. Overcoming functional fixedness involves fostering flexibility in thinking and encouraging students to explore multiple approaches and representations for problem-solving.
27. **Option (3) is correct.**  
**Explanation:** While teaching problem-solving, teachers should actually encourage children to think about their own thinking and focus on how to learn. This metacognitive approach allows students to develop a deeper understanding of their learning processes, monitor their own comprehension and progress, and make adjustments to their strategies if needed. Metacognition is a valuable skill that supports problem-solving by promoting reflection, self-regulation, and the ability to adapt and improve one's problem-solving methods. The reason given (R) states that the development of metacognitive abilities hinders problem-solving, which is incorrect. In fact, metacognition enhances problem-solving skills by promoting higher-order thinking, self-awareness, and the ability to evaluate and improve one's problem-solving approaches. Therefore, (R) is not the correct explanation of (A).
28. **Option (4) is correct.**  
**Explanation:** The assertion (A) states that teachers should provide middle school students with detailed instructions about what, how, and when to learn. However, this is not necessarily true. While teachers play an important role in guiding and supporting students' learning, it is also crucial to foster independent learning skills and self-regulation in students. Simply telling students exactly what to do may hinder their ability to develop self-directed learning strategies, critical thinking, and problem-solving skills. The reason (R) suggests that middle school children do not have the capacity to self-regulate their learning, which is an oversimplified view. While younger students may require more guidance and support in developing metacognitive skills, they are still capable of learning how to self-regulate and take responsibility for their own learning. By providing opportunities for students to reflect, set goals, and monitor their progress, teachers can help them develop self-regulation skills gradually. Therefore, both the assertion (A) and the reason (R) are false.
29. **Option (4) is correct.**  
**Explanation:** Thinking of ability as incremental and failure as an opportunity to learn motivates students to work harder by putting in more efforts. This perspective promotes the belief that abilities and intelligence can be developed and improved over time through dedication, practice, and learning from mistakes. When students view failure as an opportunity to learn and grow, they are more likely to persist, embrace challenges, and apply greater effort to overcome obstacles. This mindset fosters resilience, a growth mindset, and a willingness to engage in continuous improvement.
30. **Option (3) is correct.**  
**Explanation:**
- Socio-cultural context of the student:** The social and cultural environment in which a student is situated can significantly impact their learning. Factors such as family background, community influences, cultural norms, and language spoken at home can shape a student's learning experiences and outcomes.
  - Age of the student:** Age plays a role in learning, as developmental stages and cognitive abilities differ across different age groups. Instructional approaches and content need to be tailored to the developmental needs and capacities of students at different ages.
  - Pedagogical strategies to teach a concept:** The teaching methods and strategies employed by

teachers greatly influence learning outcomes. Effective pedagogical strategies can enhance student engagement, understanding, and retention of concepts.

- (iv) **Teacher's beliefs about the student's ability:** The beliefs that teachers hold about their students' abilities can impact their expectations, instructional decisions, and the level of support provided. Teachers who have high expectations and believe in the potential of their students are more likely to create a positive learning environment that promotes student success.

Therefore, option (4) correctly includes factors (i), (ii), (iii) and (iv) that influence learning.

## Mathematics and Science

31. **Option (4) is correct.**

**Explanation:** To solve the expression  $18 \div 3 + 5 \times 6 - 1$ , we need to follow the order of operations, which is commonly known as PEMDAS (Parentheses, Exponents, Multiplication and Division from left to right and Addition and Subtraction from left to right).

Let us break down the expression step by step:

- First, we perform division:  $18 \div 3 = 6$
- Next, we perform multiplication:  $5 \times 6 = 30$
- Now, we substitute the results back into the expression:  $6 + 30 - 1$
- Finally, we perform the addition and subtraction from left to right:  $6 + 30 = 36$  and  $36 - 1 = 35$ .

Therefore, the value of the expression  $18 \div 3 + 5 \times 6 - 1$  is 35 (option 4).

32. **Option (1) is correct.**

**Explanation:**

$$\left(\frac{3}{5}\right)^5 \times \left(\frac{3}{5}\right)^{-3} = \left(\frac{3}{5}\right)^{5-3}$$

$$\left(\frac{3}{5}\right)^{5-3} = \left(\frac{3}{5}\right)^{5x-3}$$

[In multiplication power will be added if base is same]

$$\left(\frac{3}{5}\right)^2 = \left(\frac{3}{5}\right)^{5x-3}$$

Therefore,

$$\begin{aligned} 2 &= 5x - 3 \\ 2 + 3 &= 5x \\ 5x &= 5 \\ x &= 1 \end{aligned}$$

33. **Option (4) is correct.**

**Explanation:**

To find the value of  $(4p + 3q - 2r)$ , we need to determine the values of  $p$ ,  $q$  and  $r$  from the given equation  $21168 = p^4 q^3 r^2$ .

The prime factorization of 21168 is as follows:

$$21168 = 2^4 \times 3^3 \times 7^2$$

From this, we can see that  $p = 2$ ,  $q = 3$  and  $r = 7$ .

Now, substituting these values into the expression  $(4p + 3q - 2r)$ , we have:

$$\begin{aligned} (4p + 3q - 2r) &= (4 \times 2) + (3 \times 3) - (2 \times 7) \\ &= (8 + 9 - 14) \\ &= 17 - 14 \\ &= 3 \end{aligned}$$

Therefore, the value of  $(4p + 3q - 2r)$  is 3.

34. **Option (1) is correct.**

**Explanation:** To solve the expression,  $[(-20) \div 4] \times (-2) + 6 \times 3 - 1$ , we need to follow the order of operations (PEMDAS) and consider the negative signs:

- First, we perform the division:  $[(-20) \div 4] = [-20 \div 4] = -5$
- Next, we perform the multiplication:  $-5 \times (-2) = 10$
- Then, we perform the multiplication:  $6 \times 3 = 18$
- Finally, we perform the addition and subtraction from left to right:  $10 + 18 = 28$  and  $28 - 1 = 27$

Therefore, the value of the expression  $[(-20) \div 4] \times (-2) + 6 \times 3 - 1$  is 27.

35. **Option (4) is correct.**

**Explanation:**

The fractions  $\frac{30}{25}, \frac{27}{81}, \frac{22}{25}, \frac{45}{22}$  can be

simplified as  $\frac{6}{5}, \frac{1}{3}, \frac{22}{25}, \frac{45}{22}$ . Taking the

LCM of 5, 3, 25 and 22 we get, 1650.

$$\frac{6}{5} = \frac{(6 \times 330)}{(5 \times 330)} = \frac{1980}{1650}$$

$$\frac{1}{3} = \frac{(1 \times 550)}{(3 \times 550)} = \frac{550}{1650}$$

$$\frac{22}{25} = \frac{(22 \times 66)}{(25 \times 66)} = \frac{1452}{1650}$$

$$\frac{45}{22} = \frac{(45 \times 75)}{(22 \times 75)} = \frac{3375}{1650}$$

$$\frac{1980}{1650}, \frac{550}{1650}, \frac{1452}{1650}, \frac{3375}{1650}$$

Arranging these fractions in ascending order, we have:

$$\frac{550}{1650} < \frac{1452}{1650} < \frac{1980}{1650} < \frac{3375}{1650}$$

$$\frac{27}{81} < \frac{22}{25} < \frac{30}{25} < \frac{45}{22}$$

36. **Option (3) is correct.**

**Explanation:** Given:

MP of the article = ₹ 420

Discount % = 15 %

Profit % = 19 %

Formula used:

Selling price, (SP)

$$= \frac{\text{Marked price} \times (100 - D\%)}{100}$$

Cost price, (CP)

$$= \frac{(\text{Selling price} \times 100)}{(100 + P\%)}$$

Discount is given on the marked price.

Calculations:

$$SP = \frac{\text{Marked price} \times (100 - D\%)}{100}$$

$$= \frac{420 \times (100 - 15)}{100}$$

$$= \frac{420 \times (85)}{100}$$

$$= ₹ 357$$

Now, Cost price, (CP)

$$= \frac{(\text{Selling price} \times 100)}{(100 + P\%)}$$

$$= \frac{(357 \times 100)}{(100 + 19)}$$

$$= \frac{35700}{119}$$

$$= ₹ 300$$

Therefore, the cost price of the article is ₹ 300 (option 3).

37. **Option (2) is correct.**

**Explanation:**

To find the value of  $x^4 + \frac{1}{x^4}$  we can use the identity:

$$\left(x + \frac{1}{x}\right)^2 = x^2 + 2 \times x \times \frac{1}{x} + \frac{1}{x^2}$$

$$\text{Given that } x + \frac{1}{x} = 4$$

Squaring both sides we get,

$$\left(x + \frac{1}{x}\right)^2 = (4)^2$$

$$(4)^2 = x^2 + 2 + \frac{1}{x^2}$$

$$16 = x^2 + 2 + \frac{1}{x^2}$$

$$\Rightarrow x^2 + \frac{1}{x^2} = 16 - 2$$

Rearranging the equation, we have:

$$x^2 + \frac{1}{x^2} = 14$$

On squaring the above equation, we get,

$$\Rightarrow \left(x^2 + \frac{1}{x^2}\right)^2 = (14)^2$$

$$\Rightarrow \left(x^4 + \frac{1}{x^4} + 2\right) = 196$$

$$\Rightarrow x^4 + \frac{1}{x^4} = 196 - 2$$

$$\Rightarrow x^4 + \frac{1}{x^4} = 194$$

38. **Option (3) is correct.**

**Explanation:** To determine one of the factors of the expression  $x^2y - xy^2 + x - y$ , we perform factorisation by grouping.

Grouping the terms, we have:

$$(x^2y - xy^2) + (x - y)$$

Now, let's factor out common terms from each group:

$$xy(x - y) + 1(x - y)$$

Now, we have a common factor in both terms.

$$(x - y)(xy + 1)$$

Therefore, one of the factors of the expression  $x^2y - xy^2 + x - y$  is  $(xy + 1)$ .

39. **Option (4) is correct.**

**Explanation:** To find the coefficient of  $x^2$  in the product  $(x - 2)(x - 3)(x - 5)$ , we need to expand the expression and identify the term with  $x^2$ .

Expanding the product, we get:

$$\begin{aligned} (x - 2)(x - 3)(x - 5) &= (x^2 - 2x - 3x + 6)(x - 5) \\ &= (x^2 - 5x + 6)(x - 5) + 6x \\ &= x^3 - 5x^2 - 5x^2 + 25x - 30 \\ &= x^3 - 10x^2 + 31x - 30 \end{aligned}$$

The coefficient of  $x^2$  is  $-10$ .

40. **Option (3) is correct.**

**Explanation:** To solve the given equations and find the value of  $xy$ , we will substitute the value of  $x^2 + y^2$  from the first equation into the second equation:

Given:

$$x^2 + y^2 = 6 \quad \dots(1)$$

$$\text{and } x^3y + xy^3 + x^2 + y^2 = 36 \quad \dots(2)$$

$$\Rightarrow x^3y + xy^3 + x^2 + y^2 = 36$$

$$\Rightarrow xy(x^2 + y^2) + x^2 + y^2 = 36$$

[from (1) and (2)]

$$\Rightarrow 6xy + 6 = 36$$

$$\Rightarrow 6xy = 30$$

$$\Rightarrow xy = \frac{30}{6}$$

$$\Rightarrow xy = 5$$

Therefore, the value of  $xy$  is 5.

41. **Option (3) is correct.**

**Explanation:** To determine which of the options is a Pythagorean triplet, we need to check if the given numbers satisfy the Pythagorean theorem, which states that in a right-angled triangle, the square of the length of the hypotenuse (the side opposite the right angle) is equal to the sum of the squares of the other two sides.

(1) 12, 15, 19

According to Pythagoras theorem,

$$(12)^2 + (15)^2 = (19)^2$$

$$\text{Or, } 144 + 225 = 361$$

$$\text{Or, } 369 \neq 361$$

So, option (1) is not a Pythagorean triplet

(2) 8, 13, 18

According to Pythagoras theorem,

$$(8)^2 + (13)^2 = (18)^2$$

$$\text{Or, } 64 + 169 = 324$$

$$\text{Or, } 233 \neq 324$$

So, option (2) is not a Pythagorean triplet.

(3) 5, 12, 13

According to Pythagoras theorem,

$$5^2 + 12^2 = 25 + 144$$

$$= 169$$

$$= 13^2$$

This option (3) satisfies the Pythagoras theorem.

(4) 14, 20, 24

According to Pythagoras theorem,

$$(14)^2 + (20)^2 = (24)^2$$

$$\text{Or, } 196 + 400 = 576$$

$$\text{Or, } 596 \neq 576$$

So, option (4) is not a Pythagorean triplet.

Therefore, correct answer is option (3) that is a Pythagorean triplet.

42. **Option (4) is correct.**

**Explanation:** Given one angle of the triangle is  $120^\circ$

Let's assume the angles of the triangle are A, B and C.

The sum of the angles in a triangle is  $180^\circ$ . Therefore, we can write:

$$\angle A + \angle B + \angle C = 180^\circ$$

Substituting  $\angle A = 120^\circ$

$$120^\circ + \angle B + \angle C = 180^\circ$$

$$\text{Or, } \angle B + \angle C = 60^\circ$$

$$\frac{1}{2}(\angle B + \angle C) = 30^\circ$$

Now, let the bisector OB and OC of  $\angle B$  and  $\angle C$  respectively intersect at O.

So, we have to find  $\angle BOC$ .

$$\angle OBC + \angle OCB + \angle BOC = 180^\circ$$

$$\angle BOC = 180^\circ - 30^\circ = 150^\circ$$

Therefore, the angle between the bisectors of the other two angles is  $150^\circ$ .

43. **Option (2) is correct.**

**Explanation:** A regular polygon of 6 sides is called a hexagon. To determine the number of lines of symmetry, we can use the formula for the number of lines of symmetry of a regular polygon, which is equal to the number of sides.

In this case, the regular polygon has 6 sides (a hexagon), so the number of lines of symmetry is also 6.

Therefore, the correct option is (2) 6 lines of symmetry.

44. **Option (1) is correct.**

**Explanation:** Since triangles ABC and DEF are congruent (given that  $\angle C = \angle F$ ,  $AC = DF$  and  $BC = EF$ ), their corresponding sides must be equal in length.

$$AB = 4x - 2 \text{ and } DE = 3x - 1.$$

$$\text{Since, } AB = DE$$

$$4x - 2 = 3x - 1$$

$$\text{Or, } 4x - 3x = -1 + 2$$

$$\text{So, } x = 1$$

Therefore, the value of  $x$  is 1 (option 1).

45. **Option (2) is correct.**

**Explanation:**

To form a polyhedron, the numbers representing the number of faces, vertices and edges must satisfy Euler's formula, which states that in a polyhedron, the number of faces plus the number of vertices minus the number of edges equals 2.

$$F + V - E = 2$$

(1) 4, 4 and 5

According to Euler's formula,

$$4 + 4 - 5 = 2$$

$$\text{Or, } 8 - 5 = 2$$

$$\text{Or, } 3 \neq 2$$

Since, option (1) doesn't satisfy Euler's formula this triplet can't form a polyhedron.

(2) According to Euler's formula:

$$6 + 8 - 12 = 2$$

This option satisfies Euler's formula.

Based on the analysis, the triplet that can form a polyhedron is 6, 8 and 12 (option 2).

(3) According to Euler's formula,

$$6 + 8 - 10 = 2$$

$$\text{Or, } 14 - 10 = 2$$

$$\text{Or, } 4 \neq 2$$

Since, option (3) doesn't satisfy Euler's formula this triplet can't form polyhedron.

(4) According to Euler's formula,

$$5 + 6 - 8 = 2$$

$$\text{Or, } 11 - 8 = 2$$

$$\text{Or, } 3 \neq 2$$

Since, option (4) doesn't satisfy Euler's formula this triplet can't form a polyhedron.

So, correct answer is option (2): 6, 8 and 12.

46. **Option (1) is correct.**

**Explanation:** The volume of a right circular cylinder is given by the formula  $V = \pi r^2 h$ , where  $r$  is the radius of the base and  $h$  is the height. Let's assume the heights of the cylinders are  $8h$  and  $5h$  and the radii of their bases are  $r$  and  $2r$ .

The volume of the first cylinder is

$$V_1 = \pi r^2 (8h) = 8\pi r^2 h$$

The volume of the second cylinder is

$$V_2 = \pi (2r)^2 (5h) = 20\pi r^2 h$$

Now, we can find the ratio of their volumes:

$$V_1 : V_2 = (8\pi r^2 h) : (20\pi r^2 h)$$

$$= \frac{8}{20} = \frac{2}{5}$$

Therefore, the ratio of the volumes of the two cylinders is 2 : 5 (option 1).

47. **Option (3) is correct.**

**Explanation:** Let's assume the original edge length of the cube is  $x$  cm.

New measure of the edge after increase =  $2x$  as it is increased by 100%.



Total surface area of the original cube  
 $= 6x^2$

Total surface area of the new cube  
 $= 6(2x)^2$   
 $= 6(4x^2)$   
 $= 24x^2$

Increase in surface area  
 $= \text{New surface area}$   
 $\quad - \text{Original surface area}$   
 $= 24x^2 - 6x^2 = 18x^2$

Percentage increase in surface area

$$= \left( \frac{\text{Increase in surface area}}{\text{Original surface area}} \right) \times 100\%$$

$$= \left( \frac{18x^2}{6x^2} \right) \times 100\%$$

$$= 3 \times 100\%$$

$$= 300\%$$

Therefore, the percentage increase in the surface area of the cube is 300% (option 3).

48. **Option (2) is correct.**

**Explanation:** Area of a trapezium is:

$$\text{Area} = \frac{1}{2} \times (\text{sum of parallel$$

sides)  $\times$  height

Given that the sum of the parallel sides is 40 cm and the height is 10 cm, we can substitute these values into the formula:

$$\text{Area} = \frac{1}{2} \times 40 \text{ cm} \times 10 \text{ cm}$$

$$= 20 \text{ cm} \times 10 \text{ cm}$$

$$= 200 \text{ cm}^2$$

Therefore, the area of the trapezium is 200 cm<sup>2</sup> (option 2).

49. **Option (2) is correct.**

**Explanation:** To find the mode of the data, we need to determine the value that appears most frequently.

Looking at the table, we can see that the mark of 30 has been obtained by 13 students, which is the highest count among all the marks. Therefore, the mode of this data is 30 (option 2).

50. **Option (3) is correct.**

**Explanation:** To find the probability, we need to determine the number of favorable outcomes (cards with composite numbers between 21 and 42) and divide it by the total number of possible outcomes (total number of cards).

The composite numbers between 21 and 42 are

22, 24, 25, 26, 27, 28, 30, 32, 33, 34, 35, 36, 38, 39, 40

There are 15 composite numbers between 21 and 42.

The total number of cards is the difference between the highest and lowest number, plus 1:

$$51 - 12 + 1 = 40$$

Therefore, the probability is:

$$\frac{\text{Favourable outcomes}}{\text{Total outcomes}} = \frac{15}{40} = \frac{3}{8}$$

Hence, the probability that the number on the chosen card is a composite number between 21 and 42 is  $\frac{3}{8}$  (option 3).

51. **Option (1) is correct.**

**Explanation:** The great Indian mathematician who gave the approximate value of  $\pi$  correct to 4 decimal places as 3.1416 is (1) Aryabhata.

52. **Option (4) is correct.**

**Explanation:** The most suitable method in establishing the formula for compound interest in class 8 is (4) Inductive method.

The inductive method involves making observations, recognizing patterns and forming generalizations based on those observations. In the case of compound interest, the inductive method would involve looking at specific examples of compound interest calculations and noticing the pattern or relationship between the principal, interest rate, time and final amount.

By observing multiple examples and recognizing the pattern, students can then formulate the general formula for compound interest. This method allows students to develop an understanding of the concept through hands-on exploration and critical thinking.

53. **Option (3) is correct.**

**Explanation:** According to Van Hiele's levels of geometric thinking, students will be able to draw a right-angled triangle and name it as a right scalene triangle at level 3: Relationship.

At this level, students understand the relationships and properties between geometric figures. They can identify specific types of triangles, such as right-angled triangles and further classify them based on their side lengths, in this case, as a right scalene triangle.

It's important to note that the Van Hiele levels are hierarchical, with each level building upon the previous one. Students progress through these levels as they develop a deeper understanding of geometry concepts and relationships.

54. **Option (3) is correct.**

**Explanation:** The option that is NOT a preventive method for rectifying careless errors is (3) Encourage learners to take the help of a calculator and pay attention during problem solving.

While using a calculator can be helpful in certain situations, it is not specifically a preventive method for rectifying careless errors. Relying solely on a calculator may not address the underlying causes of careless errors, such as lack of attention,

conceptual understanding or procedural knowledge.

On the other hand, options (1), (2) and (4) are preventive methods that can help in rectifying careless errors. Teaching a concept in multiple ways reinforce understanding and reduces the chances of making errors due to misconceptions. Encouraging learners to learn different steps in problem solving and practice a number of similar questions can help improve their procedural knowledge and accuracy in solving problems. Therefore, option (3) is NOT a preventive method for rectifying careless errors.

55. **Option (4) is correct.**

**Explanation:** The statement that is NOT true about errors in a mathematics class is (4) Children learn only when there is no error in their responses for a given problem.

In reality, errors are an integral part of the learning process in mathematics and children can learn from their mistakes. Making errors allow children to engage in problem-solving, critical thinking and reflection, which contribute to their understanding and growth in mathematics. Errors provide opportunities for teachers to identify misconceptions, address them and guide students towards a deeper understanding of mathematical concepts.

Therefore, the statement (4) that children learn only when there is no error in their responses for a given problem is not true.

56. **Option (1) is correct.**

**Explanation:** In accordance with the nature of mathematics, the statement that cannot be proven false is (1) Theorem.

A theorem is a statement that has been proven to be true based on rigorous mathematical reasoning and evidence. Once a theorem has been proven, it is considered to be true and cannot be proven false within the framework of mathematics.

On the other hand, (2) Conjecture, (3) Hypothesis and (4) Proposition are statements that are not yet proven and can potentially be either true or false. Conjectures are educated guesses or predictions that require further investigation and proof. Hypotheses are proposed explanations or predictions that need to be tested and verified. Propositions are statements that may or may not be true and require proof or disproof. Therefore, the statement (1) Theorem cannot be proven false within the context of mathematics.

57. **Option (3) is correct.**

**Explanation:** The most appropriate objective of the activity described in

the question is (3) Rectangles with different area can have the same perimeter.

By asking the students to draw rectangles using the same number of squares as the rectangle drawn by the teacher, the objective is to help the students understand that rectangles with different areas can still have the same perimeter. This activity highlights the concept that area and perimeter are independent properties of a rectangle.

**58. Option (2) is correct.**

**Explanation:** The statement that is NOT true about mathematics curriculum is (2) Primary stage mathematics curriculum focuses on teaching abstract concepts through formal algorithms.

In primary stage mathematics curriculum, the focus is not primarily on teaching abstract concepts through formal algorithms. The primary stage curriculum aims to develop foundational mathematical understanding and skills, focusing on concrete and visual representations to build conceptual understanding in children.

Abstract concepts and formal algorithms are introduced at later stages of mathematics education, such as the secondary level, where students have a stronger foundation in mathematical concepts and are ready to engage with more abstract and formal methods.

Therefore, statement (2) is NOT true about mathematics curriculum at the primary stage.

**59. Option (2) is correct.**

**Explanation:** The mathematical reasoning that proceeds from concrete to abstract is (2) Inductive reasoning.

Inductive reasoning involves making observations, recognizing patterns and forming generalizations based on those observations. It starts with specific examples or data and then uses that information to make a general conclusion or statement.

In the context of mathematics, inductive reasoning often involves observing patterns in numerical sequences, shapes, or algebraic expressions to arrive at a general rule or formula. It moves from specific instances towards a broader generalization.

**60. Option (2) is correct.**

**Explanation:** The most appropriate method of teaching experimental probability in a mathematics class is (2) Ask children to toss the coin 5 times and note the outcomes.

Teaching experimental probability involves engaging students in hands-on activities and observations to understand the concept of probability

through real-world experiments. By asking children to toss the coin 5 times and note the outcomes, they can actively participate in collecting data and observing the relative frequencies of different outcomes.

This method allows students to make connections between the theoretical probability (expected outcomes) and the experimental probability (observed outcomes). It provides a concrete experience for students to understand the concept of probability and how it relates to random events.

**61. Option (4) is correct.**

**Explanation:** A periscope in a submarine device which works on the laws of reflection. When light from an object outside the submarine enters the periscope, it strikes the top mirror at a  $45^\circ$  angle and reflects off at the same angle to the lower mirror. The lower mirror then reflects the light towards the observer, allowing them to see the view outside the submarine. This process is based on the principle of reflection.

Option (A) correctly describes how light bounces off the top mirror at a  $45^\circ$  angle and allows the person to see the view outside.

Option (C) states that a periscope is based on the laws of reflection, which is true. The reflection of light at the mirrors follows the principles of reflection.

Option (B) is incorrect because it describes light entering the top mirror at  $90^\circ$  and bouncing off at  $90^\circ$ , which is not how a periscope works.

Option (D) is incorrect because a periscope is not based on the laws of refraction, which involve the bending of light when it passes from one medium to another.

**62. Option (3) is correct.**

**Explanation:** Ice floats on water because of two main reasons:

(A) The density of ice is lower than that of water. When water freezes and turns into ice, the water molecules arrange themselves in a hexagonal lattice structure, which creates open spaces or gaps between the molecules. This arrangement leads to a decrease in density compared to liquid water. Since objects with lower density float on objects with higher density, ice floats on water.

(D) The molecular arrangement in ice is different from that in liquid water. In liquid water, the water molecules are less closely packed and have a more random arrangement. When water freezes, the water molecules form a regular lattice structure in the solid ice. This change in molecular arrangement also

contributes to the lower density of ice compared to liquid water.

**63. Option (3) is correct.**

**Explanation:** The correct option is (3) assertion is correct but the reason is false.

The assertion states that copper and aluminium wires are usually used for the transmission of electricity. This is true because copper and aluminium are excellent conductors of electricity. They have low electrical resistance, allowing for efficient flow of electric current through the wires.

The reason given states that copper and aluminium have a high resistivity. This is incorrect. In fact, copper and aluminium have low resistivity, which is desirable for conducting electricity. Lower resistivity means less resistance to the flow of electric current.

Therefore, assertion is correct but reason is false. However, the reason is not the correct explanation of the assertion because it states the opposite of the actual reason. Copper and aluminium wires are used for transmission of electricity due to their low resistivity and excellent conductivity, not high resistivity.

**64. Option (2) is correct.**

**Explanation:** The correct option is (2) There is a decrease in atmospheric pressure at high altitudes which leads to a lowering of the boiling point of water.

Atmospheric pressure plays a crucial role in determining the boiling point of a substance. At sea level or lower altitudes, the atmospheric pressure is relatively higher. This higher pressure increases the boiling point of water. However, as altitude increases and one goes to higher altitudes, the atmospheric pressure decreases.

At high altitudes, the decrease in atmospheric pressure reduces the external pressure on the surface of the water. As a result, water molecules require less energy to overcome the reduced external pressure and escape into the vapor phase. This leads to a lowering of the boiling point of water. The decrease in boiling point at high altitudes is observed because the atmospheric pressure is lower compared to sea level. Therefore, option (2) correctly explains the reason for the boiling of water at a lower temperature at high altitudes.

**65. Option (4) is correct.**

**Explanation:** To determine the temperature at which both sodium and sulfur would be in the liquid state, we need to find the overlapping temperature range of their melting and boiling points.

The melting point of sodium is  $98^\circ\text{C}$ , which means it transitions from solid to liquid state at temperatures

above this value. The boiling point of sulfur is 444 °C, which means it transitions from liquid to gas state at temperatures above this value.

Therefore, both elements will be in the liquid state at temperatures above the higher of the two melting points, which is 115 °C for sulfur.

Therefore, the correct option is (4) Above 115 °C.

66. **Option (1) is correct.**

**Explanation:** The correct statement is (1) (A) and (D).

(A) Electrostatic force is a non-contact force. This is true because electrostatic force acts between charged particles without the need for physical contact.

(D) Gravitational force is a non-contact force. This is also true because gravitational force acts between objects without the need for physical contact.

Statement (B) is incorrect because the ability to lift things with a magnet is an example of a non-contact force, not a contact force.

Statement (C) is incorrect because an airplane flying through the air involves the interaction of various forces, including contact forces such as air resistance.

Therefore, the correct option is (1) (A) and (D).

67. **Option (2) is correct.**

**Explanation:** Sound waves require a medium, such as air, water or solids to propagate. They cannot travel through vacuum, which is an empty space devoid of matter.

68. **Option (2) is correct.**

**Explanation:**

To arrange the solutions in the correct order of acidic strength, we need to arrange them in decreasing order of pH, with lower pH indicating stronger acidity.

Given:

Solution A:	pH 9
Solution B:	pH 2
Solution C:	pH 7
Solution D:	pH 4

Arranging them in decreasing order of pH, we get:

B > D > C > A

69. **Option (4) is correct.**

**Explanation:**

First, we can use a separating funnel to separate the mixture into two layers—oil and water. The water layer containing the salt can then be carefully removed from the separating funnel.

Next, the separated water containing salt can be evaporated to obtain the salt crystals. This can be done by heating the water until it completely evaporates, leaving behind the salt.

Therefore, the correct order is:

(2) Use separating funnel to remove water and oil, followed by evaporating water from salt.

70. **Option (3) is correct.**

**Explanation:** From the given set of reactions, we can infer that:

(1) Reactivity of Mg is more than Cu but less than Na.

In reaction (A), magnesium (Mg) displaces copper (Cu) from copper oxide (CuO), indicating that Mg is more reactive than Cu.

In reaction (B), sodium (Na) displaces magnesium (Mg) from magnesium oxide (MgO), indicating that Na is more reactive than Mg.

In reaction (C), zinc (Zn) displaces copper (Cu) from copper oxide (CuO), indicating that Zn is more reactive than Cu.

Therefore, we can conclude that the reactivity order is:

Na > Mg > Cu.

71. **Option (3) is correct.**

**Explanation:** The correct option is: (3) (a) and (b)

Gold is preferred for making jewellery because it is both malleable (can be easily shaped or molded) and resistant to corrosion (does not easily react with other substances or tarnish). These properties make gold easy to work with and ensure that it retains its shine and beauty over time.

72. **Option (2) is correct.**

**Explanation:** The correct option is: (2) Freezing of ice cream, melting of chocolate, dissolving of candy.

In this set, all the processes mentioned involve physical changes. Freezing of ice cream, melting of chocolate and dissolving of candy are examples of changes in the state or physical properties of the substances involved, without any change in their chemical composition.

73. **Option (1) is correct.**

**Explanation:** Statement 1 (S1) is correct because esters are volatile compounds that contribute to the characteristic smell of fruits.

Statement 2 (S2) is correct because polyester is a polymer made from ester monomers. The repeating units in polyester are ester linkages, which gives it its properties and structure.

74. **Option (1) is correct.**

**Explanation:**

(A) Paraffin wax	(ii) Ointments
(B) Bitumen	(i) Paints
(C) Sulphur phosphate	(iv) Fertilizer
(D) 2, 4-D	(iii) Weedicides

(A) Paraffin wax is commonly used in ointments.

(B) Bitumen is used in paints.

(C) Sulphur phosphate is a fertilizer.

(D) 2,4-D is a commonly used herbicide/weedicide.

75. **Option (4) is correct.**

**Explanation:** Programming our body to produce suitable antibodies.

Vaccines work by stimulating the immune system to recognize and respond to specific pathogens or antigens. They introduce a harmless form of the pathogen or antigen into the body, which triggers an immune response. This response includes the production of specific antibodies that can recognize and neutralize the pathogen if encountered again in the future. Vaccines essentially train the immune system to recognize and respond to specific threats, providing immunity against certain diseases.

76. **Option (2) is correct.**

**Explanation:** The incorrect statement with respect to cells is:

- Plastids are present in plant and animal cells.
- Plastids are membrane-bound organelles that are found only in plant cells.

They are responsible for various functions such as photosynthesis, storage of pigments and synthesis of certain molecules. Plastids are not present in animal cells.

77. **Option (4) is correct.**

**Explanation:** The true statement about the human circulatory system is:

Veins carry deoxygenated blood.

Veins are blood vessels that carry blood back to the heart. They typically carry deoxygenated blood, except the pulmonary veins that carry oxygenated blood from the lungs to the heart. Arteries, on the other hand, carry oxygenated blood from the heart to various parts of the body.

78. **Option (1) is correct.**

**Explanation:** Based on the information given in the table:

- A: Air  
B: Water  
C: Mosquito  
D: Insect

Therefore, the correct option is:

(1) A–Air, B–Water, C–Mosquito, D–Insect

79. **Option (2) is correct.**

**Explanation:** The correct words for (A), (B), (C) and (D) respectively are:

- (A) Viviparous  
(B) Oviparous  
(C) Zygote  
(D) Metamorphosis

80. **Option (1) is correct.**

**Explanation:** Based on Sehaj's observation that the plant has a thick stem with waxy layers and deep roots, the



correct habitat of the plant is most likely: (1) Desert

Plants in desert habitats often have adaptations to cope with arid conditions, such as thick stems to store water and waxy layers to reduce water loss through transpiration. Additionally, deep roots help the plant access water sources deep underground.

**81. Option (1) is correct.**

**Explanation:**

The false statements about science are:

1. All scientific ideas are discovered and tested by controlled experiments.
2. When a theory has been supported by a great deal of scientific evidence, it becomes law.

**Explanation:**

1. Not all scientific ideas are discovered and tested through controlled experiments. Although experiments are an important part of the scientific method, scientific ideas can also be generated through observations, hypothesis formulation, mathematical modeling and other methods of inquiry.
2. The progression from theory to law is not a straightforward process based solely on the number of supporting evidence. In science, a theory is a well-substantiated explanation of a phenomenon based on a comprehensive set of evidence. A law, on the other hand, is a descriptive generalization of a pattern or relationship observed in nature. Laws are often more specific and limited in scope compared to theories. The distinction between theories and laws is not determined solely by the amount of evidence, but rather by the nature of the scientific explanation and the level of generality or specificity.

**82. Option (2) is correct.**

**Explanation:** Concept mapping is NOT used as a tool for: (2) Lesson planning

Concept mapping is a visual tool that helps to organize and represent knowledge and relationships between concepts. It is primarily used for eliciting ideas of learners, assessing understanding and mapping student's progress. While concept mapping can be used to support teaching and learning activities, such as brainstorming and reviewing content, it is not typically used specifically for lesson planning. Lesson planning usually involves outlining objectives, instructional

strategies and assessment methods, which may involve the use of concept mapping but is not its primary purpose.

**83. Option (3) is correct.**

**Explanation:** The purpose of such kind of activities, as mentioned in the NCERT, Grade 8, Science textbook, is - It helps students to develop skills of making a question, asking questions, gathering information etc.

The activity of talking to grandparents and elderly people in the neighborhood about sewage disposal systems serves the purpose of developing various skills in students, such as forming questions, asking inquiries, gathering information and engaging in conversation with different sources of knowledge. This activity encourages students to explore beyond textbooks, gain insights from personal experiences and historical perspectives and develop research and communication skills. It also helps them to understand the changes that have taken place over time and appreciate advancements in sewage disposal systems.

**84. Option (1) is correct.**

**Explanation:** The recommendations of NCF 2005 for upper primary science teaching and learning are: (1) (A) and (B)

NCF 2005 emphasizes the need to create learning situations in the context of children, where they can actively participate and construct their own knowledge. This encourages hands-on and experiential learning, allowing students to engage in inquiry-based activities and develop a deeper understanding of scientific concepts. The integration of vocational education with science is not explicitly mentioned as a recommendation in NCF 2005. Additionally, the teaching of concepts through a disciplinary approach is not mentioned as a specific recommendation.

**85. Option (4) is correct.**

**Explanation:** The approach to sequencing of teaching-learning activity described in the scenario, where the teacher begins with a discussion of acid and base concepts and then arranges verification activities, can be termed as: 4. Inquiry-based Inquiry-based learning is an approach that focuses on active student engagement and exploration. In this approach, students are encouraged to ask questions, investigate and construct their own understanding of the subject matter. The teacher in the scenario starts with a discussion of acid and base concepts, which sets the foundation for students to explore and verify their understanding through hands-on activities. This

approach aligns with the principles of inquiry-based learning, where students actively participate in the learning process and develop a deeper understanding of the topic.

**86. Option (4) is correct.**

**Explanation:** These views are as follows:

- (a) It reduces fear of assessment in students.
- (b) It gives full opportunity to students to explore the book.
- (d) It helps to gauge the conceptual understanding of the student.

These views highlight the benefits of open book questions, such as reducing anxiety, promoting exploration and critical thinking and assessing conceptual understanding rather than relying solely on memorization.

**87. Option (1) is correct.**

**Explanation:** Divergent questions in science help learners to:

- (a) **Develop multiple views:** Divergent questions encourage learners to think critically and consider multiple perspectives or viewpoints.
- (b) **Improve their thinking strategies:** Divergent questions promote higher-order thinking skills, such as problem-solving and creative thinking.
- (c) **Engage in classroom discussions:** Divergent questions encourage learners to actively participate in classroom discussions, share their ideas and learn from their peers.

These options highlight the benefits of using divergent questions in science education to foster a deeper understanding of concepts and promote active learning.

**88. Option (4) is correct.**

**Explanation:** Discrepant events in the science classroom are used to engage students, provoke curiosity and promote critical thinking. They are designed to create cognitive conflict and challenge students' preconceived notions, leading to the exploration of new ideas and concepts. The objectives of using discrepant events include:

- (1) **It helps teachers to elicit misconceptions in students:** Discrepant events can reveal students' misconceptions or incorrect understanding of scientific phenomena.
- (2) **It helps to create cognitive conflict in students:** Discrepant events generate cognitive conflict by presenting unexpected or surprising outcomes, which stimulates students' thinking and curiosity.
- (3) **It helps students to view their ideas differently:** Discrepant

events encourage students to re-evaluate their existing ideas and develop a deeper understanding of scientific concepts.

However, the objective of helping weak students to perform well in assessment is not directly associated with the use of discrepant events. Discrepant events primarily focus on promoting conceptual understanding, critical thinking and active engagement in the learning process.

89. Option (4) is correct.

**Explanation:** Including the story of William Harvey and the challenges he faced in the science textbook fulfills multiple objectives of science teaching and learning:

- To develop a historical perspective for the development of a concept:** By sharing stories of great scientists and their discoveries, students gain an understanding of the historical context and the progression of scientific knowledge over time.
- To develop a sense that new ideas take time to be accepted:** Highlighting the resistance and ridicule faced by William Harvey for his ideas about the circulation of blood helps students to understand that scientific breakthroughs often face scepticism and take time to be accepted by the scientific community.
- To develop open-mindedness in science:** Learning about the challenges faced by William Harvey encourages students to be open-minded and receptive to new ideas, even if they challenge existing beliefs or paradigms.
- Including fun elements in science that are not for testing:** While the story of William Harvey adds an interesting and engaging element to the textbook, it primarily serves the objectives of providing historical context, developing open-mindedness and understanding the process of scientific discovery. It may not be included solely for the purpose of fun or entertainment.

90. Option (2) is correct.

**Explanation:** The assertion that facts of science serve as the foundation for concepts, principles and theories is correct. Facts are observations or empirical evidence that provide the basis for scientific understanding and knowledge.

However, the reason provided that facts in science are static and do not change is correct. In science, theories

and principles can be subject to revision and refinement as new evidence and information emerge. Scientific knowledge is dynamic and evolves over time based on further investigations and discoveries. Therefore, the reason does not provide the correct explanation for the assertion.

### Language: Hindi

91. विकल्प (3) उचित है।

**व्याख्या**—गद्यांश से पहचाना गया सही कथन है—समाज के सभी बच्चे बहुभाषी हैं।

92. विकल्प (1) उचित है।

**व्याख्या**—बहुभाषावाद का उद्देश्य, जैसा कि परिच्छेद में बताया गया है, एक ही समय में मातृभाषा के साथ-साथ क्षेत्रीय भाषा/भाषाओं और अन्य भाषाओं में सुनने और समझने, बोलने और व्यक्त करने, लिखने और पढ़ने को महत्व देना।

93. विकल्प (4) उचित है।

**व्याख्या**—पूछे गए प्रश्न का सबसे उपयुक्त विकल्प है—बच्चों की समझ का विस्तार होता है।

94. विकल्प (2) उचित है।

**व्याख्या**—भाषा के विकास का तात्पर्य अभिव्यक्ति की अपार संभावनाओं से है। इसका मतलब यह है कि जैसे-जैसे भाषा विकसित होती है, यह अपनी शब्दावली बढ़ाती है, अभिव्यक्ति के तरीकों का विस्तार करती है और ज्ञान के नए अवसर खोलती है।

95. विकल्प (3) उचित है।

**व्याख्या**—एकलभाषी विद्यार्थी की तुलना में बहुभाषी विद्यार्थी के पास बिम्ब, विधा, शब्द-चयन, उदाहरण आदि का भण्डार अधिक होने की सम्भावनाएँ हैं।

96. विकल्प (4) उचित है।

**व्याख्या**—प्रश्न का सही विकल्प 'कक्षाओं में बहुभाषी स्थिति की अनदेखी का क्या मतलब है?'

**त्रिभाषा सूत्र का पालन करना।** परिच्छेद में कहा गया है कि समाज की बहुभाषी वास्तविकता को नजरअंदाज करके, 'कक्षाओं में उन पर लक्ष्य भाषा के रूप थोपे जाते हैं।' इसका तात्पर्य यह है कि कक्षाएँ केवल लक्ष्य भाषा पर ध्यान केंद्रित करती हैं और बच्चों की बहुभाषी क्षमताओं को ध्यान में नहीं रखती हैं। इसलिए, विकल्प (3) 'केवल लक्ष्य भाषा का उपयोग करें' कक्षाओं में बहुभाषी स्थिति की अनदेखी की अवधारणा को सबसे अच्छा दर्शाता है।

97. विकल्प (4) उचित है।

**व्याख्या**—जो शब्द बाकियों से अलग है वह है—खुलना।

98. विकल्प (2) उचित है।

**व्याख्या**—दिए गए विकल्पों में 'संभावना' शब्द में 'ता' प्रत्यय जोड़कर एक नया सार्थक

शब्द बनाया जा सकता है, इसलिए, सही उत्तर है—संभावना

99. विकल्प (1) उचित है।

**व्याख्या**—सूक्ष्म कण

100. विकल्प (3) उचित है।

**व्याख्या**—यह पंक्ति समग्रतः हमारे देश का आभास कराती है 'लाखों वर्षों से जगमगाता हुआ यह देश हमारा है।' अतः विकल्प 'लाखों वर्षों से चमकता हुआ यह देश हमारा है।' सबसे उपयुक्त है।

101. विकल्प (3) उचित है।

**व्याख्या**—दिया गया परिच्छेद स्पष्ट रूप से कोई स्पष्ट केंद्रीय विचार या विषयवस्तु प्रदान नहीं करता है। इसमें काव्यात्मक और रूपक भाषा शामिल है जिससे किसी विशिष्ट व्याख्या को इंगित करना कठिन हो जाता है। हालाँकि, 'रोशनी का यह देश हमारा है' और 'गौरवशाली स्मृतियों से प्रकाशित' जैसे वाक्यांशों के आधार पर यह अनुमान लगाया जा सकता है कि प्रस्तुत कविता का केंद्रीय विचार देश की गौरवशाली प्रसिद्धि का चित्रण है। यह अनुच्छेद देश से जुड़े गौरव और श्रद्धा को उजागर करता है, इसके अद्वितीय गुणों और अनगिनत लोगों की प्रशंसा पर जोर देता है।

102. विकल्प (4) उचित है।

**व्याख्या**—दिए गए गद्यांश के आधार पर प्रश्न 'कवि ने किसकी तरह देश का कल्याण पथ दिखाया?' का सबसे उपयुक्त विकल्प है। पवित्र श्लोक, परिच्छेद में उल्लेख किया गया है कि 'पुण्य श्लोक पंथ का श्रेय है, जो करोड़ों लोगों को प्रिय है,' यह दर्शाता है कि कवि पवित्र श्लोक को देश के कल्याण पथ के लिए एक मार्गदर्शक शक्ति के रूप में संदर्भित कर रहा है।

103. विकल्प (2) उचित है।

**व्याख्या**—दिए गए गद्यांश के आधार पर, कवि का सुझाव है कि देश के बारे में जो चीज मन को हर लेती है वह है 'गौरवशाली स्मृति'।

104. विकल्प (4) उचित है।

**व्याख्या**—'विश्रुत' शब्द का अर्थ है—महिमा

105. विकल्प (2) उचित है।

**व्याख्या**—रेखांकित शब्द 'अरुण तिलक' एक व्यक्तिवाचक संज्ञा है

106. विकल्प (1) उचित है।

**व्याख्या**—द्विभाषी श्रवण बच्चों के लिए लाभदायक है। शोध से पता चला है कि कम उम्र से ही बच्चों को कई भाषाओं से अवगत कराने से कई संज्ञानात्मक और भाषाई लाभ होते हैं। द्विभाषी श्रवण संज्ञानात्मक लचीलेपन, समस्या-समाधान कौशल और भाषा विकास को बढ़ा सकता है। यह बच्चों को दोनों भाषाओं में पारंगत होने की अनुमति देता है और उन्हें सांस्कृतिक और सामाजिक लाभ प्रदान कर सकता है। परिवारों में भाषाओं के संवादात्मक रूप में बोलने का प्रयास करने के लिए भी संभावना होती है, जिससे बच्चों को भाषाओं की समझ और बोली बढ़ाने में मदद मिल सकती है।

## 107. विकल्प (1) उचित है।

**व्याख्या**—वह सिद्धांत जो मातृभाषा सीखने के दौरान भाषा सीखने की प्राकृतिक प्रक्रिया का मूलभूत सिद्धांत नहीं है—बोलना सीखने से पहले साक्षरता सीखना। भाषा सीखने की प्राकृतिक प्रक्रिया में, बच्चे आमतौर पर साक्षरता कौशल हासिल करने से पहले बोली जाने वाली भाषा सीख लेते हैं। भाषा का विकास सुनने और बोलने से शुरू होता है, क्योंकि बच्चे बोले गए शब्दों और वाक्यों को समझना और बनाना सीखते हैं। साक्षरता कौशल, जैसे पढ़ना और लिखना, आमतौर पर बच्चे की शिक्षा में बाद में पेश किए जाते हैं। तो, सही उत्तर विकल्प (1) बोलना सीखने से पहले साक्षरता सीखना है।

ये सिद्धान्त मातृभाषा के अधिगम के मूलभूत सिद्धान्त हैं जो बच्चों को स्वाभाविक रूप से भाषा सीखने में मदद करते हैं। इसके बारे में रटना और कंठस्थीकरण के स्थान पर अवधारणात्मक समझ को बदलने का कोई आधिकारिक संदर्भ नहीं है।

## 108. विकल्प (2) उचित है।

**व्याख्या**—वह कथन जो सही नहीं है वह है—सीखने की अक्षमता का भाषा सीखने से कोई संबंध नहीं है। वास्तव में, सीखने की अक्षमताएं भाषा सीखने से संबंधित हो सकती हैं। सीखने की अक्षमताएं विशिष्ट कठिनाइयों या चुनौतियों को संदर्भित करती हैं जो व्यक्तियों को पढ़ने, लिखने या गणित जैसे विशिष्ट कौशल प्राप्त करने और उपयोग करने में हो सकती हैं। भाषा-आधारित सीखने की अक्षमताएं, जैसे डिस्लेक्सिया, किसी व्यक्ति की सीखने और भाषा का प्रभावी ढंग से उपयोग करने की क्षमता पर महत्वपूर्ण प्रभाव डाल सकती हैं। ये अक्षमताएं भाषा सीखने के विभिन्न पहलुओं को प्रभावित कर सकती हैं, जिनमें पढ़ने की समझ, ध्वनि संबंधी प्रसंस्करण और अभिव्यंजक भाषा कौशल शामिल हैं। इसलिए, कथन (2) सही नहीं है।

भाषा अधिगम एक संज्ञानात्मक गतिविधि है, बच्चों को उनकी अपनी गति के अनुसार काम करने देना शिक्षकों की ओर से एक बड़ी मदद होती है, और अधिगम विकलांगता की शुरु में ही पहचान कर लेना सफल परिणाम की कुंजी होती है।

## 109. विकल्प (3) उचित है।

**व्याख्या**—यह ध्यान रखना महत्वपूर्ण है कि मैं व्यक्तिपरक निर्णय या मूल्यांकन नहीं कर सकता, क्योंकि एक एआई भाषा मॉडल हूँ। 'सबसे खराब' कक्षा प्रणाली का निर्धारण व्यक्तिपरक है और शिक्षण दृष्टिकोण, शैक्षिक संदर्भ और व्यक्तिगत छात्र आवश्यकताओं सहित विभिन्न कारकों पर निर्भर करता है।

हालाँकि, दिए गए विकल्पों के आधार पर सबसे खराब वर्ग प्रणाली का निर्धारण करना कठिन है। प्रत्येक विकल्प एक अलग शिक्षण दृष्टिकोण का प्रतिनिधित्व करता है, और किसी विशेष

दृष्टिकोण की प्रभावशीलता छात्रों और सीखने के उद्देश्यों के आधार पर भिन्न हो सकती है। आमतौर पर छात्रों को गतिविधियाँ करने की अनुमति देना, चिंतन और चर्चा को प्रोत्साहित करना, भाषा सीखने में सक्रिय भागीदारी को बढ़ावा देना और असाइनमेंट लिखने में लचीलापन प्रदान करना फायदेमंद माना जाता है। इन दृष्टिकोणों की उपयुक्तता छात्रों के स्तर, उनकी सीखने की शैली और विशिष्ट शैक्षिक संदर्भ जैसे कारकों पर निर्भर हो सकती है।

अंततः, एक संतुलित और समावेशी दृष्टिकोण पर विचार करना महत्वपूर्ण है जो छात्रों की विविध आवश्यकताओं को संबोधित करता है और उनके समग्र विकास को बढ़ावा देता है।

## 110. विकल्प (1) उचित है।

**व्याख्या**—एक पैराग्राफ में विभिन्न शब्दों के भाषण के हिस्सों की पहचान करना 'पढ़ने' में एक विशिष्ट कदम नहीं है। जबकि भाषण के हिस्सों को समझना पाठ का विश्लेषण और व्याख्या करने में सहायक हो सकता है, यह पढ़ने की प्रक्रिया में एक मौलिक कदम नहीं है। आपके द्वारा बताए गए अन्य विकल्प—एक विशिष्ट वाक्य से निष्कर्ष निकालना, पैराग्राफ का सारांश लिखना, और विभिन्न विचारों के बीच संबंध को समझना—ये सभी पढ़ने के दौरान पाठ को समझने और उसका विश्लेषण करने में शामिल विशिष्ट चरण हैं।

पाठ्य सामग्री में से विशिष्ट वाक्य से निष्कर्ष निकालना, अनुच्छेद का सारांश लिखना, और अनुच्छेद में भिन्न-भिन्न विचारों के बीच संबंध (जुड़ाव) को समझना पठन के महत्वपूर्ण चरणों में से हैं।

## 111. विकल्प (3) उचित है।

**व्याख्या**—'कल्चर शॉक बुक' की अवधारणा को आम तौर पर भाषा शिक्षा की अवधारणा नहीं माना जाता है। भाषा शिक्षा आम तौर पर भाषा को पढ़ने और सीखने पर केंद्रित होती है, जिसमें इसकी संरचना, शब्दावली और उपयोग भी शामिल है। हालाँकि सांस्कृतिक पहलुओं को कुछ हद तक भाषा शिक्षा में एकीकृत किया जा सकता है, लेकिन 'कल्चर शॉक बुक' शब्द भाषा शिक्षा की मूल अवधारणा के साथ संरेखित नहीं होता है।

दूसरी ओर, आपके द्वारा प्रदान किए गए अन्य विकल्प भाषा शिक्षा में प्रासंगिक हैं—

■ **अनुवादीकरण**—यह अवधारणा विभिन्न भाषाओं या भाषा किस्मों के बीच स्थानांतरित करने, उनके बीच समानता और अंतर को पहचानने और उपयोग करने की क्षमता को संदर्भित करती है।

■ **समूह/संग्रह**—यह अवधारणा सहयोगात्मक गतिविधियों के लिए शिक्षार्थियों को समूहों में संगठित करने या संग्रह के रूप में भाषा

सामग्री का अध्ययन करने के संदर्भ में भाषा शिक्षा से संबंधित हो सकती है।

■ **शब्द सूचकांक**—शब्द सूचकांक भाषा शिक्षा में एक उपयोगी उपकरण हो सकता है, विशेष रूप से उन शिक्षार्थियों के लिए जिन्हें विशिष्ट शब्दों का तुरंत पता लगाने या संदर्भ स्रोत में उनके अर्थ देखने की आवश्यकता होती है।

अतः सही विकल्प जो भाषा शिक्षा की अवधारणा नहीं है वह (3) कल्चर शॉक बुक है।

## 112. विकल्प (2) उचित है।

**व्याख्या**—कई कारणों से पहली भाषा का अधिग्रहण आमतौर पर दूसरी भाषा (अंग्रेजी) प्राप्त करने की तुलना में आसान माना जाता है:

■ **अंग्रेजी एक जटिल भाषा है**—अंग्रेजी अपने व्याकरण, शब्दावली और उच्चारण के मामले में जटिल हो सकती है, लेकिन यह जटिलता अकेले यह नहीं बताती है कि पहली भाषा प्राप्त करना अपेक्षाकृत आसान क्यों है। अकेले जटिलता भाषा अधिग्रहण की आसानी या कठिनाई को निर्धारित नहीं करती है।

■ **हमें अपनी पहली भाषा बोलने के बेहतर अवसर मिलते हैं**—इस विकल्प की कुछ वैधता हो सकती है। आम तौर पर, व्यक्तियों को कम उम्र से ही अपनी पहली भाषा का उपयोग करने का अधिक अनुभव और अवसर मिलता है, क्योंकि यह उनके परिवार, समुदाय और स्कूल सहित उनके निकटतम वातावरण में बोली जाने वाली भाषा है। लगातार अनुभव और अभ्यास पहली भाषा के स्वाभाविक अधिग्रहण में योगदान करते हैं।

■ **पहली भाषा भारतीय भाषा है**—यह विकल्प मानता है कि पहली भाषा भारतीय भाषा होने के कारण इसे हासिल करना आसान हो जाता है। हालाँकि, पहली भाषा प्राप्त करने की आसानी या कठिनाई पूरी तरह से इसकी भौगोलिक उत्पत्ति से निर्धारित नहीं होती है। यह एक्सपोजर, इंटरैक्शन और व्यक्तिगत सीखने की क्षमता जैसे कारकों पर निर्भर करता है।

■ **अंग्रेजी औपनिवेशिक भाषा है**—अंग्रेजी के औपनिवेशिक इतिहास ने भारत सहित कई देशों में इसके प्रसार और प्रमुखता को प्रभावित किया है, अकेले यह ऐतिहासिक पहलू अंग्रेजी की तुलना में पहली भाषा प्राप्त करने की सापेक्ष आसानी या कठिनाई को सीधे प्रभावित नहीं करता है।

## 113. विकल्प (2) उचित है।

**व्याख्या**—यह कथन कि 'बच्चों में जन्मजात भाषा क्षमता होती है और बच्चों में भाषा का विकास बिल्कुल वैसा ही होता है' अन्य जैविक कार्यों के विकास का श्रेय नोम चॉम्स्की को दिया



जाता है। चॉम्स्की, एक प्रमुख भाषाविद् और संज्ञानात्मक वैज्ञानिक, ने सार्वभौमिक व्याकरण के सिद्धांत का प्रस्ताव रखा, जो बताता है कि मनुष्य एक जन्मजात भाषा अधिग्रहण उपकरण के साथ पैदा होते हैं जो उन्हें सहजता से और उल्लेखनीय गति के साथ भाषा हासिल करने में सक्षम बनाता है। चॉम्स्की के अनुसार, भाषा का विकास एक पूर्व निर्धारित पाठ्यक्रम का अनुसरण करता है जो संज्ञानात्मक विकास के अन्य पहलुओं से अलग है। बच्चों में सहजात भाषिक क्षमता होती है और उनका विकास ठीक उसी प्रकार से होता है जैसा कि शेष जैविक विकास होता है।

#### 114. विकल्प (4) उचित है।

**व्याख्या**—नियमों और अभ्यास को रटकर व्याकरण सीखना, केवल नियमों को रटने और अभ्यास के माध्यम से व्याकरण सीखना एक प्रभावी शिक्षण पद्धति नहीं मानी जाती है। हालाँकि कुछ याद रखना और अभ्यास आवश्यक हो सकता है, लेकिन संदर्भ में व्याकरण पढ़ाना और वास्तविक जीवन संचार के अवसर प्रदान करना आम तौर पर अधिक प्रभावी होता है। सार्थक संवाद के संदर्भ में व्याकरण के नियमों को समझना और संचार में व्यावहारिक अनुप्रयोग के अवसर प्रदान करने से छात्रों को भाषा और उसके उपयोग की गहरी समझ विकसित करने में मदद मिलती है। संदर्भ के बिना रटने से व्याकरण और वास्तविक दुनिया की स्थितियों में इसके अनुप्रयोग की सीमित समझ हो सकती है। व्याकरण को समझने और सीखने का सही तरीका उसे संदर्भ में व्यवहारिक स्थितियों में दर्शाना और वास्तविक जीवन से जुड़े सम्प्रेषणों में नियमों का अभ्यास करने का होता है।

#### 115. विकल्प (4) उचित है।

**व्याख्या**—सतत मूल्यांकन के लिए एक मुख्य प्रक्रिया के रूप में योगात्मक मूल्यांकन राष्ट्रीय शिक्षा नीति 2020 केवल योगात्मक मूल्यांकन पर निर्भर रहने के बजाय निरंतर और व्यापक मूल्यांकन के महत्व पर जोर देती है। योगात्मक मूल्यांकन में आम तौर पर एक विशिष्ट अवधि या पाठ्यक्रम के अंत में छात्रों के सीखने का मूल्यांकन करना शामिल होता है, जबकि निरंतर मूल्यांकन छात्रों की उनकी शैक्षिक यात्रा के दौरान उनकी प्रगति और सीखने का आकलन करने पर केंद्रित होता है। नीति एक अधिक समग्र और व्यापक मूल्यांकन प्रणाली की ओर बदलाव को प्रोत्साहित करती है जो एक छात्र के सीखने के विभिन्न पहलुओं को ध्यान में रखती है, जिसमें उनकी वैचारिक समझ, महत्वपूर्ण सोच क्षमता और व्यावहारिक कौशल शामिल हैं। यह रचनात्मक मूल्यांकन को बढ़ावा देता है, जो छात्रों को उनकी शिक्षा में सुधार करने के लिए फीडबैक और सहायता प्रदान करता है, साथ ही उनकी प्रगति की निरंतर ट्रैकिंग भी करता है।

शिक्षा का मूलभूत सिद्धान्त कक्षा तीन तक बुनियादी साक्षरता हासिल कर लेना, कलाओं और विज्ञान में सम्बद्धता, भाषा अधिगम से

संबंधित नहीं होना, और सतत आकलन के लिए योगात्मक आकलन एक मुख्य प्रक्रिया होना है।

#### 116. विकल्प (2) उचित है।

**व्याख्या**—अनुशासित कक्षा का अर्थ है जहाँ छात्र शांत बैठे हों और शिक्षक अच्छे से पढ़ा रहा हो। यह कथन भाषा कक्षा के संबंध में सही नहीं है। एक अनुशासित कक्षा का मतलब यह नहीं है कि जब शिक्षक अच्छा पढ़ा रहा हो तो छात्र चुपचाप बैठे हों। हालाँकि अनुशासन महत्वपूर्ण है, यह केवल मौन और आज्ञाकारिता से परिभाषित नहीं होता है। एक भाषा कक्षा तब भी अनुशासित और आकर्षक हो सकती है जब छात्र सक्रिय रूप से भाग ले रहे हों, सहयोग कर रहे हों और खुद को अभिव्यक्त कर रहे हों। प्रभावी भाषा शिक्षण में अक्सर इंटरैक्टिव और छात्र-केंद्रित गतिविधियाँ शामिल होती हैं जो सक्रिय जुड़ाव, आलोचनात्मक सोच और संचार को प्रोत्साहित करती हैं। इसलिए, एक अनुशासित भाषा कक्षा में ऐसे छात्र शामिल हो सकते हैं जो केवल चुपचाप बैठकर शिक्षक की बात सुनने के बजाय विभिन्न शिक्षण गतिविधियों में सक्रिय रूप से शामिल होते हैं।

भाषा की कक्षा में बोलने, सुनने, पढ़ने और लिखने के लिए व्यापक गतिविधियाँ, समूह कार्य और आपसी संवाद शामिल हो सकते हैं।

#### 117. विकल्प (1) उचित है।

**व्याख्या**—कहानी कहने पर आधारित शिक्षाशास्त्र कहानी कहने पर आधारित शिक्षाशास्त्र को अनुभवात्मक शिक्षा से बाहर नहीं रखा गया है। वास्तव में, अनुभवात्मक शिक्षा में कहानी सुनाना एक शक्तिशाली उपकरण हो सकता है क्योंकि यह छात्रों को कथाओं के साथ जुड़ने, विभिन्न दृष्टिकोणों का पता लगाने और अपने स्वयं के अनुभवों से संबंध बनाने की अनुमति देता है। अनुभवात्मक शिक्षण में दृष्टिकोण और रणनीतियों की एक विस्तृत श्रृंखला शामिल है जो सक्रिय शिक्षण और छात्र जुड़ाव को बढ़ावा देती है। इसमें ऐसी शिक्षाशास्त्र शामिल हैं जो कला और खेल का उपयोग करते हैं, योग्यता-आधारित शिक्षा और शिक्षण को प्रोत्साहित करते हैं, और विभिन्न विषयों के बारे में अंग्रेजी में सोचना और बोलना शामिल करते हैं। इसलिए, कहानी कहने पर आधारित शिक्षाशास्त्र अनुभवात्मक शिक्षा का एक मूल्यवान घटक हो सकता है।

अनुभवजन्य अधिगम उन विभिन्न कौशलों और ज्ञान के लिए है जो छात्रों को उनके सामरिक, भौतिकी, सांस्कृतिक, और सामाजिक परिवेश में प्राप्त होते हैं।

#### 118. विकल्प (4) उचित है।

**व्याख्या**—शिक्षक को विशेष आवश्यकता वाले विद्यार्थियों को अन्य सहपाठियों की मदद लेने से हतोत्साहित करना चाहिए ताकि वे आत्मनिर्भर बन सकें

चुनौतीपूर्ण बच्चों की मदद के संदर्भ में यह रणनीति प्रासंगिक नहीं है। समावेशी शिक्षा में, विशेष आवश्यकता वाले छात्रों सहित

छात्रों के बीच सहयोग और समर्थन को बढ़ावा देना महत्वपूर्ण है। सहपाठियों को सीखने की चुनौतियों में छात्रों की मदद और समर्थन करने के लिए प्रोत्साहित करने से समुदाय, सहानुभूति और टीम वर्क की भावना को बढ़ावा मिल सकता है। सीखने में अक्षमता वाले छात्रों के लिए जरूरत पड़ने पर अपने साथियों से सहायता और समर्थन प्राप्त करना फायदेमंद है, साथ ही उनकी सर्वोत्तम क्षमताओं के अनुसार उनकी स्वतंत्रता और आत्मनिर्भरता को बढ़ावा देना भी फायदेमंद है। इसलिए, विशेष आवश्यकता वाले छात्रों को अपने सहपाठियों से मदद लेने से हतोत्साहित करना चुनौतीपूर्ण बच्चों की मदद करने की प्रभावी रणनीति नहीं है।

अध्यापक को उन छात्रों को आत्मनिर्भर बनाने और उनकी गति के अनुसार कार्य करने में मदद करने का भीतरी उद्देश्य होना चाहिए। इससे छात्रों को बेहतर अवसर प्राप्त होते हैं और भाषा अधिगम का विकास होता है।

#### 119. विकल्प (3) उचित है।

**व्याख्या**—दिए गए कथनों के आधार पर, ऐसा लगता है कि जिस कक्षा प्रणाली का वर्णन किया जा रहा है वह वह है जहाँ शिक्षक बिना अधिक लचीलेपन या आलोचनात्मक सोच के, पूर्व निर्धारित पाठ्यपुस्तक का सख्ती से पालन करता है। इसे एक कठोर और अनुचित वर्ग प्रणाली के रूप में देखा जा सकता है क्योंकि यह छात्रों की आवश्यकताओं और रुचियों के अनुकूल शिक्षक की क्षमता को सीमित करता है, और यह प्रामाणिक और प्रासंगिक सामग्रियों के उपयोग को प्रतिबंधित करता है।

इस प्रणाली में, शिक्षक की भूमिका केवल पाठ्यपुस्तक का पालन करने और पाठ को एक रेखीय तरीके से आगे बढ़ाने तक सीमित हो जाती है, भले ही सामग्री आकर्षक, अद्यतन या छात्रों के जीवन के लिए प्रासंगिक हो। यह दृष्टिकोण अखबार के लेखों जैसी प्रामाणिक सामग्रियों के उपयोग के महत्व की उपेक्षा करता है, जो वास्तविक दुनिया का संदर्भ प्रदान कर सकते हैं और सीखने के अनुभव को अधिक सार्थक बना सकते हैं।

इसके अलावा, शिक्षक को अधिक सोचने की आवश्यकता न होने और केवल पिछली कक्षा के पाठों पर निर्भर रहने से, प्रणाली नवाचार, रचनात्मकता और आलोचनात्मक सोच को हतोत्साहित करती है। यह छात्रों के उच्च-स्तरीय सोच कौशल के विकास में बाधा उत्पन्न कर सकता है और विविध दृष्टिकोणों और वर्तमान घटनाओं के प्रति उनके जोखिम को सीमित कर सकता है।

कुल मिलाकर, यह कक्षा प्रणाली शिक्षक और छात्रों दोनों पर सीमाएं लगाती है, शैक्षिक अनुभव में बाधा डालती है और संभावित रूप से पुराने या अप्रासंगिक ज्ञान को कायम रखती है। निष्पक्ष और प्रभावी शिक्षण वातावरण बनाने के लिए शिक्षकों के लिए अपनी शिक्षण विधियों को अनुकूलित करने, प्रामाणिक सामग्रियों को

शामिल करने और महत्वपूर्ण सोच को प्रोत्साहित करने में लचीलापन होना महत्वपूर्ण है।

#### 120. विकल्प (4) उचित है।

**व्याख्या**—पाठ योजना तैयार करते समय, एक प्रभावी और आकर्षक शिक्षण अनुभव बनाने के लिए विभिन्न कारकों पर विचार करना महत्वपूर्ण है। हालाँकि, कुछ ऐसे कारक हैं जिन पर पाठ योजना विकसित करते समय एकमात्र ध्यान या प्राथमिकता नहीं होनी चाहिए। इसमें शामिल है—

1. छात्रों की सीखने की गति—हालाँकि निर्देश में अंतर करना और छात्रों की व्यक्तिगत जरूरतों पर विचार करना महत्वपूर्ण है, केवल छात्रों की सीखने की गति पर ध्यान केंद्रित करना प्रतिबंधात्मक हो सकता है। गति के आधार पर पूर्व निर्धारित अपेक्षाओं का कड़ाई से पालन करने के बजाय, सभी छात्रों को अपनी गति से सीखने और प्रगति करने के अवसर प्रदान करना आवश्यक है।
2. आपके पाठ का दिन का समय—जबकि दिन का समय छात्रों के ऊर्जा स्तर और ध्यान के विस्तार को प्रभावित कर सकता है, यह किसी पाठ की सामग्री या गुणवत्ता का प्राथमिक निर्धारक नहीं होना चाहिए। इसके बजाय, दिन के समय की परवाह किए बिना, आकर्षक और सार्थक गतिविधियाँ बनाने पर ध्यान केंद्रित करें जो छात्रों की रुचि को प्रोत्साहित करें और सीखने की सुविधा प्रदान करें।
3. गतिविधियों का क्रम—जबकि गतिविधियों का तार्किक और सुसंगत अनुक्रम होना आम तौर पर सीखने के लिए फायदेमंद होता है, यह कोई पूर्ण नियम नहीं है जिसका पालन अन्य कारकों पर विचार किए बिना किया जाना चाहिए। प्रभावी शिक्षण के लिए छात्र की व्यस्तता, समझ और अप्रत्याशित परिस्थितियों के आधार पर अनुक्रम को समायोजित करने में लचीलापन महत्वपूर्ण है।

### Language: English

#### 121. Option (3) is correct.

**Explanation:** The passage mentions that a three-quarter moon was up, and the tin roofs of the bazaar glistened in the moonlight. This indicates that it was a moon-lit night when the author was wandering down the Tehri Road.

#### 122. Option (4) is correct.

**Explanation:** Statement (1) : The author was kind-hearted. - Opinion (O) Statement (2) : The author offered to help the poor boy. - Fact (F) Statement (3): The boy was very poor. - Fact (F) Statement (4): The boy was very scared. - Opinion (O) Therefore, the correct option is: (4) F-2,4; O-1,3.

#### 123. Option (2) is correct.

**Explanation:** The passage mentions that the boy was shivering, aware of the author's presence, and ready to shrink away or beg forgiveness for a crime he hadn't committed. This implies that the boy's impoverished and vulnerable state could make others perceive him as a potential thief or wrongdoer, leading him to fear judgment and seek forgiveness.

#### 124. Option (1) is correct.

**Explanation:** The passage describes how the boy, despite being aware of the author's presence, did not look up or expect anything from the world. This suggests that the boy had already accepted his abandonment or neglect and did not anticipate receiving any assistance or support

#### 125. Option (2) is correct.

**Explanation:** The passage mentions that it was a cold night, and the doors and windows were shut, indicating the presence of cold weather. This suggests that the author was walking during the winter season.

#### 126. Option (4) is correct.

**Explanation:** In the passage, the author describes seeing a boy huddled in a recess, which refers to a hollowed out or enclosed area within a building or structure. It indicates that the boy was taking shelter or seeking refuge in a small space or alcove.

#### 127. Option (2) is correct.

**Explanation:** This statement is not correct in light of the usage of the idiom "glimmer of hope" in the passage. The idiom implies a faint or small indication of hope or a slight possibility of a positive outcome. The phrase suggests a flicker or dim light of hope in a challenging or uncertain situation. The usage of "glimmer of hope" in the passage aligns with the idea of a small spark of hope appearing in the boy's eyes after the author offers him assistance.

The given statement, on the other hand, suggests that a prevailing glimmer of hope occurred when the enemy had advanced. This contradicts the usual usage of the idiom and does not fit the context of the passage.

#### 128. Option (3) is correct.

**Explanation:** The word "apprehensive" suggests a state of anxiety, unease, or nervousness. Therefore, the opposite of apprehensive would be composed, which implies a calm, collected, and untroubled state.

#### 129. Option (1) is correct.

**Explanation:** The underlined word "as" in the sentence—"As I passed along the deserted street, under the shadow of a clock tower, I saw a boy" is a conjunction. Conjunctions are words that link other words, phrases,

or clauses together. They allow the formation of , complex, elegant sentences.

We use 'as' as a conjunction when one event happens while other is in progress. In this sentence, the event of 'seeing the boy' occurs while the event of 'passing along the deserted street' is taking place. So 'as' is a conjunction.

#### 130. Option (4) is correct.

**Explanation:** The poem specifically mentions, "Don't break the shutters of the windows." This suggests that the wind should not cause any damage or destruction to the shutters of the windows.

#### 131. Option (2) is correct.

**Explanation:** The poem portrays the wind as a force that causes destruction and turmoil. It is described as clever at poking fun at weaklings and is responsible for crumbling houses, doors, rafters, wood, bodies, lives, and hearts. This indicates that the wind is depicted as a force that bullies or torments the powerless.

#### 132. Option (1) is correct.

**Explanation:** The poem describes the wind as a powerful force that brings destruction and chaos. It is portrayed as clever at poking fun at weaklings and is responsible for crumbling houses, doors, rafters, wood, bodies, lives, and hearts. The poem specifically mentions "The wind God" as the one who winnows and crushes everything. Therefore, it can be inferred that the fury that crushes everything is attributed to the wind God.

#### 133. Option (3) is correct.

**Explanation:** The poem mentions that the wind throws down the books on the shelf and tears the papers of the books. The lines "There, look what you did-you threw them all down. You tore the papers of the books" indicate that the wind's presence is felt by throwing the books down and tearing their pages. Therefore, option (3) best describes how the wind makes its presence felt on books in the poem.

#### 134. Option (4) is correct.

**Explanation:** Anaphora is the repetition of a word or phrase at the beginning of successive lines or clauses. In this case, the phrase "Don't" is repeated at the beginning of each line, emphasizing the speaker's plea to the wind to refrain from certain actions. Therefore, option (4) best describes the poetic device used in the first four lines of the poem.

#### 135. Option (1) is correct.

**Explanation:** The word from the poem that has the same meaning as "disintegrate" is "crumbling" (1).

## 136. Option (1) is correct.

**Explanation:** Exposure to two languages from an early age has been shown to provide children with various cognitive, linguistic, and cultural benefits. Bilingual children often demonstrate enhanced cognitive flexibility, problem-solving skills, and a better understanding of different cultures. Additionally, being bilingual can offer advantages in terms of communication and opportunities in an increasingly globalized world. Therefore, hearing two languages spoken around them typically places children at an advantage.

## 137. Option (1) is correct.

**Explanation:** In the natural process of language learning, children typically acquire speech before achieving literacy. They learn to understand and produce spoken language through interactions with family members and their surroundings. Emphasis is placed on developing conceptual understanding rather than relying solely on rote learning and memorization. Additionally, the presence of other languages in the surroundings can influence language learning, as children may be exposed to multiple languages and acquire them simultaneously or sequentially. Therefore, option (1) is not among the fundamental principles of language learning during the acquisition of the mother tongue.

## 138. Option (2) is correct.

**Explanation:** In reality, learning disabilities can indeed be related to language learning. Learning disabilities can affect various aspects of language development, such as reading, writing, speaking, and listening skills. Conditions such as dyslexia, specific language impairment (SLI), and auditory processing disorders can impact a person's ability to acquire and use language effectively. Therefore, option (2) is not true.

## 139. Option (4) is correct.

**Explanation:** Drafting is an important part of the writing process as it allows students to revise and improve their work. By not insisting on doing drafts, students may miss out on opportunities to refine their writing skills, receive feedback, and make necessary corrections. Drafting helps students develop critical thinking, self-reflection, and the ability to revise and edit their written work effectively. Therefore, option (4) is the most inappropriate classroom practice.

## 140. Option (4) is correct.

**Explanation:** While understanding the parts of speech is a foundational

aspect of language learning, it is not typically a specific step in a reading lesson. Reading lessons generally focus on comprehension, analysis, and interpretation of the text, rather than isolated grammatical analysis. Steps such as inferencing, summarizing, and understanding connections between ideas are more commonly included in reading lessons to develop reading comprehension skills. Therefore, option (4) is the step that is not typically a part of a reading lesson.

## 141. Option (3) is correct.

**Explanation:** Culture shock refers to the psychological and emotional disorientation experienced by individuals when they are exposed to a new and unfamiliar culture. While culture shock can be relevant in language learning contexts, it is not a specific concept within language education itself. On the other hand, options (1), (2), and (4) are all concepts directly related to language education:

- (1) **Trans languaging:** Refers to the practice of using multiple languages flexibly and dynamically in communication and learning.
- (2) **Corpus:** Refers to a collection of authentic texts or spoken language samples that are used for linguistic analysis and research.
- (4) **Concordance:** Refers to a tool or resource that provides detailed information about the use of words and phrases in context, often used for language analysis and teaching purposes.

## 142. Option (2) is correct.

**Explanation:** The reason why a first language is generally easier to acquire compared to a second language, such as English, is because individuals are typically exposed to their first language from birth or at a very young age. They are surrounded by their family, community, and environment that primarily communicate in their first language. This extensive exposure and immersion in the first language provide ample opportunities for language acquisition, as well as constant practice and reinforcement. On the other hand, when learning a second language like English, individuals may not have the same level of exposure and immersion. The learning environment may not provide as many opportunities to use and practice English, resulting in a potentially slower and more challenging acquisition process. The other options presented in the question do not accurately address the primary reason why a first

language is easier to acquire than a second language. English being a complicated language, the first language being an Indian language, or English being the language of colonizers are not the determining factors in the relative ease of acquisition between a first language and a second language.

## 143. Option (2) is correct.

**Explanation:** Noam Chomsky is a renowned linguist who proposed the theory of Universal Grammar and the concept of the innate language acquisition device (LAD). According to Chomsky, children have an innate biological capacity for language, and language acquisition and that it follows a natural and a natural and predetermined process. He argued that language development is not solely a result of external stimuli or environmental factors but is governed by internal cognitive structures. Chomsky's work has had a significant impact on the field of linguistics and our understanding of language acquisition.

## 144. Option (4) is correct.

**Explanation:** Effective grammar teaching typically goes beyond simply memorizing rules and engaging in drills. While some level of practice and repetition may be beneficial, it is important to provide meaningful contexts and authentic communication opportunities for students to internalize and apply grammar rules. Grammar should be presented and practiced within genuine communication, where students can see the relevance and purpose of the grammar structures in real-life situations.

## 145. Option (4) is correct.

**Explanation:** The NEP 2020 emphasizes formative assessment rather than summative assessment. The policy highlights the importance of continuous and comprehensive evaluation of students' progress and learning, focusing on both formative and summative assessment methods. Formative assessment involves regular evaluations throughout the learning process to provide feedback and improve understanding, while summative assessment is a final evaluation at the end of a learning period. However, the NEP 2020 places more emphasis on formative assessment for a holistic evaluation of students.

## 146. Option (2) is correct.

**Explanation:** In a language classroom, discipline is not solely defined by learners sitting quietly and the teacher delivering instruction. While classroom management is important, a disciplined class is one where



learners are actively engaged in the learning process and demonstrating appropriate behavior. Discipline encompasses creating a positive and respectful learning environment where students are actively participating, collaborating, and taking ownership of their learning. It does not solely rely on silence or the teacher's performance.

**147. Option (4) is correct.**

**Explanation:** Experiential learning typically involves hands-on, active learning experiences where students engage with the subject matter through direct experience. It emphasizes the importance of real-world application, reflection, and learning from personal experiences. While thinking and speaking about subjects in English can be a valuable component of language learning, it is not inherently exclusive to experiential learning. Experiential learning is more focused on practical experiences, active engagement, and reflection rather than the language of instruction.

**148. Option (4) is correct.**

**Explanation:** Inclusive education promotes collaboration, empathy, and support among all learners, including those with special needs.

Encouraging peer support and fostering a sense of community within the classroom is important for the overall development and inclusion of students with special needs. Restricting or discouraging other learners from helping the special needs learners can isolate and exclude them, hindering their social and emotional growth.

Instead, inclusive strategies involve creating a supportive classroom environment where all students can learn and grow together. Collaborative learning opportunities, peer tutoring, and cooperative group work can be beneficial for both students with special needs and their peers. By fostering a culture of inclusivity and support, all students can benefit from the diverse perspectives and experiences within the classroom.

**149. Option (1) is correct.**

**Explanation:** Relying solely on the textbook and blindly following its sequence without considering the students' needs, interests, or pace of learning can be an ineffective and inflexible approach. While textbooks can be valuable resources, a teacher should not solely rely on them as the sole guide for instruction. Classroom

practice should be responsive to students' individual needs, learning styles, and the specific context of the classroom. A one-size-fits-all approach may not address the diverse learning needs and interests of the students. It is important for teachers to adapt and supplement materials from the textbook to create engaging and meaningful learning experiences for their students.

**150. Option (4) is correct.**

**Explanation:** When planning a lesson, teachers primarily focus on factors directly related to student learning and instructional effectiveness. While it is important to consider parents' involvement and communication, their specific preferences for passages or materials used in the lesson typically do not play a significant role in the instructional planning process. Teachers typically base their lesson plans on factors such as students' learning pace, the time of day, and sequencing of activities to ensure a well-structured and engaging learning experience for their students. However, parental preferences for specific passages or materials are not typically a primary consideration when designing a lesson plan.