

Time: 2 hours 30 mins.

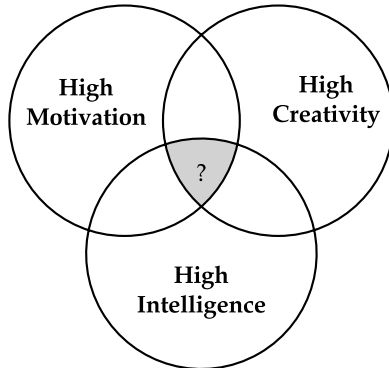
Total Marks: 150

Child Development and Pedagogy

Directions: Answer the following questions (Q. Nos. 1 to 30) by selecting the correct/most appropriate options.

- Which one of the following is a critique of theory of multiple intelligences?
 - (1) Multiple intelligence are only the 'talents' present in intelligence as a whole.
 - (2) Multiple intelligence provides students to discover their propensities.
 - (3) It overemphasises practical intelligence.
 - (4) It cannot be supported by empirical evidence at all.
- Which one of the following pair is least likely to be a correct match?
 - (1) Children enter in : Chomsky
the world with
certain knowledge
about language
 - (2) Language and : Vygotsky
thought are
initially two
different activities
 - (3) Language is : Piaget
contingent on
thought
 - (4) Language is : B.F Skinner
a stimuli in
environment
- Features assigned due to social roles and not due to biological endowment are called:
 - (1) Gender role attitudes
 - (2) Gender role strain
 - (3) Gender-role stereotype
 - (4) Gender role diagnosticity
- Which of the following will be most appropriate to maximise learning?
 - (1) Teaching should identify her cognitive style as well as of her students cognitive style.
 - (2) Individual difference in students should be smoothened by pairing similar students.
 - (3) Teacher should focus on only one learning style to bring optimum result.
 - (4) Students of similar cultural background should be kept in the same class to avoid difference in opinion.
- All of the following promote assessment as learning except.
 - (1) telling students to take internal feedback.
 - (2) generating a safe environment for students to take chances.
 - (3) tell students to reflect on the topic taught.
 - (4) testing students as frequently as possible.
- When a cook tastes a food during cooking it may be akin to:
 - (1) Assessment of learning
 - (2) Assessment for learning
 - (3) Assessment as learning
 - (4) Assessment and learning
- Differentiated instruction is:
 - (1) using a variety of groupings to meet students needs.
 - (2) doing something different for very student in the class.
 - (3) disorderly or undisciplined student activity.
 - (4) using groups that never change.
- In a culturally and linguistically diverse classroom, before deciding whether a student comes under special education category, a teacher should:
 - (1) Not involve parents as parents have their own work.
 - (2) Evaluate student on her/his mother language to establish disability.
 - (3) Use specialised psychologists.
 - (4) Segregate the child to neutralise environmental factor.
- Learning disabilities may occur due to all of the following except.
 - (1) Teachers way of teaching
 - (2) Prenatal use of alcohol
 - (3) Mental retardation
 - (4) Meaning it is during infancy
- An inclusive school reflects on all the following questions except :
 - (1) Do we believe that all students can learn.
 - (2) Do we work in teams to plan and deliver learning enabling environment
 - (3) Do we properly segregate special children from normal to provide better care.
 - (4) Do we adopt strategies catering for the diverse needs of students.
- Gifted students are:
 - (1) Convergent thinkers
 - (2) Divergent thinkers
 - (3) Extrovert
 - (4) Very hard working

12. The shaded area represent students in a normal distribution who fall:



- (1) At $\sigma = 0$ (2) Between $2\sigma - 3\sigma$
 (3) After 3σ (4) Between $\sigma - 2\sigma$
13. Which one of the following pair would be most appropriate choice to complete the following sentence?
 Children _____ faster when they are involved in the activities that seem to be _____.
- (1) Forget; useful in a classroom
 (2) Recall; linked with their classwork only
 (3) Memorise; culturally neutral
 (4) Learn; useful in real life
14. CBSE prescribed group activities for students in place of activities for individual students. The idea behind doing so could be:
- (1) to overcome the negative emotional response to individual competition which may generalise across learning.
 (2) to make it easy for teachers to observe groups instead of individual students.
 (3) to rationalise the time available with schools most of which do not have enough time for individual activities.
 (4) to reduce the infrastructural cost of the activity.
15. The conclusion '*Children can learn violent depicted in movies*' may be derived on the basis of the work done by which of the following psychologist?
 (1) Edward L. Thorndike (2) J.B. Watson
 (3) Albert Bandura (4) Jean Piaget
16. Students observe fashion shows and try to imitate models. This kind of imitation may be called:
 (1) Primary simulation (2) Secondary simulation
 (3) Social learning (4) Generalisation
17. If students repeatedly make errors during a lesson, a teacher should:
- (1) make changes in instruction, tasks, timetable or seating arrangements.
 (2) leave the lesson for the time being and come back to it after some time.
 (3) identify the erring students and talk to principal about them.
 (4) make erring students stand outside the classroom.
18. Following are some techniques to manage anxiety due to an approaching examination; **except**.
- (1) familiarising with the pattern of question paper
 (2) thinking too much about the result
 (3) seeking support
 (4) emphasising strengths

19. Bloom's taxonomy is a hierarchical organisation of _____.
- (1) achievement goals
 (2) curricular declarations
 (3) reading skills
 (4) cognitive objectives
20. A, B and C are three students studying English. 'A' finds it interesting and thinks it will be helpful for her in future. 'B' studies English as she wants to secure first rank in the class. 'C' studies it as she is primarily concerned to secure passing grades. The goals of A, B and C respectively are:
- (1) Mastery, performance, performance avoidance
 (2) Performance, performance avoidance, mastery
 (3) Performance avoidance, mastery, performance
 (4) Mastery, performance avoidance, performance
21. Even though this was clearly in violation of his safety needs, Captain *Vikram Batra* died fighting in the *Kargil* war while protecting his country. He might have:
- (1) sought novel experience
 (2) achieved self-actualisation
 (3) ignored his belongingness needs
 (4) wanted to earn a good name to his family
22. Extinction of a response is more difficult following:
- (1) partial reinforcement
 (2) continuous reinforcement
 (3) punishment
 (4) verbal reproach
23. Mastery orientation can be encouraged by:
- (1) focusing on students individual effort.
 (2) comparing students successes with each other.
 (3) assigning lot of practice material as home assignments.
 (4) taking unexpected tests.
24. Which one of the following is correctly matched?
- (1) Physical Development : Environment
 (2) Cognitive Development : Maturation
 (3) Social Development : Environment
 (4) Emotional Development : Maturation
25. All the following facts indicate that a child is emotionally and socially fit in a class **except**.
- (1) develop good relationships with peers
 (2) concentrate on and persist with challenging tasks
 (3) manage both anger and joy effectively
 (4) concentrate persistently on competition with peers
26. Which of the following statements support role of environment in the development of a child?
- (1) Some students quickly process information while others in the same class do not.
 (2) There has been a steady increase in students average performance on IQ tests in last few decades.
 (3) Correlation between IQs of identical twins raised in different homes is as high as 0.75.
 (4) Physically fit children are often found to be morally good.

27. Socialisation includes cultural transmission and:
- (1) discourages rebellion
 - (2) development of individual personality
 - (3) fits children into labels
 - (4) provides emotional support
28. A teacher shows two identical glasses filled with an equal amount of juice in them. She empties them in two different glasses one of which is taller and the other one is wider. She asks her class to identify which glass would have more juice in it. Students reply that the taller glass has more juice. Her students have difficulty in dealing with:
- (1) Accommodation
 - (2) Egocentrism
 - (3) Decentring
 - (4) Reversibility
29. Karnail Singh does not pay income tax despite legal procedures and expenses. He thinks that he cannot support a corrupt government which spends millions of rupees in building unnecessary dams. He is probably in which state of Kohlberg's stages of moral development.
- (1) Conventional
 - (2) Post conventional
 - (3) Pre conventional
 - (4) Para conventional
30. Intelligence theory incorporates the mental processes involved in intelligence (i.e. meta-components) and the varied forms that intelligence can take (i.e. creative intelligence)
- (1) Spearman's 'g' factor
 - (2) Sternberg's triarchic theory of intelligence
 - (3) Savant theory of intelligence
 - (4) Thurstone's primary mental abilities

Mathematics and Science

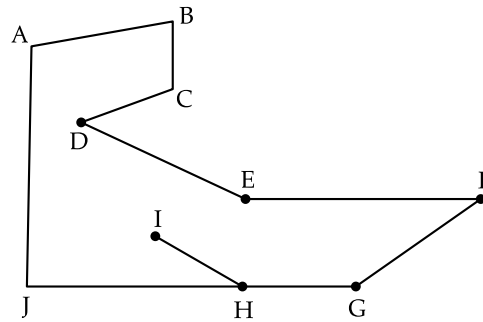
Directions: Answer the following questions by selecting the correct/most appropriate options.

31. The number of integers less than -3 but greater than -8 is:
- (1) 2
 - (2) 3
 - (3) 4
 - (4) 6
32. The distance between two places is 12 km. A map scale is $1 : 25000$. The distance between the two places on the map, in cm, is:
- (1) 24
 - (2) 36
 - (3) 48
 - (4) 60
33. The reciprocal of $\frac{-3}{8} \times \left(\frac{-7}{13}\right)$ is:
- (1) $\frac{104}{21}$
 - (2) $\frac{-104}{21}$
 - (3) $\frac{21}{104}$
 - (4) $\frac{-21}{104}$
34. The number of vertices in a polyhedron which has 30 edges and 12 faces is:
- (1) 12
 - (2) 15
 - (3) 20
 - (4) 24
35. When half of a number is increased by 15, the result is 39. The sum of digits of the original number is:
- (1) 6
 - (2) 7
 - (3) 9
 - (4) 12
36. In ΔPQT , $PQ = PT$. The points R and S are on QT such that $PR = PS$. If $\angle PTS = 62^\circ$ and $\angle RPS = 34^\circ$, then measure of $\angle QPR$ is:
- (1) 11°
 - (2) 13°
 - (3) 15°
 - (4) 17°
37. If for ΔABC and ΔDEF , the correspondence $CAB \leftrightarrow EDF$ gives a congruence, then which of the following is not true ?
- (1) $AC = DE$
 - (2) $AB = EF$
 - (3) $\angle A = \angle D$
 - (4) $\angle B = \angle F$
38. 40% of $(100 - 20\%$ of 300) is equal to:
- (1) 16
 - (2) 20
 - (3) 64
 - (4) 140
39. HCF of two numbers is 28 and their LCM is 336. If one number is 112, then the other number is:
- (1) 56
 - (2) 70
 - (3) 84
 - (4) 98
40. If $\frac{2}{3}x = 0.6$ and $0.02y = 1$, then the value of $x + y^{-1}$ is :
- (1) 0.92
 - (2) 1.1
 - (3) 49.1
 - (4) 50.9
41. If $y = \frac{x-2}{x+1}$, $y \neq 1$, then x equals:
- (1) $\frac{y+2}{1-y}$
 - (2) $\frac{y+2}{y-1}$
 - (3) $\frac{y-2}{y+1}$
 - (4) $\frac{2-y}{1-y}$
42. A square and a circle have equal perimeters. The ratio of the area of the square to the area of the circle is:
- (1) $1 : 1$
 - (2) $1 : 4$
 - (3) $\pi : 2$
 - (4) $\pi : 4$
43. ABCD is a square with $AB = (x + 16)$ cm and $BC = (3x)$ cm. The perimeter (in cm) of the square is:
- (1) 16
 - (2) 24
 - (3) 32
 - (4) 96
44. The mean of 10 numbers is 0. If 72 and -12 are included in these numbers, the new mean will be:
- (1) 0
 - (2) 5
 - (3) 6
 - (4) 60
45. The circumference of the base of a right circular cylinder is 44 cm and its height is 15 cm. The volume (in cm^3) of the cylinder is $\left(\text{use } \pi = \frac{22}{7}\right)$:
- (1) 770
 - (2) 1155
 - (3) 1540
 - (4) 2310
46. A class VII teacher wants to discuss the following problem in the class:
"A square is divided into four congruent rectangles. The perimeter of each rectangle is 40 units. What is the perimeter of given square?"
Key Mathematical concepts required to solve this problem is:
- (1) Area of square and rectangle, perimeter of square and rectangle and definition of square and rectangle
 - (2) Meaning of the terms square, rectangle, congruent, perimeter, etc.
 - (3) Area of rectangle, perimeter of square
 - (4) Formation of algebraic equation to solve the problem

47. Algebra is introduced in the middle classes. According to Piaget's theory of cognitive development, it is appropriate to introduce algebra at this stage as:
- (1) the child is at sensorimotor stage and can understand with the help of lots of manipulatives.
 - (2) the child is at pre-operational stage and can understand abstract concepts
 - (3) the child is at concrete-operational stage and he can understand and conceptualize concrete experiences by creating logical structure.
 - (4) the child is at formal operational stage and is fully mature to grasp the abstract concepts.
48. Mr. Sharma was assessing the students' work on exponents. One of the response sheet was as follows:
- (a) $2^3 \times 2^5 = 2^8$
 - (b) $3^2 \times 4^2 = (12)^4$
 - (c) $3^3 \div 3^5 = 3^{-2}$
 - (d) $7^{20} \div 7^{14} = 7^6$
 - (e) $9^3 \div 18^6 = \left(\frac{1}{2}\right)^3$

On the basis of this response sheet Mr. Sharma can make the following observation:

- (1) Child has understood the laws of exponents and can apply them well.
 - (2) Child has understood the laws of exponents but has made clerical errors.
 - (3) Child has understood the laws of exponents but has not practised the questions involving division of two numbers.
 - (4) Child has understood the law of exponents for the cases where the base is same and has missed the concept for the case where the base is different.
49. According to Van Hiele level of Geometric thought the five levels of geometric understanding are visualization, analysis, informal deduction, formal deduction and rigour. Students of class VII are asked to classify the quadrilaterals according to their properties. These students are at.....level of Van Hiele Geometrical thought.
- (1) Visualization
 - (2) Analysis
 - (3) Informal Deduction
 - (4) Formal Deduction
50. A task assigned to the class VIII student is as follows: An open box is to be made out of metallic sheet of 50 cm \times 65 cm. Length and breadth of the box is 30 cm and 15 cm respectively. What is the possible height of the box? Also find the volume of this box. This task refer to
- (1) lower level cognitive demand as it requires the knowledge of formulae of volume of cuboid.
 - (2) lower level of cognitive demand as there is no connection between concepts involved and procedure required.
 - (3) higher level of cognitive demand as the problem can be solved by making diagrams and connections between many possible situations.
 - (4) higher level of cognitive demand as it requires the use of conceptual understanding that underline the procedure to complete the task.
51. Mr. Nadeem gave the following task to his class after completing the topic lines and angles: Speak for 2 minutes on the following figures using your knowledge about lines and angles:



This task is :

- (1) Reflective in nature, can be used to pass time
 - (2) Exploratory in nature, can be used for summative assessments.
 - (3) Reflective as well can be used for formative assessment.
 - (4) Communicating and can encourage Mathematical Talk in the classroom during free time.
52. A child of class VII defines the rectangle as follows: "Rectangle is a quadrilateral whose opposite sides are parallel and equal." The definition reflects that the child
- (1) cannot recognize the shape
 - (2) do not know the correct properties of the shape
 - (3) knows the properties of the shape, but repeated some properties in definition
 - (4) knows some properties but missed some important to complete the definition.
53. A very common error observed in addition of linear expression is $5y + 3 = 8y$. This type of error is termed as
- (1) Clerical error
 - (2) Conceptual error
 - (3) Procedural error
 - (4) Careless error
54. Read the following question from the class VI text-book: "Prabal deposited ₹ 5,000 in a bank at the rate of 5% interest per annum. After 2 year he withdrew the money to purchase the study table for ₹ 3,500. He deposited the money left with him again at the rate of 5% interest per annum for another two years. How much amount will be receive after two years?" What values can be inculcated in students through this question?
- (1) Honesty
 - (2) Habit of saving money and spending it wisely
 - (3) Sincerity
 - (4) Simplicity and helping others
55. Following is a problem from text-book of class VI: "Express the following statement through linear expression: Neha has 7 more toffees than Megha. If Megha has x toffees, how many toffees does Neha have?" This problem is based on:
- (1) Knowledge
 - (2) Comprehension
 - (3) Analysis
 - (4) Synthesis
56. If $p = 3^{2000} + 3^{-2000}$ and $q = 3^{2000} - 3^{-2000}$, then the value of $p^2 - q^2$ is:
- (1) 1
 - (2) 2
 - (3) 3
 - (4) 4

57. The square of 9 is divided by the cube root of 125. The remainder is:

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

58. The value of $\sqrt{16\sqrt{8\sqrt{4}}}$ is:

- (1) 16 (2) 8
(3) $8\sqrt[3]{2}$ (4) $16\sqrt{2}$

59. One-half 1.2×10^{30} is:

- (1) 6.0×10^{30} (2) 6.0×10^{29}
(3) 6.0×5^{30} (4) 1.2×10^{15}

60. If $\frac{2}{3}, \frac{23}{30}, \frac{9}{10}, \frac{11}{15}$ and $\frac{4}{5}$ are written in ascending

order, then the fraction in the middle most will be:

- (1) $\frac{23}{30}$ (2) $\frac{4}{5}$

- (3) $\frac{2}{3}$ (4) $\frac{11}{15}$

61. The steps required for the conversion of kitchen garbage into manure are given below in a jumbled form.

- A. Put the garbage in the pit.
B. Cover the bottom of the pit with sand.
C. Cover the pit loosely with grass or a gunny bag.
D. Add worms.

The correct sequence of these steps is:

- (1) B, A, C, D (2) B, C, A, D
(3) B, A, D, C (4) B, D, A, C

62. Two organisms are best friends and live together. One provides shelter, water and nutrients while the other prepares and provides food. Such an association of organisms is termed as:

- (1) Autotrophy (2) Parasitism
(3) Heterotrophy (4) Symbiosis

63. In the alimentary canal the swallowed food moves downwards because of:

- (1) the contraction of muscles in the wall of food pipe.
(2) the flow of fluid material taken with the food.
(3) gravitational pull.
(4) force provided by the muscular tongue.

64. Frogs and earthworm breathe through their skin because of which the skin of both the organism is:

- (1) dry and rough (2) dry and slimy
(3) moist and rough (4) moist and slimy

65. While going for a picnic a student noted the reading on the odometer on the bus after every 10 minutes till the end of the journey. Later on he recorded the reading in a table shown below:

Time (AM)	Odometer reading (km)
8.00	78752
8.10	78758
8.20	78768
8.30	78780
8.40	78791
8.50	78800
9.00	78806

The average speed of the bus in the entire journey in metres per second was:

- (1) 15 (2) 18
(3) 30 (4) 54

66. You are provided with a concave mirror, a concave lens, a convex mirror and a convex lens. To obtain an enlarged image of an object you can use either:

- (1) concave lens or convex lens
(2) concave mirror or convex mirror
(3) concave mirror or concave mirror
(4) concave mirror or convex lens

67. Select from the following a set of **Kharif Crops**:

- (1) Cotton, paddy, pea, linseed
(2) Paddy, maize, cotton, soyabean
(3) Gram, mustard, groundnut, wheat
(4) Maize, paddy, linseed, soyabean

68. Study the following statements about the effects of weeds on the crop plants:

- (A) They help crop plants to grow healthily.
(B) They interfere in harvesting.
(C) They affect plant growth.
(D) They compete with crop plants for water, nutrients, space and light.

The correct statements are:

- (1) C and D only (2) D only
(3) B, C and D (4) A, B and D

69. When we add aluminium foil to freshly prepared sodium hydroxide solution a gas is produced. Which of the following correctly states the property of this gas?

- (1) Colourless and odourless gas which extinguishes a burning match stick.
(2) Colourless and odourless gas which promotes burning of a candle.
(3) Brown coloured pungent smelling gas.
(4) Colourless and odourless gas which produces a 'pop' sound when a burning match stick is brought near it.

70. Aqueous solution of which of the following oxides will change the colour of blue litmus to red?

- (1) Copper oxide (2) Iron oxide
(3) Magnesium oxide (4) Sulphur dioxide

71. Which of the following is a pair of exhaustible natural resources?

- (1) Coal and soil
(2) Petroleum and water
(3) Minerals and wildlife
(4) Natural gas and sun-light

72. Which of the following statement is true about endemic species?

- (1) They are not affected by the destruction of their habitat.
(2) They are found only in zoos and botanical gardens.
(3) They are found exclusively in specific habitat.
(4) Endemic species can never become endangered.

73. Which of the following pairs is related to the inheritance of characters?

- (1) Chromosomes and genes
(2) Chromosomes and mitochondria
(3) Cell membrane and cell wall
(4) Cell membrane and chloroplast

74. Out of the different combination of terms given below, the correct combination of terms with reference to an animal cell is:
- (1) Nucleus, plastid, cell membrane, cell wall
 - (2) Nucleus, chromosome, ribosome, cell wall
 - (3) Cell membrane, chromosome, ribosome, mitochondria
 - (4) Cell membrane, ribosome, chloroplast, mitochondria
75. Consider the following sets of reproductive terms.
- (A) Sperm, oviduct, egg, uterus
 - (B) Ovulation, egg, oviduct, uterus
 - (C) Sperm, testis, spermduct, penis
 - (D) Menstruation, egg, oviduct, uterus
- The sets of correct combination are:**
- (1) A, B and C
 - (2) B, C and D
 - (3) C, D and A
 - (4) A, B and D
76. Which of the following element must be available in water for the metamorphosis of tadpoles?
- (1) Chlorine
 - (2) Bromine
 - (3) Sulphur
 - (4) Iodine
77. Which one of the following is not the objective of teaching of science at upper primary stage?
- (1) Developing questioning and enquiring skills.
 - (2) Acquiring technological skills.
 - (3) Acquiring process skills.
 - (4) Acquiring scientific literacy.
78. National Curriculum Framework (NCF) strongly recommends that Science education at upper primary stage should:
- (1) prepare students for competitive examinations
 - (2) help students to be emotionally balanced
 - (3) help students to acquire computational skills
 - (4) follow constructivistic approach for teaching and learning of the subject
79. 'Cognitive validity' of Science curriculum at upper primary stage requires that it should:
- (1) be age appropriate and within the reach of students' understanding level
 - (2) convey scientifically correct content
 - (3) nurture the natural curiosity and creativity of the learners
 - (4) enable the students to appreciate how the concepts of Science evolve with time
80. Which one of the following does not reflect the personality attribute of a person having scientific temper?
- (1) Seeking evidence
 - (2) Biased opinion
 - (3) Rational thinking
 - (4) Openmindedness
81. NCERT Science textbooks for upper primary classes include large number of daily life related questions which have been left unanswered. This has been done so that:
- (1) teachers have a good pool of questions for assessment purpose
 - (2) students can send these questions to scientists to get the answer
 - (3) teachers can use these questions for home assignment
 - (4) students can seek answer to these questions by exploring different resources
82. While teaching the correct method of reading a clinical thermometer to class VIII students, Neha mentions the following necessary precautions to be taken:
- (1) Thermometer should be washed with hot water before and after use.
 - (2) Do not hold the thermometer by the bulb while taking the reading.
 - (3) Ensure that before use, the mercury level in the thermometer is below 35°C.
 - (4) Read the thermometer keeping the level of mercury along the line of sight.
- Which one of the above precautions has been mentioned wrongly by the teacher?**
83. The section on 'activities and projects' included in the exercises of NCERT Science textbooks for class VIII primarily aims at:
- (1) enhancing indepth understanding of the basic concepts
 - (2) keeping the students engaged during vacations
 - (3) assessing the students on practical skills
 - (4) providing opportunity to students for extended learning
84. Major objective of organisation of Science Exhibitions is to:
- (1) grade students on practical skills
 - (2) provide opportunity to students to compete with others
 - (3) provide opportunity to students to showcase their creative ideas
 - (4) provide opportunity to students to enhance their academic performance
85. Four candidates appearing in an interview for the post of science teacher were asked to give a demonstration lesson to class VIII students on the topic 'Pressure exerted by liquids and gases'. Following different approaches were followed by different candidates:
- (1) Detailed explanation of related concepts with the help of diagram on the blackboard.
 - (2) Use of charts for explanation of different concepts.
 - (3) Organisation of hands-on student activities followed up with discussions.
 - (4) Greater focus on classroom questions during the lecture.
- Which one of the above approaches will be most effective for teaching of the topic?
86. The technique of 'classroom questioning' in teaching of Science can be more effectively used for:
- (1) ensuring levels of learning
 - (2) developing problem solving skills
 - (3) maintaining discipline in the class
 - (4) promoting creativity and innovativeness
87. Given below are the steps to test the presence of proteins in a food item. These steps are not in correct sequence.
- (A) Take a small quantity of food item in a test tube, add 10 drops of water to it and shake it.
 - (B) Make the paste or powder of the food to be tested.
 - (C) Add 10 drops of caustic soda solution to the test tube and shake well.

- (D) Add 2 drops of copper sulphate to it.
The correct sequence of these steps is:
 (1) A, B, D, C (2) B, A, D, C
 (3) B, A, C, D (4) D, B, A, C
88. Which of the following terms constitute the female part of a flower?
 (1) Stigma, ovary and stamen
 (2) Stigma, ovary and style
 (3) Stamen, ovary and style
 (4) Stamen, petals and sepals
89. How many muscles work together to move a bone?
 (1) Two (2) Four
 (3) Six (4) Number is not fixed
90. Choose the set that represents only the biotic component of a habitat.
 (1) Sand, turtle, crab, rocks
 (2) Insects, frog, fish, aquatic plants
 (3) Tiger, deer, grass, soil
 (4) Insects, water, aquatic, plants, fish

Language: English

Directions: Read the given passage and answer the questions that follow (Q. Nos. 91 to 99) by selecting the most appropriate option:

Renowned educationalist Sir Tim. Brighouse, observed that an outstanding school has four factors that are visible. "Teachers talk about teaching, teachers observe each other's practice, teachers plan, organize and evaluate their work together rather than separately, and that teachers teach each other."

He continues: "One of the reasons I like that is that you can immediately see ways in which you could make it more likely that teachers talk about teaching."

Sir Tim then encouraged schools to focus on activities that were low effort but high impact, describing them as "butterflies". Some examples he gave included rotating staff meetings around different classrooms with the host, at the start, describing the room layout and displays, or discussing other teaching techniques and approaches. With modern technology teachers could observe their own lessons and then when viewing them back, decide whether they want to share them with a mentor.

The role of mentoring was vital and suggested that more schools could send teachers out in small groups to learn from colleagues in other schools.

He said "If this were widespread practice, if people were to attend to their butterflies, the outcome in terms of teacher morale and teacher satisfaction would be positive. We all agree that professional development is the vital ingredient".

91. In the mode suggested by Sir Tim, teachers may self-evaluate and self-reflect
 (1) using technology
 (2) without technology
 (3) through a students' survey
 (4) interviewing each other
92. "Teachers talk about teaching" means that they
 (1) make some suggestions
 (2) discuss their own practices
 (3) criticize one another
 (4) freely change opinions
93. 'Low effort but high impact' in this context implies that schools
 (1) pay teachers a lower salary
 (2) extract more work for the same pay
 (3) decrease the work load and salary
 (4) create opportunities within the system for development

94. In this extract, it is observed that technology supports teachers to
 (1) improve students
 (2) conduct meetings for teachers
 (3) follow-up/remediation activities for students.
 (4) self-diagnose their practices
95. Here, 'visible' means
 (1) seen (2) obvious
 (3) appealing (4) bright
96. Rotating staff meetings in the class rooms' permits teachers to
 (1) be informal with each other
 (2) miss some of them
 (3) share their own practices with others
 (4) keep busy all the time
97. A synonym for the word, 'counselling', from the passage is
 (1) describing (2) mentoring
 (3) discussing (4) teaching
98. The talk by Sir Tim is about the
 (1) teachers who dress like butterflies.
 (2) visiting schools to socialise.
 (3) knowledge teachers gain for job growth.
 (4) schools who control their teachers.
99. "Butterflies" here refer to
 (1) the dress code
 (2) a practice of staff interaction
 (3) changing schools
 (4) going to classes in rotation

Directions: Read the given poem and answer the questions that follow (Q. Nos. 100 to 105) by selecting the most appropriate option:

As I Watch You Grow

Do you know how much you mean to me?
 As you grow into what you will be.
 You came from within, from just beneath my heart
 It's there you'll always be though your own life will now start.
 You're growing so fast it sends me a whirl,
 With misty eyes I ask, Where's my little girl?"
 I know sometimes to you I seem harsh and so unfair,
 But one day you will see, I taught you we'll because I care.
 The next few years will so quickly fly
 With laughter and joy, mixed with a few tears to cry.
 As you begin your growth to womanhood, this fact you must know,
 You'll always be my source of pride, no matter where you go.
 You must stand up tall and proud, within you feel no fear,
 For all you dreams and goals, sit before you very near.
 With God's love in your heart and the world by its tail,
 You'll always be my winner, and victory will prevail.
 For you this poem was written, with help from above,
 To tell you in a rhythm of your Mother's
 heartfelt love!

Kay Thesee

100. 'Do you know how much you mean to me?' is a _____ question.
 (1) rhetorical (2) restrictive
 (3) convergent (4) divergent
101. An antonym for the word 'harsh' is
 (1) severe (3) grim
 (2) mild (4) clashing
102. In the expression 'It sends me a whirl', 'it' refers to
 (1) travelling far (2) growing up
 (3) new experiences (4) the real world

103. To 'stand up tall' is
 (1) growing up healthy (2) be tall like the boys
 (3) being fearless (4) getting ambitious
104. The phrase 'the world by its tail' means to
 (1) be a good follower (2) overcome challenges
 (3) face one's enemies (4) to avoid challenges
105. The poem addresses a
 (1) friend (2) daughter
 (3) mother (4) girl
- Directions:** Answer the following questions by selecting the most appropriate option:
106. A person sitting behind you in a cinema starts talking on the mobile phone and you want to tell him/her to stop. Choose how you will make the request.
 (1) "Stop talking so loudly!"
 (2) "Please don't use the mobile phone inside the theatre."
 (3) "Can't you not use the mobile phone, please?"
 (4) "Could you possibly stop using the mobile phone here?"
107. Exemplar for homonym would be
 (1) aisle/isle (2) beer/bear
 (3) stale/stall (4) stock/stoke
108. Which is a lexical word?
 (1) love (2) is
 (3) the (4) might
109. While learning about the passive voice form, students learn about
 (1) use of "by" (2) position of verbs
 (3) position of nouns. (4) use of verb form
110. *Students can leave the school premises at 12.30pm.*
Students ought to leave the school premises at 12.30pm.
 The two given statements can be differentiated by drawing students' attention to the
 (1) differences in the arrangement of words
 (2) meaning conveyed by the modals/verb modifiers
 (3) the roles of the subject and object in both sentences
 (4) absence of change in the verb form
111. Which learning domain constitutes higher order thinking?
 (1) remembering (2) understanding
 (3) application (4) evaluation
112. The process of word formation consists of
 (1) compounding and affixes
 (2) opposites and meaning
 (3) verbs and nouns
 (4) using synonyms or euphemisms
113. When reading, to 'decode' means to
 (1) an action used in ICT
 (2) solving a complex puzzle
 (3) to analyse and understand
 (4) understanding a foreign language
114. Speaker 1: We had an enjoyable holiday this winter.
 Speaker 2: Where did you go?
 Speaker 1: Where?
 Speaker 2: Yes, which place did you visit?
 During the assessment of students' speaking-listening skills, mark/s would be deducted during this exchange for
 (1) Speaker 1 (2) Speaker II
 (3) Both (4) Neither

115. While writing, 'ellipses' is a
 (1) phrasal verbs (2) semantic linker
 (3) adjectival form (4) prepositional phrase
116. If a longer piece of writing is brief, complete, in the third person, without digressions and emotional overtones and logically arranged, it is a
 (1) classified advertisement
 (2) memorandum
 (3) report
 (4) newspaper article
117. The politician had been making promises long before election time. The statement is in the _____ tense.
 (1) past continuous
 (2) present perfect
 (3) present perfect continuous
 (4) past perfect continuous
118. 'Gender sensitization' in the school curriculum implies
 (1) children should be differentiated as boys and girls
 (2) sex education from primary school onwards
 (3) respectful approach towards defining gender roles
 (4) promote co-education in high school.
119. Identify where the collective form is an error:
 (1) host of angels (2) congress of baboons
 (3) clutch of duress (4) shoal of fish
120. An exemplar of a question to 'funnel' or restrict a respondent's answer is
 (1) "What do you think of the weather?"
 (2) "How many books are there?"
 (3) "Tell me about your most recent holiday."
 (4) "What are your goals?"

Language: Hindi

निर्देश (121-129): नीचे दिए गए गद्यांश को पढ़कर पूछे गए प्रश्नों के सबसे उपयुक्त उत्तर वाले विकल्प चुनिए—

किसे कहूँ मैं? क्या है शिक्षा का सच? कैसा है शिक्षित व्यक्ति और कैसा होता है पढ़ा-लिखा समाज? मेरे गुरु श्री दयालचन्द्र जी सोनी तो पूरी एक काव्यात्मक पुस्तक लिख गये। इस पुस्तक का नाम है 'हूँ अणभणियों शिक्षित हूँ'। उनका आशय स्पष्ट है कि हर पढ़ा-लिखा आदमी अनपढ़ है। उन्होंने जब तक पुस्तक लिखी तो साफ कहा कि यह किताब उनके पूरे जीवन की शिक्षा का सार है। तब फिर हमें यह भी मान लेना चाहिए कि हमारा पूरा पढ़ा-लिखा समाज खासा अनपढ़ है। अशिक्षित है। तब फिर बताइए कि शिक्षा को कहाँ खोजें।

कहते हैं कि शिक्षा बालक के जन्म के साथ बालक को मिली प्रतिभा का विकास है। उसकी सोयी हुई शक्तियों को जगाने का नाम शिक्षा है। मगर ऐसा तो तब सम्भव है जब हम यह जान लें कि कौन-कौन-सा बालक कौन-कौन सी प्रतिभा के साथ पैदा हुआ है? उसके शरीर में एवं उसके मन-मस्तिष्क में कौन-कौन-सी शक्तियाँ सोयी हुई हैं? इसका अर्थ यह हुआ कि जो-जो बालक शाला में आया है उसको हम पहले पढ़ें। हर बालक को पढ़-पढ़ कर पहचानें कि वह क्या है? उसकी प्रतिभा क्या है? और कौन-कौन-सी सुशुप्त शक्तियों को लिये हुए हमारे सामने उपस्थित हुआ है।

121. 'शिक्षा' का अर्थ है—

- (1) बच्चों को जानकारी देना।
 (2) बच्चों को केवल अक्षर ज्ञान देना।
 (3) बच्चों को शक्तिशाली बनाना।
 (4) बच्चों में विद्यमान शक्तियों को प्रस्फुटित करना।

122. लेखक के अनुसार
- (1) सभी बच्चे समान रूप से प्रतिभाशाली होते हैं।
 - (2) बच्चों में अलग-अलग प्रतिभा होती है।
 - (3) सभी बच्चे शाला जाकर प्रतिभाशाली बन जाते हैं।
 - (4) सभी बच्चों की शक्तियाँ सुषुप्त अवस्था में ही रहती हैं।
123. बच्चों को शिक्षा देने के लिए सबसे पहले क्या जरूरी है?
- (1) प्रमिभाओं के विभिन्न रूप जानना।
 - (2) बच्चों को प्रमिभाओं के अनुसार वर्गीकृत करना।
 - (3) बच्चों की समस्त क्षमताओं, प्रतिभाओं को जानने के लिए उन्हें पढ़ना।
 - (4) बच्चों को पढ़ाना।
124. इस गद्यांश में शिक्षा का कौन-सा सिद्धांत निहित है?
- (1) सभी बच्चे समान रूप से प्रमिभाशाली होते हैं।
 - (2) सभी बच्चों में वैयक्तिक भिन्नता होती है।
 - (3) शक्तियाँ सदैव सुषुप्त अवस्था में ही रहता हैं।
 - (4) पढ़े-लिखे लोग अनपढ़ होते हैं।
125. 'हर बालक को पढ़-पढ़ कर पहचानें कि वह क्या है?' वाक्य में 'पहचानें' क्रिया का कर्ता हो सकता है—
- (1) मैं
 - (2) हम
 - (3) तुम
 - (4) वह
126. 'उसकी प्रदत्त प्रतिभा क्या है?' वाक्य है—
- (1) विधानवाचक
 - (2) नकारात्मक
 - (3) प्रश्नवाचक
 - (4) संदेहवाचक
127. 'शरीर' में 'इक' प्रत्यय लगने पर शब्द बनेगा—
- (1) शरीरिक
 - (2) शारीरिक
 - (3) शारिरिक
 - (4) शारिरिक
128. लेखक के अनुसार शिक्षित होना और साक्षर होना—
- (1) दोनों समान हैं।
 - (2) दोनों में मूलभूत अंतर होता है।
 - (3) दोनों पर्यायवाची हैं।
 - (4) दोनों में थोड़ा-बहुत अंतर है।
129. यहाँ 'पढ़ा-लिखा' होने से तात्पर्य है—
- (1) शिक्षित होना
 - (2) अशिक्षित होना
 - (3) साक्षर होना
 - (4) निरक्षर होना

निर्देश (130-135): नीचे दी गई पंक्तियों को पढ़कर सबसे उचित विकल्प का चयन कीजिए—

दम्भ का जहाँ-जहाँ पड़ाव था,
सत्य से जहाँ-जहाँ दुराव था,
वह चला कि अग्नि-बाण मारता,
पाप की अहा-अहा उजाड़ता,
वज्र बन गिरा गिरे विचार पर!

130. 'गिरे विचार' से तात्पर्य है—
- (1) सभी प्रकार के विचार
 - (2) मिथ्या विचार
 - (3) सत्य और हित से परे विचार
 - (4) उलझे विचार
131. नौजवान शहीद ने अग्नि-बाण इसलिए चलाए क्योंकि वह—
- (1) अपना साम्राज्य स्थापित करना चाहता था।
 - (2) सुराज स्थापित करना चाहता था।
 - (3) व्रज गिराना चाहता था।
 - (4) अपनी शक्ति की गरिमा बनाए रखना चाहता था।
132. 'दुराव' शब्द से तात्पर्य है—
- (1) दुर्गम स्थल
 - (2) आवरण
 - (3) काठिन्य
 - (4) बैर

133. 'जहाँ-जहाँ' शब्द है—
- (1) एकार्थी शब्द-युग्म
 - (2) पुनरुक्त शब्द-युग्म
 - (3) विपरीतार्थक शब्द-युग्म
 - (4) भिन्नार्थी शब्द-युग्म
134. 'पाप' का विलोम शब्द है—
- (1) प्रायश्चित्त
 - (2) अपाप
 - (3) पुण्य
 - (4) निरपराध
135. नौजवान शहीद ने किसे नष्ट किया?
- (1) अहंकार को
 - (2) असत्य को
 - (3) अहंकार और सत्य को
 - (4) अहंकार और असत्य को
- निर्देश (136-150):** नीचे दिए गए प्रश्नों के उत्तर सबसे उचित विकल्प चुनिए—
136. उच्च प्राथमिक स्तर पर कहानी, कविता पढ़ने के बाद यह जरूरी है कि बच्चे—
- (1) प्रश्नों के लिखित उत्तर दे सकें।
 - (2) उसे अपने शब्दों में दोहरा सकें।
 - (3) विपरीत भाव की कहानी या कविता लिख सकें।
 - (4) उन्हें अपने अनुभव संसार से जोड़ सकें।
137. प्लेटो का यह कथन कि 'बच्चा बड़ों के बीच एक विदेशी की तरह होता है' किस भाषिक सच्चाई की ओर संकेत करता है?
- (1) बच्चे अपनी भाषा में बोलते हैं जिसे बड़े सही-सही नहीं समझ पाते।
 - (2) बच्चा बड़ों से उम्र में छोटा होने के कारण अजनबी बना रहता है।
 - (3) बच्चों की भाषा अपरिपक्व होती है।
 - (4) बच्चों की भाषा के प्रति बड़ों का दृष्टिकोण संकीर्णता से परिपूर्ण होता है।
138. 'भाषा की कक्षा' में कहानियाँ
- (1) मनोरंजन का साधन हैं।
 - (2) पाठ्य-पुस्तक का एक पाठ हैं।
 - (3) विभिन्न प्रकार की भाषायी संरचनाएँ और चिंतन-विकास की संभावनाएँ लिए होती हैं।
 - (4) भाषा-कौशल के विकास का एकमात्र साधन हैं।
139. राष्ट्रीय पाठ्यचर्या की रूपरेखा 2005 के अनुसार कौन-सा कथन सही है?
- (1) भाषा केवल भाषा की कक्षा तक सीमित होनी चाहिए।
 - (2) भाषा-शिक्षण एक प्रकार से अन्य विषयों की कक्षाओं में भी मौजूद रहता है।
 - (3) बच्चे विद्यालय आकर ही भाषा सीखते हैं।
 - (4) प्राथमिक स्तर पर भाषा सीखने-सिखाने में केवल पढ़ने पर बल देना चाहिए।
140. भाषा-कौशल के संदर्भ में कौन-सा कथन सही है?
- (1) सुनना, बोलना, पढ़ना और लिखना एक क्रम से सीखे जाते हैं।
 - (2) सुनना और पढ़ना निष्क्रिय कौशल हैं।
 - (3) पढ़ना और लिखना कौशल में कोई संबंध नहीं है।
 - (4) सभी कौशल एक-दूसरे के साथ अंतः संबंधित होते हैं।
141. उच्च प्राथमिक स्तर पर भाषा की पाठ्य-पुस्तक में विविध प्रकार की साहित्यिक रचनाओं के समावेश का मुख्य उद्देश्य यह है—
- (1) बच्चों को सभी प्रकार की साहित्यिक विधाओं में पारंगत करना।
 - (2) विभिन्न प्रकार की साहित्यिक विधाओं की भाषायी संरचनाओं से परिचित होने का अवसर देना।
 - (3) विभिन्न साहित्यिक विधाओं के प्रसिद्ध रचनाकारों से परिचित कराना।
 - (4) पाठ्य-पुस्तक निर्माण की परंपरा का निर्वाह करना।

142. रश्मि अपनी कक्षा को बाहर मैदान में ले जाती है और पर्यावरण पर आधारित कविता-पाठ का कार्य करती है। रश्मि का उद्देश्य है—
- (1) बच्चों को रोजमर्रा की चर्चा से कुछ अलग माहौल देना।
 - (2) बच्चों को मैदान में घूमने का अवसर देना।
 - (3) मैदान के प्राकृतिक वातावरण के साथ संबंध जोड़ते हुए कविता को समझने का अवसर देना।
 - (4) अपने शिक्षक-प्रशिक्षण में सीखी बातों का निर्वाह करना।
143. भाषा में आकलन करने के बाद महत्वपूर्ण सोपान होना चाहिए—
- (1) आकलन से प्राप्त आँकड़ों के आधार पर बच्चों के अभिभावकों से विचार-विमर्श करना।
 - (2) आँकड़ों को सहेज कर रखना।
 - (3) आँकड़ों को तत्काल नष्ट करना।
 - (4) आँकड़ों का पुनः पुनः परीक्षण करना।
144. विद्यालय में एक से अधिक भाषाओं का शिक्षण—
- (1) जटिल समस्याएँ उत्पन्न करता है।
 - (2) अनेक भाषाओं के शिक्षकों के रोजगार को बढ़ावा देता है।
 - (3) बहुभाषिकता और राष्ट्रीय सद्भाव का प्रसार करता है।
 - (4) व्यावहारिक नहीं है।
145. भाषा-शिक्षण की 'प्रत्यक्ष-विधि' में—
- (1) मातृभाषा का निरर्थक हस्तक्षेप होता है।
 - (2) 'भाषा-अर्जन' की स्वाभाविक स्थिति का निर्माण होती है।
 - (3) अतिरिक्त शिक्षण सामग्री की कोई आवश्यकता नहीं।
 - (4) भाषा की विविध संरचनाओं के लेखन हेतु अभ्यास पर बल दिया जाता है।
146. भाषा में रचनात्मक आकलन का सर्वाधिक बेहतर उदाहरण है—
- (1) बच्चों को अपने खट्टे-मीठे अनुभव लिखने के लिए कहना।
 - (2) श्रुतलेख
 - (3) प्रश्नों के उत्तर लिखवाना
 - (4) इकाई-परीक्षा लेना
147. हिन्दी भाषा के प्रश्न-पत्र में आप किस प्रश्न को सर्वाधिक उचित मानते हैं?
- (1) विशेषणों के कितने और कौन-से भेद होते हैं?
 - (2) प्रत्ययों की परिभाषा लिखिए।
 - (3) सर्वनाम के भेदों को उदाहरण सहित स्पष्ट कीजिए।
 - (4) लेखक ने पहाड़ों पर होने वाली बारिश का वर्णन एक अलग तरीके से किया है। आप बारिश संबंधी अपना अनुभव लिखिए।
148. चॉम्स्की के अनुसार के कारण बच्चे भाषा सीखते हैं।
- (1) भाषायी समाज
 - (2) भाषा-अर्जन क्षमता
 - (3) भाषा-आकलन क्षमता
 - (4) व्याकरणिक नियमों की जानकारी से ही
149. भाषा-शिक्षण में अनिवार्य है—
- (1) मानक भाषा पर बल
 - (2) समग्रतावादी दृष्टिकोण
 - (3) विशेष आवश्यकता वाले बच्चों के साथ भिन्न व्यवहार
 - (4) वर्तनी संबंधी गृहकार्य

150. विशेष आवश्यकता वाले बच्चों की भाषा का आकलन करते समय
- (1) उन्हें प्रश्न-संख्या में विशेष छूट मिलनी चाहिए।
 - (2) उन्हें अधिक अंक देने का प्रयास करना चाहिए।
 - (3) उनकी क्षमता और सीमाओं का ध्यान रखना चाहिए।
 - (4) उनके प्रति दया भाव रखना चाहिए।

ANSWER KEY

Child Development and Pedagogy

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

Mathematics and Science

31. (3)	32. (3)	33. (1)	34. (3)	35. (4)
36. (1)	37. (2)	38. (1)	39. (3)	40. (1)
41. (1)	42. (4)	43. (4)	44. (2)	45. (4)
46. (2)	47. (3)	48. (4)	49. (2)	50. (4)
51. (3)	52. (4)	53. (2)	54. (2)	55. (2)
56. (4)	57. (1)	58. (2)	59. (2)	60. (1)
61. (3)	62. (4)	63. (1)	64. (4)	65. (1)
66. (4)	67. (2)	68. (3)	69. (4)	70. (4)
71. (3)	72. (3)	73. (1)	74. (3)	75. (2)
76. (4)	77. (2)	78. (4)	79. (1)	80. (2)
81. (4)	82. (1)	83. (4)	84. (3)	85. (3)
86. (1)	87. (2)	88. (2)	89. (1)	90. (2)

Language: English

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

Language: Hindi

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

Child Development and Pedagogy

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

Explanation: Multiple intelligence theory relates to the differentiation of human intelligence. Different students learn in different ways. This theory is criticized on many grounds. One of the criticism is that multiple intelligence are only talents present in intelligence as whole. Humans do not have just an intellectual capacity. They have other kinds of intelligences, such as interpersonal, spatial-visual, linguistic intelligences.

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

Explanation: Language is not a stimuli in environment. When the child realizes the communicative value of words and phrases, rewards are being received by child. He/she is born with inborn ability to learn language.

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

Explanation: Gender stereotypes are features assigned due to social roles and not due to biological endowment. These stereotypes are beliefs and expectations about how individuals should behave, think, or feel based on their gender.

Gender stereotyping occurs when people behave in a certain way as per their gender. For example, women are supposed to be obedient and men are supposed to be dominative.

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

Explanation: To maximize learning, it is essential for teachers to understand not only their own cognitive style but also the cognitive styles of their students. When teachers are aware of the diverse ways students learn and process information, they can adapt their teaching methods accordingly. This approach, known as differentiated instruction, allows teachers to cater to individual learning preferences, strengths, and needs, creating a more inclusive and effective learning environment. By considering students' cognitive styles, teachers can optimize learning outcomes and ensure that all students have the opportunity to succeed and reach their full potential.

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

Explanation: Assessment as learning is an approach to assessment that focuses on helping students learn

and improve. It involves providing students with feedback on their progress, and helping them to identify and address their learning needs.

Testing students as frequently as possible is not a good way to promote assessment as learning. In fact, it can actually be counterproductive. Frequent testing can lead to students becoming anxious and stressed, and it can discourage them from taking risks.

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

Explanation: When a cook tastes a food during cooking, it is akin to "Assessment for learning."

Assessment for learning, also known as formative assessment, refers to the process of gathering information and feedback during the learning process to monitor students' progress and provide ongoing support for their learning. Similarly, when a cook tastes the food while cooking, they are evaluating the dish's progress and making necessary adjustments based on their assessment to ensure the final product meets the desired taste and quality.

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

Explanation: Differentiated instruction is related to different instruction to different students in class. This helps all of the students in the classroom. Students differ according to culture, gender, ability, learning styles etc. A bunch of different methods of learning can be used to teach students.

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

Explanation: In a culturally and linguistically diverse classroom, before deciding whether a student comes under the special education category, a teacher should involve specialized psychologists. Specialized psychologists have the expertise and training to conduct comprehensive assessments and evaluations to determine if a student has a disability or any specific learning needs.

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

Explanation: Alcohol, Mental issues and brain related disorders may affect the learning ability of an individual. These all factors can lead to damaging impacts on the child. Therefore, teacher's way of teaching cannot affect the learning abilities of a student.

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

Explanation: Inclusive education is related to full participation of learners. It implies that all students should have equal opportunities for education and learning. Teacher uses ways of learning by increasing the scope of heterogeneity in the classroom.

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

Explanation: Divergent thinkers generates creative ideas and form logical solutions to a problem. Gifted students have divergent thinking and ability to view things in a different manner.

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

Explanation: The empirical rule, a three sigma rule, tests a distribution normality and serves as a means of forecasting dataset. As per the shaded region, the child is highly intelligent, motivated and creative. Therefore, he will fall after 3 sigmas.

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

Explanation: When activities are done in real life, learning process becomes fast. This helps in holistic development of the students and growth of knowledge and skills faster.

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

Explanation: By group activities, the burden of individual competition is eliminated and thus leads to good emotional and mental health of the students.

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

Explanation: As per Albert Bandura, learning process takes place by observing others. This is the concept of social learning.

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

Explanation: Social learning proposes that new behaviors are formed by observing and imitating others. People learn from each other through observation, imitation and modeling. In this scenario, the child is engaging in social learning by observing and imitating the models in the fashion show.

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

Explanation: If the student is making errors continuously, firstly teacher should try to change the instructional methods. After that, other aspects can be checked like time table, seating arrangements etc.

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

Explanation: Anxiety leads to feeling of fear and uneasiness. Many students fear exams. This fear can be managed

by many ways such as familiarizing with pattern of paper, support from teachers, and knowing the strengths.

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

Explanation: Bloom's taxonomy is a hierarchical organization of cognitive objectives, which focus on intellectual or mental skills that students should develop as part of their education. The cognitive domain of Bloom's taxonomy consists of six levels, each representing different levels of cognitive complexity. These levels include remembering, understanding, applying, analyzing, evaluating, and creating. At the lower levels, students are expected to recall and comprehend information, while at the higher levels, they engage in critical thinking, problem-solving, and creative processes. Bloom's taxonomy provides a valuable framework for designing educational objectives, lesson plans, and assessments that promote progressive cognitive development in students.

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

Explanation: Mastery goal means accomplishing something. Performance approach goals are those in which someone tries to do better than his/her peers. Performance avoidance goals are those goals when someone tries to avoid doing worse than his/her peers.

In the given scenario, A has mastery goals because she is interested in learning English and thinks it will be helpful for her in the future. B has performance goals because she wants to secure first rank in the class. C has performance avoidance goals because she is primarily concerned with securing passing grades.

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

Explanation: Self-actualization needs are the highest level needs in psychological development. A person potential is fully realized when basic and ego needs have been fulfilled. Captain Vikram Batra might have achieved self-actualization needs.

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

Explanation: Extinction is disappearance of previously learned behavior. Partial reinforcement leads to production of behavior which is more resistant to extinction.

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

Explanation: Mastery orientation implies setting the goal of learning and mastering the task by establishing standards. It focus on learning and avoids discussions on competition and grades. Each student is being focused on learning rather than comparing him/her with others.

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

Explanation: Social development and environment are correctly matched. Social development of an individual is the result of the environment in which he/ she lives. It is related to the transformation of individuals and society.

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

Explanation: Children who are emotionally and socially fit can manage their anger and joy, develop good relations and concentrate on challenging tasks. They love and respect people and have self-control. Therefore, concentrate persistently on competition with peers is not their characteristic.

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

Explanation: Identical twins share nearly identical genetic makeup as they develop from the same fertilized egg, making them genetically very similar. However, despite their genetic similarities, identical twins can be raised in different environments, which may include different families, schools, neighborhoods, and experiences.

The statement highlights the findings from research on identical twins raised in different homes and their IQ scores. When researchers study the IQ scores of these identical twins, they find that there is a high correlation between their IQ scores, often around 0.75 or higher. This indicates that the environment in which the twins are raised significantly influences their IQ development, even though their genetic makeup is almost identical.

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

Explanation: Socialisation helps in developing a conscience in the individuals that fit with society. It helps them to prepare for social roles in the society.

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

Explanation: Decentering is the ability to consider multiple aspects of a situation. In theory of cognitive development, the third stage is Concrete Operational stage. In this, a child at the age of 7 years to 12 years shows increased use of logic.

In the given scenario, the teacher shows two identical glasses filled with an equal amount of juice and then empties them into two different glasses-one taller and one wider. The students' difficulty in correctly identifying that the amount of juice remains the same regardless of the glass shape indicates a lack of decentering.

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

Explanation: At post conventional level, ethical moral thinking and moral principles are used. Karnail does not want to support a corrupt

government. He is using his own conscience for right actions.

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

Explanation: According to Sternberg, human intelligence is the cognitive ability to learn from experience. This helps in reasoning, remembering important information and coping with demands of daily living. When intelligence is defined and measured, real life success will be achieved.

Mathematics and Science

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

Explanation: The number of integers less than -3 but greater than -8 is The integers between -8 and -3 are $-7, -6, -5, -4$.

Thus, there are 4 integers less than -3 but greater than -8 .

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

Explanation: The distance between two places is 12Km.

$$12 \text{ km} = 1000 \times 12 \text{ m} \\ 12000 \text{ m} = 12000 \times 100 \text{ cm} \\ = 12,00,000 \text{ cm}$$

A map scale is 1: 25,000

Using unitary method, 25,000 cm is equivalent to 1 cm on the map.

Then, 12,00,000 cm is equivalent to

$$\frac{12 \times 10^5}{25 \times 10^3} = \frac{12 \times 10^2}{25} \\ = \frac{1200}{25} = 48 \text{ cm on the map.}$$

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

Explanation: The given term is

$$\frac{-3}{8} \times \frac{-7}{13} \\ \frac{-3}{8} \times \frac{-7}{13} = \frac{3 \times 7}{8 \times 13} \\ = \frac{21}{104}$$

The reciprocal of $\frac{21}{104}$ is $\frac{104}{21}$.

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

Explanation:

Given,

$$\begin{aligned} \text{Number of edges} &= 30, \\ \text{Number of faces} &= 12 \end{aligned}$$

Edges = 30, Faces = 12.

Then according to the Euler's formula is

$$F + V - E = 2$$

Therefore, the number of vertices

$$\begin{aligned} &= 2 + E - F \\ &= 2 + 30 - 12 \\ &= 20 \end{aligned}$$

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

Explanation: Let the number be 'x', half of x is $x/2$.

Half of this when increased 15, that is $x/2 + 15 = 39$

$$\Rightarrow \frac{x}{2} + 15 = 39$$

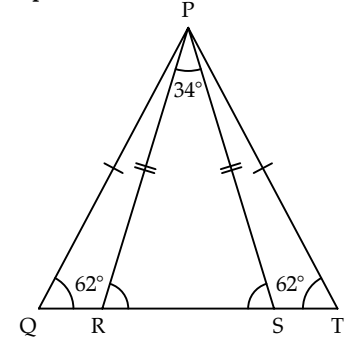
$$\Rightarrow \frac{x}{2} = 39 - 15$$

$$\Rightarrow x = 24 \times 2 = 48$$

Sum of digits of the original number
= 4 + 8 = 12

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

Explanation:



In ΔPQT ,

$$PQ = PT$$

$$\angle PTS = 62^\circ$$

and $\angle PQT = 62^\circ$

(Angles opposite to the equal sides of an isosceles triangle are also equal.)

In ΔPRS , $PR = PS$.

$$\angle RPS = 34^\circ$$

and $\angle PSR = \angle PRS$

(Angles opposite to the equal sides of an isosceles triangle are also equal.)

$$\angle PSR + \angle PRS = 180^\circ - \angle RPS$$

$$= 180^\circ - 34^\circ$$

$$= 146^\circ$$

$$\text{Since, } \angle PSR = \angle PRS$$

$$= 146^\circ/2$$

$$= 73^\circ,$$

$$\angle PRQ = 180^\circ - \angle PRS$$

(Linear pair)

$$\angle PRQ = 180^\circ - 73^\circ$$

$$= 107^\circ$$

In ΔPQR ,

$$\angle PQR + \angle PRQ + \angle QPR$$

$$= 180^\circ$$

(Sum of all the angles in a triangle is 180°)

Then

$$\angle QPR = 180^\circ - (\angle PQR + \angle PRQ)$$

$$= 180^\circ - (62^\circ + 107^\circ)$$

$$= 180^\circ - 169^\circ$$

$$= 11^\circ$$

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

Explanation: ΔABC and ΔDEF , the correspondence CAB and EDF gives a congruence, then, $AC = DE$

$$AB = DF$$

$$\angle A = \angle D$$

$$\angle B = \angle F$$

Thus, $AB = EF$ is not true.

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

Explanation:

$$40\% \times (100 - 20\% \times 300)$$

$$= \frac{40}{100} \left(100 - \frac{20}{100} \times 300 \right)$$

$$= \frac{40}{100} \left(100 - \frac{20}{1} \times 3 \right)$$

$$= \frac{4}{100} (100 - 60)$$

$$= \frac{4}{10} \times 40 = 16$$

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

Explanation: Given, the HCF of two numbers is 28 and their LCM is 336. One number is 112.

We know that,

$\text{HCF} \times \text{LCM} = \text{The product of the two numbers.}$

Let the other number be n ,

$$\text{So, } \text{HCF} \times \text{LCM} = 112 \times n$$

$$n = \frac{28 \times 336}{112} = 84$$

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

Explanation:

$$\frac{2}{3}x = 0.6$$

and $0.02y = 1$

$$\text{Then, } x + \frac{1}{y} = \frac{xy+1}{y} \quad \dots(i)$$

Now,

$$x = \frac{0.6 \times 3}{2} = 0.9$$

\Rightarrow

$$0.02y = 1$$

$$y = \frac{1}{0.02}$$

$$= \frac{100}{2} = 50$$

Putting the values of x and y in equation (i) we get,

$$x + \frac{1}{y} = \frac{xy+1}{y}$$

$$= \frac{0.9 \times 50 + 1}{50}$$

$$= \frac{46}{50} = 0.92$$

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

Explanation:

$$\text{Given, } y = \frac{x-2}{x+1}, y \neq 1,$$

then $x = ?$

$$y = \frac{x-2}{x+1}$$

$$\Rightarrow y(x+1) = x-2$$

$$\Rightarrow xy + y = x - 2$$

$$\Rightarrow x(y-1) = -2-y$$

$$\Rightarrow x = \frac{-2-y}{(y-1)}$$

$$= \frac{-(2+y)}{-(-y+1)} = \frac{(2+y)}{(1-y)}$$

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

Explanation: Given, perimeter of the square = perimeter of the circle.

Let the edge length of the square is 'a' and the radius of the circle be 'r'.

Therefore, $4a = 2\pi r$

$$\Rightarrow a = \frac{2\pi r}{4} = \frac{\pi r}{2}$$

Area of square : Area of circle

$$= \frac{a^2}{\pi r^2} = \frac{\left(\frac{\pi r}{2}\right)^2}{\pi r^2}$$

$$= \frac{\pi^2 r^2}{4\pi r^2} = \frac{\pi}{4}$$

Area of square : Area of circle
= $\pi : 4$

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

Explanation: ABCD is a square,

$$AB = BC.$$

$$\Rightarrow x + 16 = 3x$$

$$\Rightarrow 2x = 16$$

$$\text{So, } x = 8 \text{ cm}$$

Putting the value of x , in AB

$$= x + 16 = 8 + 16$$

$$= 24 \text{ cm}$$

Perimeter of the square is

$$4 \times 24 = 96 \text{ cm}$$

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

Explanation: Given that the mean of the ten numbers is 0.

Then, we can say that the sum of all the ten numbers is 0.

Mean

$$= \frac{\text{Sum of 10 numbers}}{\text{Number of Observations}}$$

or,

$$0 = \frac{\text{Sum of 10 numbers}}{10}$$

So, sum of 10 numbers = 0

The sum of 10 numbers + the sum of 72 + (-12)

$$= 0 + 72 - 12 = 60$$

Now there are 12 numbers.

New mean

$$= \frac{\text{Sum of 12 numbers}}{\text{Total number of observations}}$$

$$= 60 \div 12 = 5$$

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

Explanation: The circumference of the base of a right circular cylinder is 44 cm and its height is 15 cm.

$$2\pi r = 44$$

$$\Rightarrow r = \frac{44}{2\pi} = \frac{22}{\pi}$$

The volume of the cylinder is,

$$\pi r^2 h = \pi \left(\frac{22}{\pi}\right)^2 \times 15$$

$$= \frac{22 \times 22}{\pi} \times 15$$

$$= \frac{22 \times 22 \times 7}{22} \times 15$$

$$= 22 \times 7 \times 15$$

$$= 2310 \text{ cm}^3$$

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

Explanation: To solve the given problem, the student must know the terms square, rectangle, congruent, perimeter, etc. He divides the square into 4 congruent rectangle whose perimeter is 40 units.

If the perimeter is 40 cm, then each side of the square is 10 cm ($40/4=10$ cm).

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

Explanation: According to Piaget's theory of cognitive development, the concrete-operational stage is normally between the age of 7 and 12, when children start to develop the capacity to reason rationally about mathematics, particularly algebraic ideas. This is why many school systems start teaching algebra in grades 6 or 7. Children can comprehend and use the fundamental arithmetic operations at this stage to resolve issues involving real-world situations and things. Teachers can support students in developing the cognitive frameworks and logical reasoning abilities necessary for success in mathematics and other academic fields by giving them opportunity to practice algebraic thinking.

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

Explanation: When the base is same, child clearly understands the rule of exponents and powers; however, when the base is different, the child is unable to comprehend the idea. This can be said because the child had made a mistake in the problem (b) and (e), where the bases are different.

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

Explanation: According to Van Hiele's theory of geometric mind, there are five different types of geometric understanding: visualisation, analysis, informal deduction, formal deduction and rigour. Students can recognise and identify simple forms and figures at the analysis level based on their properties but they might not be able to justify why those features are true. When asked to categorise quadrilaterals based on their properties, class VII students are expected to recognise the fundamental characteristics of quadrilaterals (such as the number of sides and angles) and use these characteristics to divide them into various groups (such as squares, rectangles, trapezoids, etc.). Students at this level are able to analyse and classify shapes using their grasp of fundamental qualities but they are not yet able to properly demonstrate why specific properties are true. This level of comprehension serves as a crucial foundation for more complex deductive reasoning and formal proof in geometry.

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

Explanation: The given activity refers to a higher level of cognitive demand as it requires the use of conceptual understanding to underline the procedure to complete the task. Cognitively demanding tasks

are those that call for conceptual comprehension in addition to procedural competence. Procedural knowledge refers to the capability of carrying out a specific procedure or set of steps to complete a task while conceptual understanding refers to the capacity to comprehend the underlying concepts and principles that govern a particular topic or process.

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

Explanation: The given exercise can be utilised as a formative evaluation tool as well as a means of reflection. Students can reflect on their learning, pinpoint their areas of strength and weakness and create improvement plans with the use of reflective exercises. These exercises are crucial for encouraging metacognition and assisting students in taking charge of their education.

The activity can be used as part of formative assessment to learn more about how well students understand a certain subject or idea. Any assessment that is carried out during the learning process with the goal of giving feedback that may be used to improve learning outcomes is referred to as a formative assessment. Teachers can assist students in identifying areas for improvement by giving them feedback on how they performed during the exercise.

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

Explanation: The definition given by the student reflects that the student knows some properties but has missed some of the most important properties of the rectangle to complete the definition.

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

Explanation: When a learner makes a conceptual error, it means that he doesn't comprehend the fundamental ideas or rules that underpin a specific mathematical operation. If a learner does not comprehend how to join related terms or how to simplify the equation, they may make a conceptual error when adding linear expressions.

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

Explanation: Students can learn the importance of saving money and using it wisely by using the provided question or problem as a teaching tool.

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

Explanation: The given question demands comprehension skill to understand what is being asked. Strong comprehension abilities are essential for both academic success and lifetime learning. Teachers can assist students in developing confidence autonomous learners who can comprehend and analyse

material in a range of circumstances by creating a supportive learning environment and teaching effective practices.

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

Explanation:

$$\begin{aligned} p^2 - q^2 &= (p + q)(p - q) \\ &= (3^{2000} + 3^{-2000} + 3^{2000} - 3^{-2000}) \\ &\quad (3^{2000} + 3^{-2000} - 3^{2000} + 3^{-2000}) \\ &= (2 \times 3^{2000})(2 \times 3^{-2000}) \\ &= 4 \end{aligned}$$

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

Explanation: The square of 9 is divided by cube root of 125.

$$\frac{81}{\sqrt[3]{125}} = \frac{81}{5} = 16\frac{1}{5}$$

Thus, the remainder is 1.

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

Explanation: The value of $\sqrt{16\sqrt{8\sqrt{4}}}$

$$\begin{aligned} &= \sqrt{16\sqrt{8\sqrt{2^2}}} \\ &= \sqrt{16\sqrt{8 \times 2}} \\ &= \sqrt{16\sqrt{16}} \\ &= \sqrt{16\sqrt{4^2}} \\ &= \sqrt{16 \times 4} \\ &= \sqrt{4 \times 4 \times 4} = 4\sqrt{4} \end{aligned}$$

$$4 \times 2 = 8$$

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

Explanation:

$$\begin{aligned} \frac{1.2 \times 10^{30}}{2} &= \frac{0.6 \times 10^{30}}{1} \\ &= 0.6 \times 10 \times 10^{29} \\ &= 6 \times 10^{29} \end{aligned}$$

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

Explanation: Making the denominator of all the fraction same,

$$\frac{2}{3}, \frac{23}{30}, \frac{9}{10}, \frac{11}{15}, \frac{4}{5}$$

Taking LCM of 3, 30, 10, 15, 5
LCM = 30

$$\frac{2}{3} = 9 \times \frac{3}{30} = \frac{27}{30}$$

$$\frac{23}{30} = 23 \times \frac{1}{30} = \frac{23}{30}$$

$$\frac{9}{10} = 9 \times \frac{3}{30} = \frac{27}{30}$$

$$\frac{11}{15} = 11 \times \frac{2}{30} = \frac{22}{30}$$

$$\frac{4}{5} = 4 \times \frac{6}{30} = \frac{24}{30}$$

$$\frac{20}{30}, \frac{23}{30}, \frac{27}{30}, \frac{22}{30}, \frac{24}{30}$$

Arranging this in descending order we get,

$$\frac{27}{30}, \frac{23}{30}, \frac{24}{30}, \frac{22}{30}, \frac{20}{30}$$

61. Option (3) is correct

Explanation: Vermicomposting is a process of converting kitchen wastes into manure by adding redworms. This is nature friendly and free of chemicals.

The steps required for the conversion of kitchen garbage into manure in chronological order is (B), (A), (D) and (C).

62. Option (4) is correct

Explanation: The relationship described in the scenario is an illustration of mutualism, a sort of symbiotic relationship in which both of the involved species are benefited from the partnership. In this instance, one organism supplies food, while the other organism offers necessities like shelter, water and nutrition. Both creatures are dependent on one another in order to survive and procreate. Natural systems, from coral reefs to the microbiome in animals' guts, exhibit mutualistic connections frequently.

63. Option (1) is correct

Explanation: The process of moving swallowed food downwards in the alimentary canal is called peristalsis. Peristalsis is a wave-like muscular contraction that happens along the walls of the oesophagus, stomach and intestines and aids in the movement of food through the digestive tract. However, the oesophagus or food pipe cannot actively contract to move food downward. Instead, a coordinated series of contractions and relaxations caused by the involuntary muscle contractions of the smooth muscle tissue in the walls of oesophagus propels the food towards the stomach.

64. Option (4) is correct

Explanation: The ability to exchange gases (oxygen and carbon dioxide) through the skin is common in frogs and some species of earthworms. Frogs' moist, slimy skin helps to speed up this procedure by expanding the surface area available for gas exchange.

65. Option (1) is correct

Explanation:

Total time is 1 hour.

$$\begin{aligned} \text{Total distance} &= \text{Initial reading} \\ &\quad - \text{final reading} \\ &= 78806 - 78752 \\ &= 54 \text{ km} \end{aligned}$$

The average speed of the bus in the entire journey in metres per second is,

$$54 \text{ km/hr} = 54 \times \frac{1000}{60} \times 60 \text{ m/s}$$

$$\begin{aligned} &= 54 \times \frac{5}{15} \text{ m/s} \\ &= 15 \text{ m/s} \end{aligned}$$

66. Option (4) is correct

Explanation: Optical tools that can be used to obtain an enlarged image of an item include convex lens and concave mirrors. A concave mirror creates a real and inverted image of the object when it is positioned in front of it because the light rays are reflected and come together at a single point. By bringing the object closer to the mirror, the image can be made larger.

Similar to how a convex lens creates a real and inverted image when an item is placed in front of it, the lens bends light rays such that they converge at a single point. You may enlarge this image by bringing the lens closer to the subject.

67. Option (2) is correct

Explanation: Paddy, maize, cotton and soya bean are the Kharif crops also known as the summer crops. Crops known as kharif are planted in India during the rainy season, which normally lasts from June to September. Warm temperatures and a lot of water are needed for the growth of these crops. Rice, maize, sorghum, millet, cotton, sugarcane and soybeans are a few examples of Kharif crops. The states of Maharashtra, Andhra Pradesh, Telangana, Tamil Nadu and Karnataka are where these crops are primarily farmed.

68. Option (3) is correct

Explanation: By lowering the quality and quantity of the crop that is harvested, weeds might hinder harvesting. The main crop may be forced to suffer from limited growth and decreased output as a result of weeds competing with it for nutrients, water and sunlight. Except these, the presence of weeds can make it difficult for harvesting equipment to run smoothly, which could harm the crops or reduce equipment efficiency. Weeds must be kept under control during the growing season to avoid obstructing the harvest. Hence, the statements B, C and D are correct.

69. Option (4) is correct

Explanation: Colourless, odourless and extremely flammable hydrogen gas is formed when aluminium foil is put to freshly made sodium hydroxide solution. It ignites with a light blue flame and produce a pop sound when a burning match stick is brought near it. When aluminium foil reacts with sodium hydroxide solution,

hydrogen gas is released as a result of the aluminium metal displacing hydrogen ions from the sodium hydroxide solution.

The properties of the gas can be correctly stated by statement (4) that is a colourless and odourless gas which produces a 'pop' sound when a burning match stick is brought near it.

70. Option (4) is correct

Explanation: A metal oxide is basic in nature and changes blue litmus paper to red whereas non-metallic oxides are acidic in nature and turn red litmus paper blue.

Thus, sulphur dioxide will be acidic in nature as sulphur is a non-metal and it will change the colour of blue litmus paper to red.

71. Option (3) is correct

Explanation: Natural resources that are exhaustible have a limited supply and will eventually be depleted. Minerals like iron, copper and aluminium as well as fossil fuels like coal, oil and natural gas are a few examples of exhaustible natural resources. These resources, which took millions of years to develop, are being depleted much more quickly than they can be replaced. They cannot be replenished in our lifetimes once they are consumed.

Similarly, wildlife is an example of exhaustible resources because it is depleting due to human activities and exploitation. In contrast, renewable energy sources like wind and solar electricity can replenish themselves spontaneously and are not anticipated to run out. Overusing finite natural resources can harm the ecosystem and contribute to problems like pollution and climate change.

72. Option (3) is correct

Explanation: The term "endemic species" refers to organisms that are naturally present only in a single area or region of the planet. These species are frequently very specialised and have evolved special adaptations to live in their particular habitat. Various ecosystem types, including islands, mountains, forests and deserts, support endemic species. Due to their narrow range, endemic species are frequently in danger of going extinct if their habitat is damaged or altered due to human activity or other environmental reasons. The protection of these species and their distinctive environments depends on conservation efforts.

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

Explanation: The components of a cell's nucleus called chromosomes store DNA-based genetic material. Genes are sections of DNA that contain instructions for how the body should develop and work.

Genetics is the study of how traits are passed down via families. An understanding of genetics can be used to forecast the possibility that particular features will be passed down to future generations as well as to help explain why certain traits run in families.

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

Explanation: Along with other organelles like mitochondria, ribosomes, lysosomes and the endoplasmic reticulum, an animal cell distinguished by a membrane-bound nucleus. The cell membrane, which is composed of a phospholipid bilayer, acts as a protective barrier that controls how chemicals enter and exit the cell. Cell wall and chloroplast are absent in animal cell.

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

Explanation: The set of correct combination are
Ovulation → Egg → Oviduct → Uterus.

Ovary produces one egg every month by the process of ovulation. This egg is carried from ovary to oviduct and transplanted in uterus.

Sperms → Testis → Sperm Duct → Penis.

Sperms are formed in testis. These are passed through sperm duct to penis. Menstruation → Egg → Oviduct → Uterus

If an egg remains unfertilized, the uterus lining shed off and it comes out of vagina with blood and mucus. This process is called menstruation.

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

Explanation: Iodine is required for the production of thyroxine hormone, which is essential for the transformation of tadpoles into frogs. Tadpoles may develop abnormally or even die if there are insufficient levels of iodine in the water, which could affect the synthesis of the hormone thyroxine. Iodine must therefore be present in water to ensure appropriate transformation of tadpoles into healthy adult frogs.

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

Explanation: At the upper primary level, teaching science focuses on cultivating a scientific mindset, a sense of wonder and an interest in the world around us, rather than just teaching students how to use technology. Developing a conceptual

knowledge of scientific ideas and the capacity to apply them in practical contexts is the main goal. Although acquiring technological skills is crucial, teaching science in upper primary schools does not have only one goal in mind.

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

Explanation: The National Curriculum Framework (NCF) for School Education places a strong emphasis on using a positive teaching and learning strategy when it comes to science in upper primary. NCF contends that by engaging in practical activities and experiments, students should be encouraged to investigate, inquire, think critically and creatively and build their own knowledge of scientific subjects. Instead of having pupils memorise scientific concepts and facts, the emphasis should be on helping them improve their ability to think critically and solve problems. The goal of the constructive approach in science education is to foster in students a lifelong interest in science as well as scientific knowledge.

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

Explanation: The degree to which the curriculum is created to satisfy the cognitive demands and abilities of the students is referred to as "Cognitive Validity" in the context of curriculum. The curriculum for upper primary pupils should be developmentally and cognitively appropriate for their age group. The curriculum should give pupils the chance to investigate, learn about and build their grasp of scientific ideas and principles. Additionally, it ought to promote the growth of students' analytical, investigative and problem-solving abilities. The scientific curriculum can aid students' learning and promote their interest and engagement in science by putting a strong emphasis on cognitive validity.

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

Explanation: A scientific temperament is defined by an open-minded and objective attitude towards new theories and data. It calls for people to base their thoughts and opinions on facts and logic rather than their own prejudices and biases. Therefore, a person with a scientific temperament should make an effort to avoid having biased opinions and to keep their thought and decision-making processes objective.

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

Explanation: In the NCERT science textbook, some questions are purposefully left unanswered to inspire pupils to investigate and look for solutions

on their own. With this strategy, students are encouraged to develop critical thinking, independent learning and curiosity. The authors of the textbook encourage students to conduct research and inquiry-based learning by leaving some questions unanswered, which aids in their development of a deeper understanding of scientific concepts and procedures. Additionally, it fosters creativity, problem-solving abilities and preparing students to take on real-world challenges.

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

Explanation: The accuracy of the readings can actually be impacted by washing a thermometer with hot water. Before and after every use, the thermometer should be washed. One should never use hot water for washing the thermometer. To get reliable readings, it's crucial to use a clinical thermometer carefully and take the necessary safety measures. While taking the reading, the bulb shouldn't be held as this could alter the result. It is crucial to check that the mercury level is below 35°C prior to use. Additionally, the mercury should be at eye level.

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

Explanation: The NCERT science textbook for class VIII's section on "activities and projects" primarily attempts to give students opportunity to engage in experiential learning and to investigate science outside of the classroom. These projects and activities challenge students to think critically and apply their knowledge in authentic settings and they frequently entail practical experimentation, data collection and analysis. Students can gain a deeper grasp of scientific ideas and procedures by participation in these activities and projects, as well as acquire abilities like cooperation, communication and problem-solving.

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

Explanation: Student innovation and original ideas in science and technology can be displayed through science exhibitions. It challenges them to think creatively and develop original solutions to difficulties encountered in the real world. Students can connect with scientists, researchers and specialists from a variety of fields at exhibitions and gain knowledge from their experiences. Additionally, science exhibitions aid in educating the general public about the most recent advancement in science and technology.

85. Option (3) is correct

Explanation: Science lessons on the idea of pressure exerted by liquids and gases can be effectively taught by having students engage in a practical experience before having class discussions. It encourages the development of practical skills and enables active student participation in the learning process. Students have the chance to clarify any questions they may have and deepen their comprehension of the idea during the conversations that follow the activity. Students who may have trouble comprehending the idea through conventional classroom lectures or textbook readings alone may find this method to be especially helpful.

86. Option (1) is correct

Explanation: Science teaching and learning can both benefit greatly from the questioning strategy used in the classroom. Teachers can assess their students' conceptual knowledge, foster their ability to think critically and encourage active engagement in the learning process by using effective questioning techniques. Teachers can aid students in grasping scientific concepts by posing open-ended questions that force them to reflect deeply and apply their knowledge. Teachers can also utilise questioning to get their pupils to come up with their own inquiries, which can raise interest in the material and drive to study.

87. Option (2) is correct

Explanation: The steps in the correct order to test the presence of protein in a food item are B, A, D and C. That is:

- make the paste or powder or paste of the food to be tested.
- take a small portion of it in a test tube and add 10 drops of water and mix it well.
- add 2 drops of copper sulphate into it.
- add 10 drops of caustic soda solution to it and mix well, which helps to identify the presence of protein.

The reaction between the copper sulphate and the protein molecules produces a violet colour that confirms the presence of protein in the food item.

88. Option (2) is correct

Explanation: The pistil or carpel is the name for the flower's female portion. The ovary, style and stigma are parts of the reproductive organ in question. One or more ovules in the ovary have the potential to become seeds when pollen fertilises them.

The stigma, which is the sticky or feathery structure on top of the pistil that collects pollen, is connected to the ovary by a long, thin structure called the style. For reproduction as well as the generation of fruit and seeds, the female portion of the flower is essential.

89. Option (1) is correct

Explanation: A muscle pair known as an antagonistic muscle pair cooperates to move a bone. Movement is made possible by the contraction of one muscle while the relaxation of another. For instance, the triceps relax when the biceps tighten, allowing the arm to bend. The triceps contract, the biceps relax and the arm straightens as a result. The precise control and movement of the body's bones is made possible by the synergistic contraction of opposing muscles.

90. Option (2) is correct

Explanation: The biotic component of a habitat is represented by aquatic plants, frogs, fish and insects. Animals, plants, fungus and microorganisms are examples of the living things that make up a habitat's biotic components. To create an ecosystem, these organisms interact with one another and the abiotic elements of the habitat, such as the soil, water and air. Each of these living things is essential for sustainability and balance of the ecosystem.

Language: English

91. Option (1) is correct.

Explanation: Modern technology empowers mentors by allowing them to observe their own lessons in a more detailed and systematic manner. Mentors can gain valuable insights into their teaching practices improve their pedagogical skills, and continuously improve their lessons for the benefit of their students using video recordings, annotation tools, data analytics, and other technological advancements.

92. Option (2) is correct.

Explanation: Teachers can now observe and evaluate each other's work thanks to advancements in technology. Teachers can engage in remote observation, share feedback asynchronously, or participate in real-time discussions using video recordings, online platforms, and video conferencing tools. This collaborative approach to peer observation fosters professional development, encourages the exchange of best practises, and ultimately improves teaching

practises for the benefit of both teachers and students.

93. Option (4) is correct.

Explanation: Sir Tim then encouraged schools to focus on activities that were low effort but high impact, describing them as "butterflies". Some examples he gave included rotating staff meetings around different classrooms with the host, at the start, describing the room layout and displays, or discussing other teaching techniques and approaches.

94. Option (4) is correct.

Explanation: Technology is critical in assisting teachers in self-diagnosing and reflecting on their teaching practices. It provides a variety of tools and resources to help teachers collect data, analyse instructional methods, and make informed decisions to improve their teaching effectiveness.

95. Option (1) is correct.

Explanation: Synonym of visible is 'seen'.

96. Option (3) is correct.

Explanation: Rotation, or the practise of teachers engaging in collaborative discussions about their teaching practises and approaches, is an important strategy for promoting professional growth and improving teaching effectiveness.

97. Option (2) is correct.

Explanation: Counselling means mentoring, in which professional advice is given by mentors.

98. Option (3) is correct.

Explanation: The talk by sir Tim is about the knowledge teachers gain for job growth.

99. Option (2) is correct.

Explanation: "Butterflies" in this passage refers to the teachers who go out in groups to learn from other staff members.

100. Option (4) is correct.

Explanation: Divergent questions begin with a prompt and require students to think creatively and critically to identify multiple potential answers. The question in the poem is a divergent question.

101. Option (2) is correct.

Explanation: The opposite of harsh is mild which means easy and light.

102. Option (2) is correct.

Explanation: The statement is 'you're growing so fast, it sends me a whirl'. Thus, 'It' means growing up.

103. Option (3) is correct.

Explanation: Mother is teaching her daughter to become a fearless person. Refer to the lines, "You must stand up tall means without fear."

104. **Option (2) is correct.**
Explanation: Mother wants her daughter to overcome challenges and become winner.
105. **Option (2) is correct.**
Explanation: The poem addresses a daughter. The poetess is her mother.
106. **Option (2) is correct.**
Explanation: For making a request, use of please is necessary to indicate politeness and respect.
107. **Option (1) is correct.**
Explanation: Words with same pronunciation are homonyms. Aisle and isle are pronounced same, but have different meaning and different spellings. Hence, this is the correct answer.
108. **Option (1) is correct.**
Explanation: A lexical word is a type of word that carries semantic meaning and contributes to the core content of a sentence. It is also known as a content word or open-class word. Nouns, verbs, adjectives, and adverbs are the most common lexical words.
109. **Option (4) is correct.**
Explanation: A passive sentence uses the verb form. The tense of the verb changes when the sentence changes from active to passive.
110. **Option (2) is correct.**
Explanation: Modal verbs are auxiliary verbs such as will, could, shall, might, should. Here, the two statements are showing the usage or meaning of modal verbs.
111. **Option (4) is correct.**
Explanation: Evaluation involves analytical abilities, which are of higher order thinking domain.
112. **Option (1) is correct.**
Explanation: Compounding and affixes are the processes of formation of words. Prefixes and suffixes play important role in the process of affixation of word formation. Compounding contains two or more root words.
113. **Option (3) is correct.**
Explanation: Decoding means to analyse and understand. It helps in comprehending the text by making sounds to figure out a word. Decoding also means translating the message from its sign format.
114. **Option (1) is correct.**
Explanation: Marks would be deducted for speaker 1 as he was not attentive in listening.
115. **Option (2) is correct.**
Explanation: Ellipsis means a series of dots. It implies an intentional omission of a word.

116. **Option (3) is correct.**
Explanation: A report is a brief paragraph about an event or an experience, written by third person. Ideas are logically arranged in a report.
117. **Option (3) is correct.**
Explanation: Past perfect continuous is an action that began in the past and continued up to another point in the past.
118. **Option (3) is correct.**
Explanation: An equal balance of man and woman assures that there is no gender inequality. Gendersensitization education "refers to education based on the teaching that propagates gender equality by improving curriculum and textbooks to include gender-positive material and any other learning activities that promote gender equality.
119. **Option (3) is correct.**
Explanation: Clutch of ducks is incorrect, rather it should be group or flock of ducks.
120. **Option (2) is correct.**
Explanation: To funnel or restrict the respondent's answer means to give the possible answer. It starts with open-ended questions but ends with closed questions. There is a specific answer to the question, "how many books are there?" Other questions are open ended.

Language: Hindi

121. **विकल्प (4) उचित है।**
व्याख्या—गद्यांश में लेखक ने शिक्षा का अर्थ बच्चों में विद्यमान शक्तियों को प्रस्फुटिक करना बताया है।
कहते हैं कि शिक्षा बालक के जन्म के साथ बालक को मिली प्रतिभा का विकास है। उसकी सोई हुई शक्तियों को जगाने का नाम ही शिक्षा है। मगर ऐसा तो तब सम्भव है जब हम यह जान लें कि कौन-कौन-सा बालक कौन-कौन-सी प्रतिभा के साथ पैदा हुआ है?
122. **विकल्प (4) उचित है।**
व्याख्या—लेखक के अनुसार सोई हुई शक्तियों को जगाने का नाम शिक्षा है। मगर ऐसा तो तब सम्भव है जब हम यह जान लें कि कौन-कौन-सा बालक कौन-कौन-सा बालक कौन-कौन-सी प्रतिभा के साथ पैदा हुआ है? उसके शरीर में एवं उसके मन-मस्तिष्क में कौन-कौन-सी शक्तियाँ साई हुई हैं? उसकी प्रदत्त प्रतिभा क्या है? और कौन-कौन-सी सुषुप्त शक्तियों को लिए हुए वह हमारे सामने उपस्थित हुआ है।

123. **विकल्प (3) उचित है।**
व्याख्या—बच्चों को शिक्षा देने के लिए सबसे पहले यह जरूरी है कि बच्चों की समस्त क्षमताओं, प्रतिभाओं को जानने के लिए उन्हें पढ़ना।
गद्यांश में लेखक ने बताया है कि बालक में कौन-सी प्रतिभा है? तथा उसके शरीर में एवं उसके मन-मस्तिष्क में कौन-कौन-सी शक्तियाँ सोई हुई हैं? इसके लिए यह आवश्यक है कि जो-जो बालक पाठशाला में आया है उसको हम पहले पढ़ें।
124. **विकल्प (3) उचित है।**
व्याख्या—इस गद्यांश में शिक्षा का यह सिद्धान्त निहित है कि शक्तियाँ सदैव सुषुप्त अवस्था में ही रहती हैं।
लेखक ने बताया है कि बालक प्रतिभा के साथ पैदा होता है। यह प्रतिभा और शक्तियाँ सुषुप्त अवस्था में होती हैं। उसकी सोई हुई शक्तियों को जगाने का नाम ही शिक्षा है।
125. **विकल्प (2) उचित है।**
व्याख्या—'हर बालक को पढ़-पढ़ कर पहचाने कि वह क्या है?' वाक्य में 'पहचाने' क्रिया का कर्ता 'हम' हो सकता है।
कर्ता—
(i) जो वाक्य में कार्य को करता है, वह कर्ता कहलाता है।
(ii) इसमें कार्य को करने वाले का पता चला है।
(iii) कर्ता कारक में विभक्ति चिन्ह के रूप में 'ने' का प्रयोग होता है।
126. **विकल्प (3) उचित है।**
व्याख्या—'उसकी प्रदत्त प्रतिभा क्या है?' वाक्य प्रश्नवाचक है।
वाक्य—
(i) शब्दों के व्यवस्थित रूप को वाक्य कहते हैं।
(ii) यह दो या दो से अधिक पदों का सार्थक समूह होता है, जिसका पूरा अर्थ निकलता है।
अर्थ के आधार पर वाक्य के भेद—
(i) विधान वाचक
(ii) निषेधवाचक
(iii) प्रश्नवाचक
(iv) विस्मयादिवाचक
(v) आज्ञावाचक
(vi) इच्छावाचक
(vii) संकेतवाचक
(viii) सन्देशवाचक
प्रश्नवाचक—
(i) जिन वाक्यों के द्वारा प्रश्न किया जाता है, उन्हें प्रश्नवाचक वाक्य कहते हैं।
127. **विकल्प (3) उचित है।**
व्याख्या—'शरीर' में 'इक' प्रत्यय लगने पर 'शारीरिक' शब्द बनेगा।

प्रत्यय—

- (i) वे शब्दांश जो दूसरे शब्दों के अन्त में जुड़कर अर्थ में परिवर्तन कर देते हैं, उन्हें प्रत्यय कहते हैं।
(ii) उदाहरण के लिए— बेल + अन = बेलन।

128. विकल्प (2) उचित है।

व्याख्या—लेखक के अनुसार शिक्षित होना और साक्षर होना दोनों में मूलभूत अन्तर होता है।

129. विकल्प (2) उचित है।

व्याख्या—यहाँ 'पढ़ा-लिखा' होने से तात्पर्य है अशिक्षित होना।

गद्यांश में लेखक ने बताया है कि मेरे गुरु श्री दयालचन्द्र जी सोनी तो पूरी एक काव्यात्मक पुस्तक लिख गए। इस पुस्तक का नाम है 'हूँ शिक्षि हूँ।' उनका आशय स्पष्ट है कि हर पढ़ा-लिखा आदमी अनपढ़ है। उन्होंने जब यह पुस्तक लिखी तो साफ कहा कि यह किताब उनके पूरे जीवन की शिक्षा का सार है। तब फिर हमें यह भी मान लेना चाहिए कि हमारा पूरा पढ़ा-लिखा समाज खासा अनपढ़ है।

130. विकल्प (3) उचित है।

व्याख्या—'गिरे विचार' से तात्पर्य है सत्य और हित से परे विचार। गिरे विचार के अन्तर्गत पाप द्वेष इत्यादि शामिल होते हैं, जो असत्य को महत्व देते हैं। गिरे विचारों में किसी का हित निहित नहीं होता।

131. विकल्प (2) उचित है।

व्याख्या—नौजवान शहीद ने अग्नि-बाण इसलिए चलाए क्योंकि वह सुराज स्थापित करना चाहता था। कवि ने लिखा है कि—
"वह चला कि अग्नि-बाण मारता,
पाप की अहा-अहा उजाड़ता,
वज्र बन गिरा गिरे विचार पर।"

132. विकल्प (4) उचित है।

व्याख्या—'दुराव' शब्द से तात्पर्य बैर से है। जहाँ अहंकार फरेब विद्यमान होता है, वहाँ सत्य दूर रहता है अर्थात् अहंकार का सत्य से बैर होता है।

133. विकल्प (2) उचित है।

व्याख्या—'जहाँ-जहाँ' शब्द में पुनरुक्त शब्द-युग्म है।

पुनरुक्त शब्द—

- (i) जब किसी शब्द की एक साथ दो बार आवृत्ति होती है और उनका समान अर्थ प्रकट होता है तो उसे पुनरुक्त शब्द कहते हैं।
(ii) उदाहरण के लिए— धीरे-धीरे, गड़-गड़ इत्यादि।

पुनरुक्त शब्द के प्रकार—

- (i) पूर्ण पुनरुक्त
(ii) अपूर्ण पुनरुक्त
(iii) प्रति-ध्वन्यात्मक पुनरुक्त
(iv) भिन्नात्मक पुनरुक्त

134. विकल्प (3) उचित है।

व्याख्या—'पाप' का विलोम शब्द 'पुण्य' है।

विलोम—

- (i) एक-दूसरे के विपरीत या उल्टा अर्थ प्रकट करने वाले शब्दों को विलोम शब्द कहते हैं।
(ii) उदाहरण के लिए हार का जीत, आजादी का गुलामी इत्यादि।

135. विकल्प (4) उचित है।

व्याख्या—नौजवान शहीद ने अहंकार और असत्य को नष्ट किया है। कवि ने अपनी यह बात इन पंक्तियों के माध्यम से इस प्रकार व्यक्त की है—

"दम्भ का जहाँ-जहाँ पड़ाव था,
सत्य से जहाँ-जहाँ दुराव था,"

136. विकल्प (4) उचित है।

व्याख्या—उच्च प्राथमिक स्तर पर कहानी, कविता पढ़ने के बाद यह जरूरी है कि बच्चे उन्हें अपने अनुभव संसार से जोड़ सकें।

मुख्य बिन्दु—

- (i) कहानी और कविता बच्चों को समाज से जोड़ती है।
(ii) कल्पनाशील बनाने में सहायक है।
(iii) सृजनात्मक शक्ति का विकास होता है।
(iv) बालकों को व्यवहार कुशल बनाती है।
कहानी, कविता जीवन-जगत से जुड़े होने चाहिए ताकि बालकों को उनके अनुभव संसार से जोड़ते हुए तथा उनके में व्यवहारिक ज्ञान का विकास करते हुए बच्चों के संवेदना-लोक की साथी बन सकें।

137. विकल्प (1) उचित है।

व्याख्या—प्लेटो का यह कथन है कि 'बच्चा बड़ों के बीच एक विदेशी की तरह होता है। यह इस भाषिक सच्चाई की ओर संकेत करता है कि बच्चे अपनी भाषा में बोलते हैं जिसे बड़े सही-सही नहीं समझ पाते।

बच्चा अत्यन्त छोटा होता है और उसे भाषाई ज्ञान नहीं होता। वह प्रारम्भ में अपने हाव-भाव के माध्यम से या संकेत माध्यम से अपनी बात कहता है। वह जिस परिवेश में रहता है, वहीं की भाषा ग्रहण करता है।

लार्ड मैकाले के मतानुसार, "बालक उस भाषा को शीघ्र सीखता है, जिसका व्याकरण वह नहीं जानता।"

चॉम्स्की के अनुसार, "जन्म से बच्चे सार्वभौमिक भाषा सिद्धांतों को समझने की क्षमता रखते हैं।" वाइगोत्स्की के अनुसार, "बच्चे सामाजिक अंतःक्रिया से भाषा सीखते हैं।"

पियाजे के अनुसार, "भाषा परिवेश के साथ अंतःक्रिया से सीखी जाती है।"

138. विकल्प (3) उचित है।

व्याख्या—'भाषा की कक्षा' में कहानियाँ विभिन्न प्रकार की संरचनाएँ और चिन्तन-विकास की सम्भावनाएँ लिए होती हैं।

मुख्य बिन्दु—

- (i) कल्पनाशील बनाने में सहायक है।
(ii) अपने अनुभवों की अभिव्यक्ति का सही माध्यम है।
(iii) सृजनात्मक शक्ति के विकास में सहायक है।
(iv) कहानियाँ बालकों को समाज और संस्कृति से जोड़ती हैं।

यह दुनिया की प्रकृति की कल्पना और अन्वेषण करने की क्षमता को बढ़ावा देता है।

यह उन्हें अपने स्वयं के अनुभवों के आधार पर अर्थ का निर्माण करने में सक्षम बनाता है।

139. विकल्प (2) उचित है।

व्याख्या—राष्ट्रीय पाठ्यचर्या की रूपरेखा 2005 के अनुसार भाषा-शिक्षण एक प्रकार से अन्य विषयों की कक्षाओं में भी मौजूद रहता है।

राष्ट्रीय पाठ्यचर्या की रूपरेखा (2005)—

- (i) ज्ञान को स्कूल के बाहरी जीवन से जोड़ा जाए।
(ii) पढ़ाई को रटत प्रणाली से युक्त रखा जाए।
(iii) पाठ्यचर्या पाठ्यक्रम केन्द्रित न हो बल्कि बाल केन्द्रित हो।
(iv) कक्षा-कक्ष को गतिविधियों से जोड़ा जाए।
(v) शिक्षण अधिगम में मातृभाषा का प्रयोग करें।
(vi) समावेशी शिक्षा पर बल दिया जाए।
(vii) विशिष्ट बालकों और सामान्य बालकों दोनों को एक साथ समावेशी कक्षा में पढ़ाया जाए।

एक समावेशी कक्षा सभी बालकों को एक साथ व समान शिक्षा ग्रहण करने की अनुशंसा करती है, चाहे वो भाषा, व्यवहार, शारीरिक रूप से कितने ही असमान क्यों न हो।

140. विकल्प (4) उचित है।

व्याख्या—भाषा-कौशलों के सन्दर्भ में यह कथन सही है कि सभी कौशल एक-दूसरे के साथ अन्तः सम्बन्धित होते हैं।

भाषा कौशल—

- (i) भाषा के ठीक से काम करने की योग्यता हासिल करना ही भाषा कौशल है।
(ii) भाषा के मुख्य चार कौशल हैं—सुनना, बोलना, पढ़ना और लिखना।

भाषा कौशल को दो भागों में बाँटा गया है—

- (i) प्रधान कौशल— यह सम्प्रेषण में सहयोग देता है। इसमें दो मुख्य कौशल हैं—सुनना और बोलना।
(ii) गौण कौशल— बालक परिवार, समाज और विद्यालय से भाषा सीखता है। इसके भी दो भेद हैं— पढ़ना और लिखना।

जिस प्रकार की भाषा हम सुनते हैं अनुकरण द्वारा उसी प्रकार की भाषा हम उच्चारित करते हैं। उच्चारित तथा पठित भाषा ही हमारी वर्तनी (लिखने) की शुद्धता का आधार बनती है। भाषा

के चारों कौशल एक-दूसरे से अंतःसंबंधित होते हैं, इन्हे एकीकृत रूप से पढ़ना चाहिए।

141. विकल्प (2) उचित है।

व्याख्या—उच्च प्राथमिक स्तर पर भाषा की पाठ्य-पुस्तक में विविध प्रकार की साहित्यिक रचनाओं के समावेश का मुख्य उद्देश्य यह है—विभिन्न प्रकार की साहित्यिक विधाओं की भाषाई संरचनाओं से परिचित होने का अवसर देना।

मुख्य बिन्दु—

- विभिन्न साहित्यिक विधाओं से बालक को परिचित कराना।
- साहित्यिक विधाओं की समझ विकसित करना।
- सृजनात्मक शक्ति का विकास करना।
- भाषा ज्ञान तथा शब्द भंडार में वृद्धि करना।

अतः निष्कर्ष निकलता है कि उच्च प्राथमिक स्तर पर भाषा की पाठ्य-पुस्तक में विविध प्रकार की साहित्यिक रचनाओं के समावेश का मुख्य उद्देश्य है—विभिन्न प्रकार की साहित्यिक विधाओं की भाषायी संरचनाओं से परिचित होने का अवसर देना।

142. विकल्प (3) उचित है।

व्याख्या—रश्मि अपनी कक्षा को बाहर मैदान में ले जाती है और पर्यावरण पर आधारित कविता-पाठ का कार्य करती है। रश्मि का उद्देश्य है कि मैदान के प्राकृतिक वातावरण के साथ सम्बन्ध जोड़ते हुए कविता को समझने का अवसर देना।

मुख्य बिन्दु—

- कक्षा को वास्तविक जीवन से जोड़कर शिक्षण देना।
- वास्तविक अनुभव के विकास में सहायक है।
- ज्ञान को स्कूल के बाहरी जीवन से जोड़ने का प्रयास।
- पढ़ाई को रटत प्रणाली से मुक्त करना।
- कक्षा-कक्ष को गतिविधियों से जोड़ना।

अतः हम कह सकते हैं कि रश्मि अपनी कक्षा को बाहर मैदान में ले जाती है और पर्यावरण पर आधारित कविता-पाठ का कार्य करती है। रश्मि का उद्देश्य है, मैदान के प्राकृतिक वातावरण के साथ संबंध जोड़ते हुए कविता को समझने का अवसर देना।

143. विकल्प (1) उचित है।

व्याख्या—भाषा में आकलन करने के बाद महत्वपूर्ण सोपान होना चाहिए कि आकलन से प्राप्त आँकड़ों के आधार पर बच्चों के अभिभावकों से विचार-विमर्श करें।

मुख्य बिन्दु—

- भाषा आकलन द्वारा अभिभावकों को अपने बच्चे के काम के बारे में जानकारी मिलती है।

(ii) अभिभावक अपने बच्चे की प्रगति से अवगत रहते हैं।

(iii) समस्याओं को समझकर उपचारात्मक शिक्षण में सहायक है।

(iv) हिन्दी भाषा के आकलन से प्राप्त आँकड़ों को 'पोर्टफोलियो' में संग्रहित करके रखा जाता है।

पोर्टफोलियो एक फाइल है, जिसका संबंध विद्यार्थियों के अधिगम से होता है। विद्यार्थियों द्वारा संपन्न कार्य का उद्देश्यपूर्ण व्यवस्थित संकलन जो विद्यार्थियों के उत्तम प्रयासों एवं क्रमिक विकास को दर्शाता है, विद्यार्थियों का पोर्टफोलियो कहलाता है। पोर्टफोलियो में छात्रों के दैनिक, मासिक, वार्षिक तथा कक्षावार उत्कृष्ट कार्यों को सुरक्षित रखा जाता है। विद्यार्थियों के भाषा संबंधी क्रमिक विकास का आकलन करने के लिए किसी शिक्षक की निर्भरता मुख्य रूप से पोर्टफोलियो के अवलोकन पर होती है।

144. विकल्प (3) उचित है।

व्याख्या—विद्यालय में एक से अधिक भाषाओं का शिक्षण बहुभाषिकता और राष्ट्रीय सद्भाव का प्रसार करता है।

मुख्य बिन्दु—

- इसके अन्तर्गत दो या उससे अधिक भाषाओं का प्रयोग किया जाता है।
- ब्लूम फील्ड के अनुसार—“बहुभाषिकता की स्थिति तब पैदा होती है जब व्यक्ति किसी ऐसे समाज में रहता है जो उसकी मातृभाषा से अलग भाषा बोलता है और उस समाज में रहते हुए वह उस अन्य भाषा में इतना पारंगत हो जाता है कि उस भाषा का प्रयोग मातृभाषा की तरह कर सकता है।”

भाषा शिक्षण के बारे में रवीन्द्रनाथ भाषा शिक्षण का परिचय देते हुए लिखते हैं कि—“भाषा शिक्षण के मूल में भाषा व्यवहार और भाषिक कौशल होते हैं स्वयं भाषा की अपनी संरचना या प्रकृति नहीं।”

145. विकल्प (2) उचित है।

व्याख्या—भाषा-शिक्षण की 'प्रत्यक्ष विधि' में भाषा-अर्जन की स्वाभाविक स्थिति का निर्माण होता है।

मुख्य बिन्दु—

- इसके अन्तर्गत बिना व्याकरण के नियमों की भाषा सिखाई जाती है।
- वार्तालाप के माध्यम से भाषा के सीखने पर अधिक बल दिया जाता है।
- मौखिक व लिखित अभ्यास द्वारा भाषा सिखाई जाती है।
- प्रत्यक्ष विधि में श्रव्य-दृश्य सामग्री का भी प्रयोग किया जाता है।
- वास्तविक परिस्थितियों में भाषा के व्यावहारिक रूपों को सहज रूप से सीखना ही प्रत्यक्ष विधि की विशेषता है।

इस विधि में मौखिक व लिखित अभ्यास द्वारा सीधे नयी भाषा सिखायी जाती है।

इस विधि में वार्तालाप के माध्यम से सीखने पर अधिक बल दिया जाता है।

यह विधि व्याकरण विधि के दोषों को दूर करने में प्रयोग में लायी जाती है।

इस विधि में व्याकरण का ज्ञान अप्रत्यक्ष रूप से दिया जाता है।

146. विकल्प (1) उचित है।

व्याख्या—भाषा में रचनात्मक आकलन का सर्वाधिक बेहतर उदाहरण है कि बच्चों को अपने खट्टे-मीठे अनुभव लिखने के लिए कहा जाए।

मुख्य बिन्दु—

- अभिव्यक्ति को प्रकट करने का सही माध्यम है।
- सृजनात्मक शक्ति के विकास में सहायक है।
- संज्ञानात्मक व्यवहार में सुधार में सहायक है।
- व्यावहारिक ज्ञान में सहायक है।
- रचनात्मक आकलन द्वारा छात्रों की शैक्षिक प्रगति का मूल्यांकन किया जा सकता है।

छात्र अपने मौलिक विचारों की अभिव्यक्ति को लिखित रूप देने तथा विभिन्न उद्देश्यों के लिए लिखने का माध्यम को चुनते हैं।

147. विकल्प (4) उचित है।

व्याख्या—हिन्दी भाषा के प्रश्न-पत्र में हम इस प्रश्न को सर्वाधिक उचित मानते हैं—लेखक ने पहाड़ों पर होने वाली बारिश का वर्णन एक अलग तरीके से किया है। आप बारिश सम्बन्धी अपना अनुभव लिखिए।

मुख्य बिन्दु—

- बारिश का वर्णन करते हुए छात्र अपनी भाषा का प्रयोग करेंगे।
- अपने अनुभवों को अभिव्यक्त करेंगे।
- इस प्रश्न से छात्रों की सृजनात्मक शक्ति का विकास होगा।
- इससे संज्ञानात्मक विकास होगा।
- बौद्धिक क्षमता विकसित होगी।

प्रश्न-पत्र में पूछे गये प्रश्नों का उद्देश्य बालकों की भाषा-प्रयोग क्षमता का आकलन करना होता है। आकलन-आकलन को एक संवादात्मक एवं रचनात्मक प्रक्रिया माना जाता है, जिसके द्वारा शिक्षक को यह ज्ञात होता है कि बालक का उचित अधिगम हो रहा है या नहीं। भाषा क्षमता का आकलन से तात्पर्य बच्चे की भाषा प्रयोग की क्षमता को ध्यान में रखने से है, अर्थात् बच्चा विभिन्न संदर्भों में किस प्रकार भाषा प्रयोग कर रहा है।

148. विकल्प (2) उचित है।

व्याख्या—चॉम्स्की के अनुसार भाषा-अर्जन क्षमता के कारण बच्चे भाषा सीखते हैं।

चौम्स्की—

- (i) इनका मानना है कि बालक में भाषा को सीखने की क्षमता जन्मजात होती है।
- (ii) भाषा-अर्जन की क्षमता कुछ निश्चित समय तक होती है।
- (iii) भाषा को सीखने हेतु वातावरण और संस्कृति का महत्वपूर्ण स्थान होता है।
- (iv) बालक में भाषा अधिग्रहण यन्त्र (LAD) होता है, जिसकी सहायता से वह किसी भी भाषा को तीव्र गति से सीख पाता है। बच्चों में भाषा अर्जन क्षमता जन्मजात होती है। बच्चे भाषा-अर्जन क्षमता के कारण ही भाषा सीखते हैं। बच्चों में भाषा अर्जित करने की सहजात योग्यता होती है।

149. विकल्प (2) उचित है।

व्याख्या—भाषा-शिक्षण में अनिवार्य है—समग्रतावादी दृष्टिकोण।

समग्रतावादी दृष्टिकोण—

- (i) यह होल लैंग्वेज अप्रोच के नाम से भी जाना जाता है।

- (ii) यह भाषा को सम्प्रेषण का माध्यम मानने और शब्द-कोश और वाक्यगत नियमों के बन्धन के अतिरिक्त अन्य पहलुओं पर भी ध्यान करता है।
- (iii) एनसीएफ 2005 के आधार पत्र के अनुसार—“शिक्षा में भाषा की भूमिका को ठीक ढंग से सराहने के लिए हमें समग्रतावादी दृष्टिकोण अपनाने की जरूरत है। हमें इसके संरचनागत, साहित्यिक, सांस्कृतिक, मनोवैज्ञानिक स्थिति में रखकर इसकी पड़ताल करनी होगी।”

साहित्य का पठन-पाठन, वाचन और श्रवण भी भाषा के संस्कारों से परिचित कराता है। लोककथाओं का दादा-दादी से कहानियों के रूप में सुनना।

बचपन में कविता, कहानी, लघु उपन्यास, यहां तक की कॉमिक्स, चंपक, नंदन, बालहंस, चंदामामा पढ़ना भी साहित्य से रूबरू होना है। साहित्य से संवाद भी भाषा के साथ हमारे रिश्तों को प्रभावित करता है।

150. विकल्प (3) उचित है।

व्याख्या—विशेष आवश्यकता वाले बच्चों की भाषा का आकलन करते समय उनकी क्षमता और सीमाओं का ध्यान रखना चाहिए।

विशेष आवश्यकता वाले बच्चे—

- (i) इन्हें विशिष्ट बालक भी कहते हैं।
- (ii) इनका बौद्धिक स्तर प्रायः सामान्य बुद्धिलब्धि से अधिक अर्थात् 120 की सीमा में होता है या शारीरिक, मानसिक दृष्टि से बाधित होते हैं।
- (iii) हावर्ड के अनुसार—“विशिष्ट बालकों की श्रेणी में वे बच्चे आते हैं जिन्हें सीखने में कठिनाई का अनुभव होता है या जिनका मानसिक या शैक्षिक निष्पादन या सृजन अत्यन्त उच्च कोटि का होता है या जिनको व्यावहारिक सांवेगिक एवं समाजिक समस्याएँ घेर लेती हैं या वे विभिन्न शारीरिक अपंगताओं या निर्बलताओं से पीड़ित रहते हैं जिसके कारण ही उनके लिए अलग से विशिष्ट प्रकार की शिक्षा व्यवस्था करनी होती है।”