

CTET Solved Paper

Paper-1
03rd January 2022

Time: 2 hours 30 mins.

Total Marks: 150

Child Development and Pedagogy

1. As per contemporary perspectives, the course of child development is:
 - (1) uniform across children and specific milestones are definitely achieved by all children as they reach a certain age.
 - (2) multi directional since children grow up in varying contexts.
 - (3) completely unpredictable even though development is uni-directional for all.
 - (4) determined solely by hereditary information received from parents.
2. principle of development states that development of motor skills start from centre of the body and proceeds towards the extremities.
 - (1) Spiral
 - (2) Specificity
 - (3) Proximodistal
 - (4) Cephalocaudal
3. At which stage of development do children actively engage in make believe play?
 - (1) Infancy
 - (2) Early childhood
 - (3) Middle childhood
 - (4) Adolescence
4. Which of the following are secondary agencies of socialization?
 - (i) Family
 - (ii) Media
 - (iii) Religious institutions
 - (iv) School
 - (1) (i) (ii) (iv)
 - (2) (i) (iii) (iv)
 - (3) (ii) (iii) (iv)
 - (4) (i) (iv)
5. Ruhi is shown three pencils and she observes that pencil A is longer than pencil B and pencil B is longer than pencil C. When Ruhi infers that A is longer pencil than C, which characteristic of Jean Piaget's cognitive development is she demonstrating?
 - (1) Seriation
 - (2) Conservation
 - (3) Transitive thought
 - (4) Hypothetico – deductive reasoning
6. According to Jean Piaget's theory of cognitive development, children in the operational stage are capable of:
 - (1) Reversibility
 - (2) Hypothetico – deductive reasoning
 - (3) Abstract thinking
 - (4) Propositional reasoning
7. Which of the following stage is NOT proposed by Lawrence Kohlberg in his theory of Moral reasoning?
 - (1) Conventional stage
 - (2) Unconventional stage
 - (3) Post Conventional stage
 - (4) Pre Conventional stage
8. A teacher wants to design the teaching – learning processes in her classroom on Lev-Vygotsky's social constructivism principles. Which of the following should she avoid?
 - (1) Designing teaching – learning experiences based in social contexts.
 - (2) Closely observing the students attempts of learning.
 - (3) Use of formal standardised tests to assess learning.
 - (4) Providing scaffolding when needed.
9. To facilitate student's learning, which of the following is suggested by Lev Vygotsky's in his theory of social constructivism?
 - (1) Peer Collaboration
 - (2) Non-interference of cultural tools
 - (3) Focus on Rote memorization
 - (4) Decontextualized curriculum
10. A teacher in a progressive classroom should believe that:
 - (1) Class should always be in strict control and only teacher should dictate instruction.
 - (2) Learning takes place only in the classroom.
 - (3) Learners bring a rich variety of experiences with them in the classroom.
 - (4) Learners learn most meaningfully only through drill and practice.
11. Which of the following theorist dismissed that intelligence is unitary and proposed that there exist several distinct independent intelligences?
 - (1) Jean Piaget
 - (2) Howard Gardner
 - (3) Lev Vygotsky
 - (4) Lawrence Kohlberg
12. Rohan's response on receiving a toy doll was, 'I don't like this toy because boys do not play with dolls'. This is an example of:
 - (1) Gender relevance
 - (2) Gender discrimination
 - (3) Gender stereotype
 - (4) Gender stability
13. A teacher facilitates and support her students to work on multiple drafts for an essay over a period of one month. If she consider all the drafts of each student as well as the process of working on the same, what kind of assessment is she using?
 - (1) Summative
 - (2) Norm-referenced
 - (3) Formative
 - (4) Standardized

14. In a multi-lingual classroom, a teacher should –
- (1) Discourage the use of native language for communication.
 - (2) Recognize only the predominant language that is used by majority students.
 - (3) Create awareness about diversity of languages and allow their use as per student's preference.
 - (4) Discourage the use of languages other than one target language such as English.
15. As per National education policy 2020, education must:
- (i) Be focused only on predetermined content
 - (ii) Focus on problem solving.
 - (iii) Develop critical thinking among learners.
 - (iv) Be inquiry driven and discovery-oriented.
- (1) (ii) (iii) (iv) (2) (i) (ii) (iii)
 - (3) (i) (ii) (iv) (4) (i) (ii) (iii) (iv)
16. In order to complete her syllabus, a teacher always expects answers from a preferred group of learners. The teacher's action is:
- (1) is justified for completing the syllabus.
 - (2) is showing that the teacher has good skills to identify best students of her class.
 - (3) is depriving other students of equal opportunity.
 - (4) would be effective in ensuring equal participation of all students.
17. To support inclusion of student having Dyscalculia, it is important to:
- (1) set strict time constraints to finish task.
 - (2) provide visual calculators and math apps to student.
 - (3) include additional content to over shadow relevant in text context.
 - (4) use only standardized ways for assessing student's learning.
18. Which of the following materials will **NOT** be beneficial for a student with visual impairment?
- (1) Tactile globe
 - (2) Books with small print
 - (3) Screen reading software
 - (4) Braille books
19. **Assertion (A):** In a language classroom, teacher should provide audio books along with text materials.
Reason (R): Multiple options of representation cater to needs of diverse learners such as those with reading related disorders.
 Choose the correct option.
- (1) Both (A) and (R) are true and (R) is the correct explanation of (A).
 - (2) Both (A) and (R) are true but (R) is not the correct explanation of (A).
 - (3) (A) is true and (R) is false.
 - (4) Both (A) and (R) are false.
20. A creative child is likely to have:
- (i) Divergent thinking
 - (ii) Convergent thinking
 - (iii) Ability for abstract thinking
 - (iv) Ability for generating novel products.
- (1) (i), (ii) (iii) (2) (i) (ii) (iv)
 - (3) (i) (iii) (iv) (4) (ii) (iii) (iv)
21. **Assertion (A):** Teacher should employ multiple ways of assessment in their classroom.
Reason (R): Children success and failure in classroom cannot be accurately and adequately determined only by a paper – pencil test.
 Choose the correct option.
- (1) Both (A) and (R) are true and (R) is the correct explanation of (A).
 - (2) Both (A) and (R) are true but (R) is not the correct explanation of (A).
 - (3) (A) is true and (R) is false.
 - (4) Both (A) and (R) are false.
22. To teach a concept, a teacher is giving multiple examples and subsequently ask students to form a rule considering the information gathered through those examples. Which of the following approach is being used here for concept formation among children?
- (1) Deductive (2) Inductive
 - (3) Imitative (4) Competitive
23. To gain cooperation of students in classroom management, a teacher should:
- (1) establish strict and rigid classroom rules herself.
 - (2) frequently complain to parents about student's misbehaviour.
 - (3) reprimand the students for not following the rules.
 - (4) establish norms and rules for classroom in collaboration with students.
24. Choose the option that correctly represents the context(s) in which learning takes place in children.
- (i) Games and play
 - (ii) Home
 - (iii) Classrooms
- (1) (i) (iii) (2) (ii) (iii)
 - (3) (i) (ii) (iii) (4) (iii)
25. Which of the following is **NOT** an effective way to facilitate problem solving skills among students?
- (1) Facilitate discussion on the topics and encourage students for participation.
 - (2) Encourage students to brainstorm and generate ideas to solve problems.
 - (3) Provide students with a variety of learning materials to find solution of the problem.
 - (4) Emphasize one use of predetermined step by step procedure for every problem.
26. Which of these is characteristic of a constructivist classroom?
- (1) Learners are passive in the process of learning.
 - (2) Maximum emphasis is given on rote memorization of the textbook.
 - (3) Asking of questions by children is not encouraged in the classroom.
 - (4) The previous experiences of children are used for construction of new knowledge in the classroom.
27. Which of the following belief of a teacher is detrimental to student's learning?
- (1) Errors are a part of the process of learning.
 - (2) Making errors is a shameful act for the learners
 - (3) Errors provide insight in to the gaps in the conceptual understanding of the learner.

- (4) Learners must be given the space to make errors without fear of being reprimanded.
28. Which of the following is an example of extrinsic motivation?
- While doing research, Arman consults various sources to be sure about his learnings.
 - Rayon researches from many sources for a project to get a cash prize.
 - To ensure self-satisfaction, Sitara takes regular feedback from her seniors.
 - For personal interest and to improve his capabilities, Kulmeet practices the task regularly.
29. During the Covid-19 Pandemic has negatively affected the performance of students in examination. Which of the following relationship is highlighted in this statement?
- Competition and Cognition
 - Cognition and Emotions
 - Heredity and performance
 - Heredity and Environment
30. Learning is more meaningful and effective when it is majorly:
- Teacher directed
 - Directed by peers
 - Textbook centric
 - Self-directed
35. The factors of any numbers are the number.
- Equal to or less than
 - Equal to or greater than
 - Equal to
 - Less than
36. Venu found his birth certificate while cleaning the home on 25th September 2021. He noted that the date of birth in the certificate was written as 5th December 1995. What was Venu approximate age when he found the certificate?
- 24 years 11 months
 - 25 years $9\frac{1}{2}$ months
 - 25 years $3\frac{1}{2}$ months
 - 26 years 3 months
37. The height of five persons is given below:
163 cm, 161 cm, 156 cm, 159 cm, 162 cm.
What is the sum of height in meters ?
- 7 m 10 cm
 - 8 m 1 cm
 - 8 m 10 cm
 - 9 m 1 cm
38. 1729 is called the Ramanujan number because it is the smallest number expressible as the sum of two cubes in two different ways. Which of the following pairs of numbers will give cubes of this number?
- (1, 12) and (9, 8)
 - (1, 12) and (10, 9)
 - (2, 11) and (10, 9)
 - (2, 11) and (9, 8)
39. Three friends receive message on their mobile phones at an interval of 20 minutes, 30 minutes and 45 minutes respectively. They start receiving message together at a particular time. After how much time will they receive message again on their mobile phone altogether?
- 1.5 hours
 - 2 hours
 - 2.5 hours
 - 3 hours
40. Amongst the following fractions, the largest and the smallest fractions, respectively are:
- $$\frac{3}{4}, \frac{6}{7}, \frac{1}{2}, \frac{2}{3}, \frac{4}{5}, \frac{5}{6}$$
- $\frac{6}{7}$ and $\frac{1}{2}$
 - $\frac{2}{3}$ and $\frac{3}{4}$
 - $\frac{4}{5}$ and $\frac{3}{4}$
 - $\frac{1}{2}$ and $\frac{6}{7}$
41. Observe the pattern and write the numbers at
- $$1 + 3 = 4$$
- $$1 + 3 + 5 = 9$$
- $$1 + 3 + 5 + 7 = 16$$
- $$1 + 3 + 5 + 7 + 9 = 25$$
- $$1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 = \dots\dots\dots$$
- 36
 - 64
 - 81
 - 100
42. The rates of various Stationary items are given below:
- | | |
|---------------------------|----------|
| A packet of pencils | - ₹22.00 |
| A packet of pen | - ₹37.50 |
| One eraser | - ₹3.50 |
| One sharpener | - ₹4.50 |
| A packet of pastel sheets | - ₹48.00 |
| One ruler | - ₹10.00 |

Mathematics

31. The table shows the marks obtained of three students before and after studying mathematics in a group:

Name	Marks obtained before studying in group (out of 100)	Marks obtained after studying in group (out of 100)
Mansi	67	79
Harman	54	60
Faisal	63	74

Which is the approximate average marks obtained by all the three students together in each type of study?

- 73.2, 64.77
 - 71, 61.33
 - 64.77, 73.2
 - 61.33, 71
32. Which of the following groups of letters have both horizontal and vertical lines of symmetry?
- C, X, T
 - X, H, O
 - X, Y, Z
 - A, B, C
33. Rakesh and Sania are discussing with each other. Rakesh says 'The radius is double of the diameter' and Sania says 'It is half of the diameter'. Which of the following is the correct option?
- Rakesh is correct and Sania is wrong
 - Sania is correct and Rakesh is wrong
 - Both are wrong because radius and diameter are equal
 - Both are wrong because there is no relationship between radius and diameter
34. Areeba finds angles in various English letters and numerical digits. In which of the following groups she will only find right angles?
- K, 7, T
 - X, 4, N
 - H, 5, E
 - M, 3, L

- Harpeet buys one packet of pencil, two packets of pens, three erasers, one sharpener, two packets of pastel sheets and one ruler. How much would be required to pay?
- (1) ₹218.00 (2) ₹236.50
(3) ₹185.00 (4) ₹193.50
43. What will be the remainder when 10011 is divided by 101?
- (1) 9 (2) 11
(3) 12 (4) 13
44. Select the least number which is a perfect square and divisible by each of the numbers 16, 20 and 24.
- (1) 1600 (2) 3600
(3) 6400 (4) 14400
45. The product of the place values of two sixes in 786364 is
- (1) 36 (2) 36000
(3) 360000 (4) 6060
46. A mathematics teacher posed the following question to her class:
"Take four digits 7, 8, 4, 6. Make the smallest and the largest four-digit number such that no digit is repeated in them."
After the various responses of the students, she asked the students, "Think about the arrangement of the digits in both the numbers you have formed. Can you say how the largest and the smallest number is formed? Write down your procedure."
Which of the following statements is most appropriate in the above context?
- (1) The teacher is saving her time of assessing the students by asking the students to assess their answers themselves.
(2) The teacher is keeping the students engaged to maintain discipline in the class.
(3) The teacher wants to understand the students' thinking process involved in the answers given by them.
(4) The teacher is confusing the students who have given the correct answer so that they check their answers again.
47. Which of the following is **NOT** used for Formative Assessment?
- (1) Student Portfolios
(2) Anecdotal Records
(3) Term-End Examination
(4) Field Trips
48. A mathematics teacher posed the following word problem to his students:
"One copy of a newspaper has 12 pages. Everyday 10,500 copies are printed. How many total pages are printed every day?
A student responded that the answer would be between 1,25,000-1,30,000.
Which of the following statements is correct in the above context?
- (1) The teacher should discourage the student from giving inaccurate answer
(2) Estimation is used in daily life mathematics hence, the teacher should appreciate the student's estimation of answer to near accuracy.
(3) The teacher should ignore the response of the student and focus on teaching the algorithm of multiplication
(4) Mathematics requires exact answers so estimation has no relevance in mathematics
49. According to National Curriculum Framework, NCF (2005), which of the following represents a vision of 'classroom environment for doing mathematics'?
- (A) Students working in groups and looking for different strategies to solve a problem while making connections with real-life situations
(B) Students solving textbook exercises based on example solved by teacher
(C) Teacher reflecting on the process of learning and seeing mistakes as opportunities for learning
(D) Students copying the solution of questions from the backboard.
- Choose the correct option:**
- (1) (A) and (B) (2) (B) and (D)
(3) (A) and (C) (4) (C) and (D)
50. A primary school mathematics teacher wants her students to appreciate the use of Data Handling in daily life for organising, representing and interpreting the information. Which of the following would help the teacher to achieve the learning outcome?
- (1) Discussing solved examples from the textbooks
(2) Using various railway time-tables, surveys published in newspapers etc.
(3) Explaining various ways of data representation
(4) Teaching them various formal ways of representing the data.
51. Which of the following strategies is most appropriate to introduce the concept of fractions in primary classes?
- (1) Writing the fractions in the form of p/q where $q \neq 0$ on the blackboard and explaining the symbols
(2) Writing an example of fraction and then marking a point on the number line to represent the fraction
(3) Using paper folding activities with symmetrical cut-outs of circles and rectangular strips to represent fraction
(4) Giving two examples of a fraction and asking the students to write ten similar examples of fractions in their notebooks
52. "Mathematics has its own language of words and symbols which is far removed from the everyday speech of the students." Which of the following is most appropriate in the context of given statement?
- (1) Teacher should help students to memorise the vocabulary and symbols used in mathematics.
(2) Teacher should contextualise the mathematics problems and make mathematics a part of student's life experiences.
(3) Teacher should focus only on solving word problems in mathematics to help students in learning the language of mathematics.
(4) Teacher should display the chart of important mathematical symbols and formulas in the classroom.

53. A class V student is able to classify two-dimensional shape into categories based on their properties. According to Van-Hiele's theory of geometrical development, she is at level of geometrical reasoning.
 (1) Analysis (2) Axiomatic
 (3) Recognition (4) Deduction
54. A primary class mathematics teacher poses the following word problem to his students:
 "Samina goes to bed at 10 minutes to 9. Kirti goes to bed 20 minutes later than Samina. What time does Kirti go to bed?"
 One of the students gave 20 as the answer. He explains, "It says Kirti goes to bed 20 minutes later, so the answer must be 20."
 According to Newman, the answer given by the student is an example of:
 (1) Comprehension Error (2) Reading Error
 (3) Process Skill Error (4) Careless Error
55. National Curriculum Framework (2005) emphasizes that school mathematics must be activity-oriented. This is because:
 (A) It helps students to develop skills to earn livelihood.
 (B) It motivates students to solve meaningful problems in mathematics.
 (C) It provides concrete experiences to understand abstract concepts in mathematics.
 (D) It provides recreation time to children in primary classes.
Choose the correct option:
 (1) (B) and (C) (2) (A) and (C)
 (3) Only (D) (4) (A) and (D)
56. Which of the following tool/tools of assessment is/are appropriate for students facing mathematics anxiety?
 (a) Norm Referenced Assessment
 (b) Cooperative Learning Projects
 (c) Summative Assessment
 (d) Formative Assessments
Choose the correct option:
 (1) (a) and (c) (2) (b) and (d)
 (3) Only (c) (4) (b) and (c)
57. In a mathematics classroom, a student counts on his fingers to solve the problems on addition in following ways:
 $3 + 9 = 4, 5, 6, 7, 8, 9, 10, 11, 12$
 $9 + 3 = 10, 11, 12$
 Which of the following statements is most appropriate regarding the above process used by the student?
 (1) This process should be ignored as it is not algorithmic
 (2) The student is unable to use the commutative law of addition in solving problems on addition.
 (3) The student should be discouraged to count on fingers as it is not a formal method to solve a problem
 (4) It is an appropriate algorithm to solve the questions based on addition.
58. Which one of the following is **NOT** a problem-solving strategy in mathematics?

- (1) Solving Backwards
 (2) Graphic representation
 (3) Rote Memorisation
 (4) Trial and error
59. A mathematics teacher posed the following question to his students "Write a pair of Integers whose sum gives negative integers."
 The above question is an example of:
 (1) Open-ended question
 (2) Close-ended question
 (3) Recall based question
 (4) Multiple choice question
60. Read the following statement:
 "In mathematics, from concrete objects we abstract set of Natural Numbers. In this set we include zero and get a set of Whole Numbers. We include negative numbers in this set to get a set of Integers. To Integers, we add positive and negative fractions to get a set of Rational Numbers"
 The above statements reflects this:
 (1) Linear arrangement of concepts in mathematics.
 (2) Hierarchical nature of mathematics.
 (3) Concrete nature of concepts in mathematics.
 (4) Concepts in mathematics move from abstract to concrete.

Environmental Studies

61. Which of the following animals front teeth keep growing throughout its life?
 (1) Cat (2) Squirrel
 (3) Snake (4) Tiger
62. Identity the most suitable characteristic(s) from the given options about the honeybee
 (A) Only the queen bee lays the eggs.
 (B) The male bees have no special role as worker.
 (C) All female bee lay the eggs.
 (D) Worker bees look for food and bring it to the bee hive.
 (1) A, B & C (2) A & C
 (3) A, B & D (4) A & D
63. People who have been living in forest for at least 25 years, have a right over the forest land and what is grown on it. This act is derived from ?
 (1) Right to forest act 2007
 (2) Indian forest act 1927
 (3) National forest, 1988
 (4) Indian forest amendment act, 2019
64. Jhoom farming is
 (1) organic farming
 (2) slash and burn farming
 (3) limited use of pesticides
 (4) limited use of Chemical fertilizer
65. Roland Ross received Nobel Prize in medicine in 1902 for discovering that
 (1) Dengue is transmitted by mosquito
 (2) Malaria is transmitted by mosquito
 (3) Chikungunya is transmitted by mosquito
 (4) Plague is transmitted by fleas
66. Which of the following part of cinchona tree is used to treat malaria ?
 (1) Root (2) Bark
 (3) Leaves (4) Seed

67. Poisonous teeth of snakes are called
 (1) Pangs (2) Fangs
 (3) Incisors (4) scales
68. Which of the following is a **non-poisonous** snake found in India
 (1) Russell's viper (2) Saw-scaled viper
 (3) Indian Rock Python (4) Common Krait
69. Vermi-composting is a method of composting that uses :
 (1) Tapeworm (2) Leeches
 (3) Earthworm (4) Hookworm
70. Pashmina variety of wool is obtained from which animal ?
 (1) Sheep (2) Camel
 (3) Goat (4) Alpaca
71. Incomplete burning of fossil fuels emits :
 (1) CO (2) CO₂
 (3) SO₂ (4) NO
72. A technique of watering plants by making use of narrow tubing which delivers water directly to the base of the plant is called
 (1) Nano-irrigation (2) Micro-irrigation
 (3) Femto-irrigation (4) Drip-irrigation
73. Which of the following plants traps and eats insects?
 (1) Cuscuta plant (2) Sunflower plant
 (3) Cactus plant (4) Pitcher plant
74. Collection of rain water for future use is called
 (1) Rain water collection
 (2) Rain water pumping
 (3) Rain digging
 (4) Rain water harvesting
75. Which of the following diseases is spread by mosquitoes ?
 (A) Malaria (B) Pneumonia
 (C) Dengue (D) Chikungunya
 (1) A and C (2) B, C and D
 (3) A, C and D (4) A only
76. Child-centred classrooms ensure conducive environment for students to learn. Which of the following suggests the same ?
 (1) Teacher gives instructions and expects students to obey and be disciplined.
 (2) Teacher reads the textbook, write questions and answers on the blackboard and asks students to copy them.
 (3) Teacher provides learning situations that give students an opportunity to observe, explore, question, experience and develop an understanding of various concepts.
 (4) Teacher controls what happens in the classroom and students' participation is minimal.
77. In class V chapter 'Across the wall' a teacher Arif allows students to share experiences of sports they play. Which of the following best explains his attempts ?
 (1) Develop an understanding of sports rule.
 (2) Develop values related to sports.
 (3) Develop an understanding of issues like similar games for boys and girls, equal opportunities for all and team spirit.
 (4) Develop ability to share personal experience.
78. Which of the following is the most suitable to transact EVS in primary classrooms ?
 (1) Lecture method
 (2) Chalk and talk method
 (3) Inquiry based Teaching
 (4) Jug and mug approach
79. Field visits are important in EVS teaching. Which of the following is true for such visits ?
 (1) Going to a place near the school with pre-planning and follow-up activity.
 (2) Going to a distant and well-known place.
 (3) Going to a near by place.
 (4) Going to a place of your choice.
80. An EVS classroom should be a happy classroom. Which one of the following statement is true in this regard ?
 (1) Teacher remains happy in the class and students follow her instructions happily.
 (2) Administer strict discipline so that they remain focused in written works.
 (3) Observe, explore ask questions and do activities.
 (4) Ensure that they read the book and underline the text for better comprehension.
81. Family tree is a useful tool for developing analytical thinking among children
 (1) It is about joint family and their relationships.
 (2) It is only about the immediate family members.
 (3) It is only about the grandparents of the family and their relationships between the other family members.
 (4) It pertains to relationships between members of the family across several generations.
82. Indicator for assessment in EVS is:
 (1) Discussing (2) Recalling
 (3) Stating (4) Listing
83. Under the theme 'mapping' for class III, which activity would be the **most appropriate** for students?
 (1) Ask them to draw a sketch of their house.
 (2) Ask them to draw the route from their home to the school.
 (3) Ask them to draw a diagram of their classroom.
 (4) Ask them to draw a sketch of their neighbourhood.
84. A teacher has to teach the sub-theme 'Animals' to class I students. Which of the following strategy is more appropriate to transact this theme to the learner
 (1) Asks students to list out names of animals.
 (2) Tell names of animals to the students.
 (3) Takes students on a trip to the zoo to give them concrete experience.
 (4) Shows coloured photographs of a variety of animals to give them understanding about animals.
85. Dr. Beaumont's experiments helps students in understanding the role of a scientist. Arrange the steps given below of scientific method in a proper sequence:
 1. Record results and draw conclusions
 2. Propose a hypothesis
 3. Ask a question
 4. Test the Predictions
 5. Make Predictions

6. Make an observation
 (1) 1, 2, 3, 4, 5, 6 (2) 1, 3, 2, 5, 4, 6
 (3) 6, 4, 5, 2, 3, 1 (4) 6, 3, 2, 5, 4, 1
86. The best strategy of giving students the experience of biological diversity
 (1) Give them books and articles to study about bird species.
 (2) Show them documentaries on migratory birds.
 (3) Take them to a bird sanctuary for observing.
 (4) Giving talks and lectures on endangered birds
87. Aditya is an gifted boy and feels his class teachers should cater to his curiosity. What intervention is his teacher required to make?
 (1) Give extra time to him
 (2) Being more affectionate to him
 (3) Give him extra responsibility of leading the class
 (4) Use some customized material to teach him
88. Which one of the following is a part of environmental studies?
 (1) Issues concern of science , social sciences
 (2) Concepts of environmental "education"
 (3) Issues concerns of social sciences
 (4) Issues & concerns of social inequalities
89. Dramatization is considered as a good method for teaching - learning of EVS for slow learners. Which is the most appropriate reason(s) for selecting dramatization for them ?
 A. Traditional drama technique make it easy for them to relate to a concept.
 B. Interactive drama stay with students memory for long.
 C. Slow learners enjoy acting a lot.
 (1) A & B (2) A & C
 (3) B & C (4) A, B & C
90. EVS textbook support students to :
 (1) memorise the issues & concerns of EVS subject.
 (2) describe the issues and concerns of EVS subject.
 (3) construct knowledge through all issues.
 (4) respond to the issues and concerns of EVS subject.

Language: English

Direction (91-99): Read the following passage and complete the statements/answer the questions by choosing the best options from the given ones.

1. Rural India faces serious shortages - power, water, health facilities, roads etc. These are known and recognised. However, the role of technology in solving these and other problems is barely acknowledged and the actual availability of technology in rural areas is marginal. The backbone of the rural economy is agriculture, which also provides substance to over half the country's population. The 'Green Revolution of the 1970s was, in fact, powered by the scientific work in various agricultural research institutions. While some fault the Green Revolution for excessive exploitation of water and land resources through overuse of the fertilisers, it did bring about a wheat surplus and prosperity in certain pockets of the country.
2. In rural India today, there is a dire inadequacy of both science (i.e. knowledge) and technology (which

derives from science and manifests itself in physical form). The scope to apply technology to both farm and non-farm activities in rural areas is huge, as are the potential benefits. In fact, crop yields are far lower than what they are in demonstration farms, where science and technology are more fully applied. Technologies that reduce power consumption of pump are vital; unfortunately, their use is minimal, since agricultural power is free or largely subsidised. Similarly, there is little incentive to optimise - through technology or otherwise - water use, especially in irrigated areas (a third of total arable land), given the water rates.

3. Post-harvest technologies for processing and adding value could greatly enhance rural employment and incomes but at present deployment of technology is marginal. Cold storage and cold chains for transportation in market are of great importance for many agriculture products particularly, fruits and vegetables but are non-existent. These are clearly technologies with an immediate return on investment, and benefit for all, the farmers, the end customer, the technology provider.
91. Read the following statements:
 (a) There is no scope of applying technology to an advantage in rural areas.
 (b) However, it has no adverse effect on crop production.
 (1) (a) is correct and (b) is incorrect
 (2) (a) is incorrect and (b) is correct
 (3) both (a) and (b) are correct
 (4) both (a) and (b) are incorrect
92. Overuse of fertilisers led to:
 (1) damaged land
 (2) wheat surplus at some places
 (3) both 1 and 2
 (4) severe power shortage
93. Read the following statements
 (a) There is sufficient availability of technology in rural areas.
 (b) There is need to use technology to reduce power consumption.
 (c) So, water is used very economically for irrigation purpose.
 (1) Both (b) and (c) are false.
 (2) Both (a) and (b) are true.
 (3) (a) is false but (b) is true.
 (4) (c) is true but (a) is false.
94. Cold storage can benefit everyone by providing.
 (1) cheaper transportation
 (2) cheap commodities by avoiding wastage
 (3) improvement in the quality of vegetables
 (4) a richer fruit crop
95. What percentage of population is dependent on agriculture?
 (1) more than 50% (2) less than 50%
 (3) exactly 50% (4) 100%
96. 'Vital' in para 2 means the same as:
 (1) essential (2) lively
 (3) active (4) energetic
97. 'technology' in para 2 is used as a/an:
 (1) verb (2) adverb

- (3) adjective (4) noun
98. 'marginal' in para 1 means the same as:
 (1) little (2) not much
 (3) sufficient (4) abundant
99. 'there is little incentive' (para 2). The word incentive is used as a/an:
 (1) verb (2) adverb
 (3) noun (4) adjective

Direction (100-105) : Read the following stanza and answer the question/complete the statements by choosing the best option from those given below.

When you're up against a trouble,
 Meet it squarely, face to face;
 Lift your chin and set your shoulders,
 Plant your feet and take a brace.

4

When it's vain to try to dodge it,
 Do the best you can do;
 You may fail, but you may conquer,
 See it through!

8

Black may be the clouds about you
 And your future may seem grim,
 But don't let your nerve desert you;
 Keep yourself in fighting trim.

12

If the worst is bound to happen,
 Spite of all that you can do,
 Running from it will not save you,
 See it through!

16

100. What does the poet want to 'brace' for?
 (1) planting one's feet firmly
 (2) setting up shoulders
 (3) facing difficulties
 (4) dodging someone
101. In 'dodge it' (line 5). 'it' stands for:
 (1) nerves (2) the problems
 (3) black clouds (4) vanity
102. By 'lift your chin' (line 3) the poet wants us to be:
 (1) alert (2) punctual
 (3) smart (4) bold
103. The poet want us to avoid
 (1) black clouds (2) grim future
 (3) meanness (4) failing nerves
104. What is the rhyme scheme in lines no. 9-12?
 (1) abab (2) abcd
 (3) abac (4) abbb
105. 'Your future may seem grim.'
 The underline word means the same as:
 (1) soft (2) bright
 (3) depressing (4) sure
106. Multilingualism effects our brain positively and enhances cognitive skills. This view of bilingualism is very different from the attitude towards bilingualism during most part of the 20th century. Second language was seen as earlier.
 (1) an added asset, a motivational factor
 (2) an interference, a hindrance
 (3) a happy coincidence
 (4) a cause for failure in life
107. Translanguaging

- (1) reinforces the traditionally defined language boundaries.
 (2) challenges the traditional culturally defined language boundaries
 (3) views different languages as separate systems
 (4) is a new term for bilingualism
108. Creativity in language education is:
 (1) classroom activity that is novel and open-ended
 (2) bringing together unrelated elements to begin something new
 (3) classroom activity using new methods of teaching
 (4) classroom materials using communicative language teaching
109. I have a student, Sadaf. She picks up words like 'well' and 'umm' and wants to know about them. I can't find the explanations in the course book. What should I do?
 (1) Call a friend who speaks better English.
 (2) Find examples of authentic spoken language use.
 (3) Consult grammar textbook and find such usages.
 (4) Refer to dictionary.
110. Which one of the following is NOT a step in a grammar lesson.
 (1) Students read (or listen) to the text that contains the target word or form in it.
 (2) Students highlight the target word/phrase in the text.
 (3) The teacher provides controlled and free practice of the grammar point.
 (4) Language being presented in the form of a reading text means that you should drill it.
111. Which one of the following is NOT a concept from language education?
 (1) print-rich environment
 (2) acoustics
 (3) phonics
 (4) dyslexia
112. 'Colourless green ideas sleep peacefully.' is a sentence composed by Noam Chomsky. This is an example of a sentence that is
 (1) grammatically correct, but whimsical.
 (2) grammatically well-formed, but inaccurate meaning wise.
 (3) correct in terms of word use but phonologically inaccurate.
 (4) correct in terms grammatically but incorrect logically.
113. 'Consequently', 'therefore', 'furthermore' and 'however' are examples of:
 (1) Cohesive devices (2) Cohesion
 (3) Vocabulary (3) Grammar areas
114. Identify the CORRECT example of teacher language.
 (1) Then together talking-many words-happy class.
 (2) The ideas espoused by group 1 are mind blowing.
 (3) Stop talking, or else, you will regret it later and not talking is good for you.
 (4) Please sit in pairs and write a paragraph about the picture given to you.
115. The word 'washback' refers to how a test:
 (1) effects classroom teaching materials.
 (2) effects learners preparation for examinations
 (3) impacts the overall life of a learner

- (4) impacts language development
116. A corpus is involving natural discourse in diverse contexts.
- a collection of textbooks
 - a large collection or database of texts
 - a large collection of articles
 - a collection of grammatical sentences
117. A teacher collects the errors of learners of her class and discusses them with her learners once in two weeks. What is this known as?
- Error correction
 - Feedback
 - Grammar teaching
 - Remedial teaching
118. Language acquisition is
- conscious and deliberate
 - natural and deliberate
 - natural and subconscious
 - language processing
119. Which of the following is **true** of English language in India?
- It is one of the languages of VIII Schedule of Indian Constitution.
 - It is the associate official language of the Indian Union.
 - It is the official language of the Indian Union.
 - It is one of the languages of the recognized languages by the Constitution.
120. Which one of the following is 'comprehensible input' in language learning at the secondary stage?
- An authentic text slightly above the level of the learner.
 - An extract from a play by Shakespeare.
 - An authentic text slightly below the level of the learner.
 - A teacher developed story with her understanding of the level of learners grammar.

Language: Hindi

निर्देश (121-128): नीचे दिए गए गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर के लिए सबसे उपयुक्त विकल्प का चयन कीजिए—

कौओं के आश्रयदाता वृक्षों को ऋग्वेद में काकाम्बीर कहा गया है। ऐसे वृक्षों की मालिका में ही नीम को शुमार किया जाना चाहिए। हर साल कौओं के कितने ही घोंसले नीम के पेड़ पर पाये जाते हैं। वैशाख माह में कौए यदि इस पेड़ पर घोंसले बनाते हैं तो इसे समृद्धि का लक्षण माना जाता है। एक तरह से यह आगामी खुशहाली का संकेत होता है। वैसे कौए की आवाज़ कितनी भौंड़ी और कर्कश होती है। लेकिन काकाम्बीर के घोंसले में बैठे कौए की महीन और चुलबुली आवाज़ जो एक बार सुन ले वह अवश्य ही मोहित हो जाता है, क्योंकि उसके कंठ से चाशनी-पगे स्वर जो निकल रहे होते हैं....!

निबौरी के बीच से तेल निकाला जाता है, जो 'मारगोसा' कहलाता है। कीटनाशक दवाइयाँ बनाने के लिए इसका प्रयोग किया जाता है। वात-विकार के मामले में मालिश करने के लिए भी यह तेल उपयुक्त पाया जाता है।

नीम की लकड़ी ठोस और मजबूत होने से पानी के जहाज बनाने के काम में यह प्रयुक्त होती है। खिलौने, कृषि के औज़ार तथा बैलगाड़ियाँ बनाने के लिए भी नीम की लकड़ी उपयुक्त होती है।

121. जिन पेड़ों पर कौए घोंसला बनाते हैं, ऋग्वेद में उन्हें किस नाम से संबोधित किया गया है?

- काकाश्रय
 - काकाम्बीर
 - काक्आश्रय
 - काकभुसुंडी
122. कौए जिस महीने में अपने घोंसले बनाते हैं उसका हिन्दी नाम है—
- चैत्र
 - वैशाख
 - ज्येष्ठ
 - फाल्गुन
123. नीम के फल का नाम है—
- निबौरी
 - निमौरी
 - निमौड़ी
 - निबोरि
124. पानी के जहाज बनाने में नीम की लकड़ी का प्रयोग होता है क्योंकि—
- यह ठोस और कमजोर होती है
 - यह ठोस और कठोर होती है
 - यह ठोस और मजबूत होती है
 - यह ठोस और रूखी होती है
125. 'मारगोसा' है—
- नीम के बीच से बना तेल
 - तिल का तेल
 - सरसों का तेल
 - नीम का बीज
126. आश्रयदाता का विग्रह कीजिए—
- आश्रयदा + ता
 - आश्र + दाता
 - आश्रय + दाता
 - आश्रय + ता
127. 'कर्कश' का विलोम शब्द है—
- कठोर
 - मधुर
 - मधुरता
 - मिठास
128. "इसे समृद्धि का लक्षण माना जाता है।" रेखांकित शब्द है।
- भाववाचक संज्ञा
 - जातिवाचक संज्ञा
 - व्यक्तिवाचक संज्ञा
 - गुणवाचक विशेषण

निर्देश (129-135): निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़िए तथा पूछे गए प्रश्नों के उत्तर के लिए सबसे उपयुक्त विकल्प का चयन कीजिए—

हिन्दी में मुहावरों की अधिकता का श्रेय मैं इस भाषा को बोलने वाले समुदाय को देता हूँ। उनकी पारिवारिकता को मानता हूँ। हिन्दी में देह के अंग भी किसी न किसी प्रवृत्ति की ओर इंगित करते हैं। मसलन टाँग अड़ाना बोल चाल में काम आने वाला यह मुहावरा व्यक्ति की नकारात्मकता उजागर करता है। हाथ के लिए अनेक शब्द-प्रयोग एवं मुहावरे हैं। हाथ थामना, हाथ लगाना, हाथ बढ़ाना और हाथ बाँटना हमेशा सकारात्मक अर्थ में काम में आते हैं। इसलिए जिन्हें हस्तक्षेप का अर्थ खोजते समय उर्दू के दखलंदाजी का सहारा लेना पड़े, वे ही कह सकते हैं कि हस्तक्षेप नकारात्मक प्रक्रिया है। हस्तक्षेप न आक्षेप है और न आक्रमण। मेरे लिए सामान्य अर्थ में तथा जनतांत्रिक समाज के लिए भी, हस्तक्षेप गलत काम को रोकने की चेतावनी है। प्रयास है।

129. हिन्दी मुहावरों में किससे जुड़े शब्दों की भरमार होने की बात की गई है?

- परिवार
 - देह
 - व्यक्ति
 - समुदाय
130. सकारात्मक अर्थ में प्रयोग होने वाला मुहावरा नहीं है—
- टाँग अड़ाना
 - हाथ थामना
 - हाथ लगाना
 - हाथ बढ़ाना
131. नकारात्मक अर्थ में प्रयोग होने वाला शब्द है—
- बीच-बचाव
 - बोल-चाल
 - इंगित
 - हस्तक्षेप

132. 'हस्तक्षेप' का जनतांत्रिक समाज में अभिप्राय है— अनुचित कार्य को—

- (1) बढ़ाना (2) रोकना
(3) फैलाना (4) दबाना
133. देह के अंग से जुड़ा मुहावरा नहीं है—
(1) बत्तीसी दिखाना (2) आँखों का तारा
(3) हाथ बढ़ाना (4) लाल-पीला होना
134. 'समाज' में 'इक' प्रत्यय लगाने के पर बनने वाला शब्द है—
(1) समाजिक (2) सामाजिक
(3) सामाजीक (4) समाजीक
135. 'हाथ बढ़ाना' मुहावरे से अभिप्राय है—
(1) मदद करना (2) हाथ मसलना
(3) कार्य बाँटना (4) सहारा देना
136. शिक्षार्थी केंद्रित कक्षा कौन-सी है?
(1) जिस कक्षा में अध्यापक निर्णय लेते हैं और आत्मनिर्भर होते हैं।
(2) जिसमें अधिगम का समग्र उत्तदायित्व अध्यापक पर होता है।
(3) जिसमें विद्यार्थियों की बहुत कम संख्या पर ध्यान दिया जाता है और अधिकांश विद्यार्थियों की अनदेखी की जाती है।
(4) जिसमें शिक्षार्थियों के पूर्व ज्ञान और अनुभवों को शामिल किया जाता है।
137. भाषा शिक्षा में 'समावेशन' से क्या आशय है?
(1) इसमें शिक्षार्थियों की आवश्यकताओं का ध्यान रखने के लिए अध्यापक व्यावहारिक युक्तियों को अपनाते हैं।
(2) इसमें विद्यालयी शिक्षा के सभी घटक शामिल हैं, जैसे कि बुनियादी संरचना, आर्थिक संसाधन, विद्यालय समुदायों का सृजन।
(3) इसमें पारंपरिक कक्षा में नवीन तकनीकी से जुड़ी विधियों को प्रयोग में लाना शामिल है।
(4) इसमें सामाजिक और अंतः क्रियात्मक दृष्टिकोण को संलग्न करते हुए भाषा शिक्षण का रूपांतरित दृष्टिकोण शामिल है।
138. 'भाषा अध्यापक-शिक्षा' में विमर्श, चिन्तन-मनन से क्या तात्पर्य है?
(1) सचेत, प्रायोगिक रूप से सिद्ध विचार।
(2) मूल्यांकन और समस्या समाधान के वे पहलू जो नवीन अन्तःदृष्टि तथा समझ प्रदान करते हैं।
(3) इसमें सामान्य संज्ञानात्मक योग्यताएँ, कठस्थीकरण और दोहराव आधारित अभ्यास शामिल हैं।
(4) यह इस तरह की समझ है कि दिन-प्रतिदिन के निर्णय किस तरह से क्रियान्वयन को प्रभावित करते हैं।
139. शोएब ने 'भूतकाल' की अवधारणा समझाने के लिए एक पाठ्य सामग्री का प्रयोग किया। उसने उदाहरण दिए, विद्यार्थियों को नियम समझाए और नियमों का अभ्यास करवाया। फिर भी विद्यार्थी अच्छी तरह से अभ्यास कार्य नहीं कर पा रहे हैं। शोएब के लिए नीचे दिए गए सुझावों में से गलत सुझाव को चिन्हित करें।
(1) विद्यार्थियों को अच्छी तरह से सम्प्रेषित करें और उन्हें अक्सर अभ्यास करने के अवसर दें।
(2) विद्यार्थियों को प्रोत्साहित करते रहें और उनके स्तर को ध्यान में रखते हुए समझाते रहें।
(3) कक्षा में ऑडियो रिकॉर्डिंग सुनाएँ और शिक्षार्थियों को बार-बार सुनने के लिए कहें।
(4) व्याकरण सिखाने के लिए सामूहिक रूप से ड्रिल करवाएँ।
140. निम्नलिखित में से कौन-सा कथन पाठ्य सामग्री आधारित व्याकरण पाठों के संदर्भ में सही नहीं है?

- (1) पाठ्य सामग्री आधारित व्याकरण के पाठ व्याकरण के बिन्दुओं के सभी प्रयोगों पर ध्यान केंद्रित करने में मदद करते हैं।
(2) पाठ्य सामग्री आधारित पाठ निर्देशित खोजबीन उपागम का अनुसरण करते हैं जिसमें विद्यार्थी स्वयं भाषा के बारे में जानकारी प्राप्त करते हैं।
(3) पाठ्य सामग्री आधारित व्याकरण पाठों की योजना बनाते समय अध्यापकों को स्वयं अपनी ओर से भी सामग्री सृजित करनी चाहिए।
(4) इन पाठों में सुव्यक्त व्याकरण शिक्षण होता है और शिक्षार्थियों के लिए नियमों का वर्णन भी शामिल होता है।
141. निम्नलिखित में से कौन-सी भाषा शिक्षा की अवधारणा नहीं है?
(1) युनैतीपूर्ण अवधि की परिकल्पना
(2) बोधगम्य निवेश
(3) मस्तिष्क क्षति एवं नियंत्रण
(4) सकारात्मक पुनर्बलन
142. राष्ट्रीय शिक्षा नीति 2020 कहती है
(1) विद्यालय में अधिगम के लिए 'बहुभाषिकता और भाषाओं की शक्ति' आवश्यक है।
(2) आगे की शिक्षा को सहज बनाने के लिए विद्यालय के प्राथमिक चरण में माध्यम के रूप में अंग्रेजी भाषा हो।
(3) सभी भाषा अधिगम मातृभाषा में ही होना चाहिए।
(4) बच्चों को अपनी रुचि के अनुसार अनेक भाषाएँ सीखनी चाहिए।
143. 'अन्ततः' 'इसके साथ', 'इसके अलावा' यह किसके उदाहरण हैं?
(1) योजक उपकरण (2) सम्बद्धता
(3) शब्द संपदा (4) व्याकरण के क्षेत्र
144. 'क्या हम जानते हैं कि वास्तव में क्रिया कहाँ हो रही है?' यह प्रश्न किसलिए है?
(1) तथ्यात्मक पठन के लिए
(2) निष्कर्ष निकालने से जुड़े पठन के लिए
(3) सूचना दर्शाने के लिए
(4) शब्द संपदा की जाँच के लिए
145. निम्नलिखित में से कौन-सा 'अधिगम के लिए आकलन- का उदाहरण है?
(1) वार्षिक परीक्षा
(2) मध्य सत्रांत परीक्षा
(3) पोर्टफोलियो
(4) सप्ताह में दिए जाने वाले प्रदत्त कार्य
146. 'मिश्रित अधिगम' कौन-सा है?
(1) व्याकरण अनुवाद विधि और सम्प्रेषणात्मक भाषा शिक्षण का मिश्रण
(2) भाषा शिक्षण के लिए दो 'ऐप' के मिश्रण का प्रयोग
(3) एक ही कक्षा में दो भाषाएँ सीखना
(4) पारंपरिक अधिगम और वेब आधारित ऑनलाइन उपागम का मिश्रण
147. 'भाषा जागरूकता' के बारे में क्या सही है?
(1) इससे संज्ञानात्मक रूप से लाभ हैं।
(2) इससे किसी प्रकार का कोई लाभ नहीं है।
(3) यह भाषा की व्याकरण को जानना है।
(4) यह निर्धारित अवधारणा है।

148. 'निवेश परिकल्पना' अनुशंसा करती है कि भाषिक निवेश भाषिक दक्षता के वर्तमान स्तर से अधिगम प्रतिफलों को सही तरह से प्राप्त करने के लिए आदर्श है।

- (1) एक चरण पीछे (2) एक चरण आगे
(3) बहुत आगे (4) समानांतर

149. मातृभाषा आधारित बहुभाषिकता क्या है?

- (1) प्रत्येक शिक्षार्थी अपनी विद्यालयी शिक्षा अपनी मातृभाषा में आरम्भ करता है और उसके बाद अंग्रेजी माध्यम में अध्ययन करता है।
(2) सभी विद्यालयों में मातृभाषा या घर की भाषा माध्यम के रूप में।
(3) प्रत्येक शिक्षार्थी अपनी आरंभिक शिक्षा विद्यालय मातृभाषा/घर की भाषा में आरंभ करता है और बाद में अधिक भाषाओं से जुड़ता है।
(4) सभी विद्यालयों में अभिभावकों की माँग को पूरा करने के लिए अंग्रेजी माध्यम में पढ़ाई होना।

150. निम्नलिखित वार्तालाप पढ़ें—

मैं चाहती हूँ कि 'अ' अक्षर से शुरू होने वाले विद्यार्थी यहाँ खड़े हो जाएँ और 'ब' अक्षर से शुरू होने वाले विद्यार्थी वहाँ खड़े हो जाएँ।

क्या आप समझ गए

विद्यार्थी : (सभी चुप हैं।)

एक विद्यार्थी : जी हाँ (बहुत ही धीमे से)

विद्यार्थी उत्तर नहीं देना चाहते हैं।

निम्नलिखित में से कौन-सा उदाहरण सही नहीं है?

- (1) विद्यार्थियों में आत्मविश्वास की कमी है।
(2) विद्यार्थियों ने निर्देश को सही तरीके से नहीं समझा है।
(3) विद्यार्थी बात नहीं करना चाहते हैं।
(4) विद्यार्थियों को और अधिक विस्तार से निर्देश एवं अध्यापक से मदद की जरूरत है।

ANSWER KEY

Child Development and Pedagogy

1. (2) 2. (3) 3. (2) 4. (3) 5. (3)
6. (2) 7. (2) 8. (3) 9. (1) 10. (3)

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

Mathematics

31. (4) 32. (2) 33. (2) 34. (3) 35. (1)
36. (2) 37. (2) 38. (2) 39. (4) 40. (1)
41. (3) 42. (1) 43. (3) 44. (2) 45. (3)
46. (3) 47. (3) 48. (2) 49. (3) 50. (2)
51. (3) 52. (2) 53. (1) 54. (1) 55. (1)
56. (2) 57. (2) 58. (3) 59. (1) 60. (2)

Environmental Studies

61. (2) 62. (3) 63. (1) 64. (2) 65. (2)
66. (2) 67. (2) 68. (3) 69. (3) 70. (3)
71. (1) 72. (4) 73. (4) 74. (4) 75. (3)
76. (3) 77. (3) 78. (3) 79. (1) 80. (3)
81. (4) 82. (1) 83. (2) 84. (3) 85. (4)
86. (3) 87. (4) 88. (1) 89. (1) 90. (3)

Language: English

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

Language: Hindi

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

CTET Solved Paper (Answers with Explanation)

Paper-1
03rd January 2022

Child Development and Pedagogy

1. Option (2) is correct.

Explanation: Development multi-dimensional and involves the processes that are happening genetically as well as environmentally. It is multi-directional, leading to changes in various aspects of human life, including physical, mental, emotional, and social dimensions. There is no fixed path or a single direction in which the development occurs, it's a complex mixture of all types of growth in every bit of it. A child's development represents the interaction of heredity and environment which influences overall growth and development. It follows a predictable pattern whereas it's not compulsorily to follow the same path as they get affected by different factors internally and externally both.

2. Option (3) is correct.

Explanation: Development occurs in an orderly and similar sequence in all humans although exhibit differences in individuals are affected by various physical, mental, and social factors.

There are two patterns of development:

(i) **Cephalocaudal:** It is a type of development, that proceeds in a longitudinal direction i.e. from head to toe, in which a child initially gains control over the head followed by body and then legs for walking.

(ii) **Proximodistal:** In this type of development, it proceeds from centre of the body towards the extremities. In this, the fine motor skills develop later and fundamental muscles start developing first.

3. Option (2) is correct.

Explanation: There are 3 stages of childhood:

1. early childhood (2-6 years),
2. middle childhood (6-11),
3. later childhood (11-14 years)

■ In early childhood, children actively engage in make-believe play where they agree to what they pretend.

Example: If a boy wears a dress of a girl (frock), then will become a girl

■ In Infancy (0-1 years), babies learn to group fine motor skills and basic gross motor skills only.

■ In middle childhood, the child often tries to play the same gender per group. At this stage, children may not actively participate in playing other gender children.

■ Adolescence is the age of children between 12-18 years. They experience rapid physical, cognitive and psychosocial growth in this stage where they also gets attracted towards opposite gender.

4. Option (3) is correct.

Explanation: Secondary socialization is the socialization of children moving towards their childhood phase to adolescence phase, attaining maturity in all spheres of life. Secondary agencies means agents that play an active role in making them socialize at this age. Examples: Peer groups, Media, Schools, Neighbourhood, religious institutions, etc. During this phase, individuals become more attracted to external influences. This transition is a departure from their earlier focus, such as their family.

5. Option (3) is correct.

Explanation: Jean Piaget's cognitive development theory explains that at each stage of development, a child represents a new way of thinking which are universal and similar to the pattern.

■ Seriation is the ability to differentiate objects or situations according to their features such as shape, size, color, pattern, etc.

■ Conservation refers to the understanding of the concepts with respect to quantity, volume or mass while changing its size, shape, etc.

■ Transitive thought is the ability to recognize relationships among various things in a sequence using logic and reasoning.

■ Hypothetico-deductive reasoning is the ability of the child to think about multiple ways to reach a solution and could use abstract knowledge for solving.

Here, Ruhi is shown three pencils, A, B, and C, with A being longer than B and B being longer than C. Ruhi uses her ability of transitive thought to infer that A is also longer than C.

6. Option (2) is correct.

Explanation: According to Jean Piaget, there are four stages of cognitive development i.e.

- (i) Sensorimotor (birth-2 years)
- (ii) Preoperational (2-7 years)
- (iii) Concrete operational (7-11 years)
- (iv) Formal operational (11 years and above)

In the concrete operational stage, the child is capable of thinking logically about concrete events. They start using inductive reasoning, using the concept of conversation, and the reversibility ability to recognize that things that can be changed can be returned to their original condition.

7. Option (2) is correct.

Explanation: Lawrence Kohlberg's theory of reasoning is divided into 3 levels:

- (i) Pre-conventional stage
 - Punishment and obedience orientation.
 - Instrumental Relativist orientation.
- (ii) Conventional morality stage.
 - Good boy, Good girl orientation
 - Law and order orientation.
- (iii) Post-Conventional stage.
 - Social contract orientation
 - Universal ethics principles.

8. Option (3) is correct.

Explanation: Lev-Vygotsky's social constructivism states that language and culture are the frameworks for experiencing reality through communication.

According to him, learning occurs with fostering overall learning. He never believes in formal standardized tests to assess students.

- He suggests using scaffolding (with the help of teachers or guardians) whenever required.
- He always advocated designing teaching-learning based on social context teaching-learning based on social context.
- He asked the teachers to closely observe the attempts made by students for better understanding.
- He believes in reciprocal teaching in which the student act as a teacher for reading sessions in small groups.

9. Option (1) is correct.

Explanation: Lev Vygotsky's theory of social constructivism focuses

on the importance of learning or understanding concepts while being in a social context. He emphasizes the importance of learning through working together by synthesizing the information and actively experiencing the concepts with their team mates rather than using rote memorization of facts and figures. He also suggests that knowledge is a social construct that cannot be isolated. Peer collaboration is an approach that engages learners to process and synthesize information as children work with their peer groups.

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

Explanation: A progressive classroom is a classroom where students are actively engaged in learning. It is the best way for students to experience real-world situations. It aims to integrate academics with the social development of learners. It focuses on problem-solving and critical thinking. Features of the progressive classroom are:

- (i) It provides experiences through various activities.
- (ii) It enhances the capability of each individual for better learning.
- (iii) Children play an active part while the teacher plays a passive role.

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

Explanation: Howard Gardner proposed the theory of Multiple intelligences. He suggests eight types of intelligence which he himself increased to nine; In them, he states that there are multiple intelligences with autonomous intelligence capacities. Types of intelligence are:

- **Linguistic intelligence:** It suggests an ability to use language in a skilled way.
- **Logical-mathematical intelligence:** It suggests an ability to use logical reasoning and mathematics to solve numbers and deal with abstract knowledge.
- **Musical intelligence** deals with sensitivity to music and the ability to create rhythm, sounds, musical patterns, etc.
- **Bodily-Kinesthetic intelligence** is using an individual's body in a controlled manner like dancers and sports persons.
- **Spatial intelligence** refers to space and visual pattern acquisition like architects, builders, etc.
- **Interpersonal intelligence** is the sensitivity within to understand the thought of others and socially interact with others.

- **Intrapersonal intelligence** involves understanding oneself and experiencing desires and emotions.

- **Naturalistic intelligence** involves perceive patterns in nature and influenced by flora, fauna, and all biodiversity.

Existential intelligence is the capacity to handle sensitive data about the human past like in philosophers.

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

Explanation:

- **Gender stereotype** involves forming a perception of someone based on their gender without analyzing their capabilities. It is a socially constructed norm performed by men and women. Here, Rohan's response on receiving a toy doll clearly focuses on gender stereotypes as according to him only girls play with toy dolls and boys don't because it is a generalised view that ought to be possessed by men and women.

Notes: Gender relevance is a way of looking at how social norms impact the lines available to different genders.

- **Gender discrimination** is the partiality among different genders for having different opportunities.
- **Gender stability** is described as the understanding of gender and it's the incapability of changing it over the period of the lifespan.

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

Explanation: Formative assessment is a continuous assessment that occurs throughout the academic session. It is a better way of assessment as it is non-threatening and ensures a supportive environment. It also helps to achieve a better understanding of the concepts as it provides hand-on experiences to the students.

Notes:

- **Summative assessment** is the assessment taken at the end of each term.

Norm-referenced is the assessment that is taken in comparison to others. It is taken to rank an individual. Standardized assessments are the examination taken by teachers focussing on student abilities, potential, etc. They are generated by experts.

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

Explanation: Multilingual classroom is a classroom where students from different mother-tongue can participate altogether. Features of the multilingual classroom are:

- It allows students to use their own language or mother language which makes them more comfortable.
- It arouses confidence among students.
- It makes students more positive towards learning in the classroom.

So, A teacher should create awareness about the diversity of languages and allow their use as per student's preference.

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

Explanation: National Education Policy (2020) emphasizes the development of creative potential of each student. It doesn't support focusing on predetermined content, or rote memorization. According to NEP (2020), education must:

- (i) provide real-life experience
- (ii) learner-centered
- (iii) focus on problem-solving
- (iv) develop critical thinking among learners
- (v) be inquiry-driven and discovery-oriented

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

Explanation: The teacher is showing biased behaviour which would demotivate other students and also would decrease other students interest level's.

While asking questions in the classroom, a teacher should always:

- (i) provide equal opportunity to all the students
- (ii) ask questions according to student's capability
- (iii) ask questions to increase the thinking capabilities

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

Explanation: Dyscalculia is a type of disability in individuals where they are unable to perform calculations, have difficulty in comprehending arithmetic concepts difficulty in understanding numbers and faces problems in learning facts.

To overcome the dyscalculia for inclusion of students, teacher should:

- (i) provide visual calculators and math apps to students
- (ii) use real-life objects
- (iii) provides ample time to solve the question
- (iv) give visual aids
- (v) help the students in solving calculations

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

Explanation: Visual impairment is a disability with sight or vision. There are various methods for students with visual impairment such as:

- (i) Tactile globes are globes having convex and concave features

- on the surface with a glance at borders.
- (ii) Screen reading software is the programs displayed on the screen with a speech synthesizer.
 - (iii) Braille books are books with text according to the braille pattern of the alphabets.
 - (iv) Large print books will also help in better vision.
- But here, a book with small print will not help.
19. **Option (1) is correct.**
Explanation: Language classroom is a classroom that includes students belonging to diverse cultural and social background, speaking multiple languages. For a better understanding of students, a teacher in a language classroom should.
- (i) provide audio books along with text materials
 - (ii) assist the students whenever and wherever required
 - (iii) use multiple options of representation according to the need of learners
20. **Option (3) is correct.**
Explanation: A creative child is one who actively participates in activities and uses his own imagination or knowledge to create something new, different and better. It is like using previous knowledge to generate something in an innovative way features of a creative child:
- (i) Divergent thinker (who comes to a question from the answer)
 - (ii) Ability to think abstractly
 - (iii) Ability for generating novel products
 - (iv) Adaptable to different situations
 - (v) Accommodate any situation easily
21. **Option (1) is correct.**
Explanation: The purpose of assessment is to identify the progress of students in the learning process for providing appropriate remedies wherever and whenever is needed/required.
 A teacher should employ multiple ways of assessment in his/her classroom because a single method cannot be used to analyze all aspects of the student. Multiple ways will give accurate data about a child's progress and growth in learning. A child's success and failure in a classroom cannot be determined only by a paper-pencil test or any other single mode of examination.
22. **Option (2) is correct.**
Explanation: Inductive approach is a method in which examples are provided to form a rule considering the information gathered from those examples. This method was given by Aristotle. In this method, students go from particular to general, known to unknown and simple to complex.
- Notes:**
- Deductive approach is a method in which rules are followed examples. It is moving from general to specific, rule to example, and unknown to known.
 - Imitative learning is learning by imitating others which helps in social interaction, modulation of emotions, and communicative prospects.
 - Competitive learning is not any type of learning. As students feel insecure, being in competition.
- Here, the teacher uses the concept of an inductive method for concept formation among children.
23. **Option (4) is correct.**
Explanation: For classroom management, a teacher should
- (i) pay attention to individual differences to
 - (ii) establish norms and rules for a classroom in collaboration with students
 - (iii) not make rigid rules
 - (iv) not complaining about each mistake of the student to the parents
 - (v) ensures participation of each student throughout the school timings.
24. **Option (3) is correct.**
Explanation: Learning occurs everywhere and brings a permanent change in behaviour of students. Children learn both in formal and informal ways.
- Formal learning happens inside the classroom, or school via a particular curriculum that follows it.
 - Informal learning happens outside the classroom i.e. in day-to-day life situations. Informal learning occurs everywhere, including within the family, among peers, within society, and during activities like playing games.
25. **Option (4) is correct.**
Explanation: Problem-solving skills involve finding solutions by critically addressing challenges, utilizing attention, creativity, and awareness. To facilitate problem-solving skills among students, teachers should:
- (i) provide students with ample study materials to find the solutions.
 - (ii) facilitate discussion on the topics and encourage students to participation
 - (iii) encourage students for brainstorming and generate ideas to solve problems
 - (iv) link the problem to real-life situations
- But, emphasizing the use of a pre-determined step-by-step procedure for every problem will and may promote rote memorization, which is not conducive to learning.
26. **Option (4) is correct.**
Explanation: A constructivist classroom is a classroom environment where learning occurs based on previous. In this environment, learning is not merely transmitted from teacher to student, but it is constructed collaboratively and dynamically.
27. **Option (2) is correct.**
Explanation: Errors act as a window to the thought process of the child. Whenever a child makes errors, a teacher can analyze the thought process and mistakes in the conceptual gap in knowledge. There is no second thought that errors are part of a learner's process of learning. This is so because they elaborate on the gap areas in the conceptual understanding of the learner. They must be given ample opportunities to explore by themselves, in which out of process, some mistakes or errors should be allowed and prepared remedies should be given.
28. **Option (2) is correct.**
Explanation: Extrinsic motivation is the motivation that comes from achieving an outside goal. It occurs in children when they receive an award, payment, certificate, or appreciation from a source anywhere outside.
 Here, Rayon received a cash prize for his research which is an extrinsic motivation source.
29. **Option (2) is correct.**
Explanation:
- Cognition is about the mental processes involving knowledge, remembering, problem-solving abilities creativeness, etc.
 - Emotion is being in a state of joy, sorrow, fear hate. They can be negative or positive depending on the circumstances the person is dealing with.
- Cognition and emotion are highlighted during covid-19 pandemic which made a negative effect on the performance of students in examinations. It made students pressurized about their physical and mental wealth.
30. **Option (4) is correct.**
Explanation: Learning is more meaningful and effective when it is majorly self-directed which means engaging learners in solving complex problems and reaching solution creatively. They use real-life experience and skills for learning. It prepares children for making a

step in future situations. In this type of learning children become enthusiastic and confident.

Mathematics

31. Option (4) is correct.

Explanation:

Concept:

$$\text{Average} = \frac{\text{Sum of numbers}}{\text{Total numbers}}$$

of observations

Calculation:

Average marks obtained before studying in group by all the three students

$$\begin{aligned} &= \frac{67 + 54 + 63}{3} \\ &= 61.33 \end{aligned}$$

Similarly, average marks obtained after studying in group by all the three students

$$\begin{aligned} &= \frac{79 + 60 + 74}{3} \\ &= 71 \end{aligned}$$

Hence, the approximate average marks obtained in each type of study is 61.33, 71.

32. Option (2) is correct.

Explanation: A vertical line of symmetry refers to one which runs down an image and thus divides it into two identical halves. Further, the horizontal line of symmetry is a line that runs across the image thus it divides it into two identical halves. Letter X, H and O have both horizontal and vertical line of symmetry.

33. Option (2) is correct.

Explanation: Radius is the distance from the center of a circle to its circumference. And, the diameter is a straight line that goes from one side to the other of a circle, passing through the center.

$$\Rightarrow \text{Diameter} = 2 \times \text{Radius}$$

34. Option (3) is correct.

Explanation: The angle formed by two lines that are perpendicular to each other is called a right angle. H and E have four right angles. In 5, there are two right angles.

35. Option (1) is correct.

Explanation: Factors of a number are defined as numbers that divide the original number evenly or exactly. For example—the factors of 6 are 1, 2, 3, 6. Thus, it is equal to or less than the number.

36. Option (2) is correct.

Explanation: From the birth date i.e., 5th December 1995 till 5th December 2020, it's been 25 years. Now, from 5th December 2020 till 5th September 2021, it's been 9 months.

Now, from 5th September 2021 till 25th September 2021, it's been 20 days or approximately half a month. So, after adding the values we get, 25 years 9 and 1/2 months

37. Option (2) is correct.

Explanation: Using formula,:

$$\begin{aligned} 1 \text{ m} &= 100 \text{ cm} \\ 163 \text{ cm} + 161 \text{ cm} + 156 \text{ cm} + 159 \text{ cm} + 162 \text{ cm} &= 801 \text{ cm} \\ &= 8 \text{ m } 1 \text{ cm} \\ &= 801/100 \end{aligned}$$

38. Option (2) is correct.

Explanation: Plagiarised text

$$\begin{aligned} \text{Cube of } 10, \quad (10)^3 &= 1000 \\ \text{Cube of } 9, \quad (9)^3 &= 729 \\ \text{The sum of cubes of } 10 \text{ and } 9 &= 1000 + 729 \\ &= 1729 \end{aligned}$$

Similarly,

$$\begin{aligned} \text{Cube of } 12, \quad (12)^3 &= 1728 \\ \text{Cube of } 1, \quad (1)^3 &= 1 \\ \text{The sum of cubes of } 12 \text{ and } 1 &= 1728 + 1 \\ &= 1729 \end{aligned}$$

In both cases we are getting same result.

So, 1729 is a Ramanujan number.

39. Option (4) is correct.

Explanation: Plagiarised text

$$\begin{aligned} \text{They will receive message altogether} &= \text{LCM of } 20, 30 \text{ and } 45 \\ 20 &= 2 \times 2 \times 5 \\ 30 &= 2 \times 3 \times 5 \\ 45 &= 3 \times 3 \times 5 \\ \text{So, LCM} &= 2 \times 2 \times 3 \times 3 \times 5 \\ &= 180 \end{aligned}$$

Time after which these three friends receive message altogether

$$\begin{aligned} &= 180 \text{ minutes.} \\ \text{Since, } 1 \text{ hour} &= 60 \text{ minutes} \\ \text{Thus, } 180 \text{ minutes} &= \frac{180}{60} \\ &= 3 \text{ hours} \end{aligned}$$

40. Option (1) is correct.

Explanation: The LCM of the denominator (4, 7, 2, 3, 5, 6) is 420. Multiplying the given fraction with 420

$$\frac{3}{4} \times 420 = 315$$

$$\frac{6}{7} \times 420 = 360$$

$$\frac{1}{2} \times 420 = 210$$

$$\frac{2}{3} \times 420 = 280$$

$$\frac{4}{5} \times 420 = 336$$

$$\frac{5}{6} \times 420 = 350$$

Here we can see that the largest value is 360 and the smallest value is 210. So, Largest fraction = $\frac{6}{7}$ Smallest fraction = $\frac{1}{2}$

41. Option (3) is correct.

Explanation:

$$1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 = 81$$

42. Option (1) is correct.

Explanation:

Money paid by Harpreet

$$\begin{aligned} &= (1 \times \text{cost of one packet of pencil}) + (2 \times \text{cost of 1 packet of pen}) + (3 \times \text{cost of one eraser}) + \text{Cost of one sharpener} + (2 \times \text{cost of a packet of pastel sheet}) + \text{Cost of ruler} \\ &= 22.00 + (2 \times 37.50) + (3 \times 3.50) + 4.50 + (2 \times 48) + 10 \\ &= 22.00 + 75 + 10.5 + 4.50 + 96 + 10 \\ &= \text{Rs. } 218 \end{aligned}$$

43. Option (3) is correct.

Explanation:

When $10011 \div 11$,

Quotient = 99

Remainder = 12

44. Option (2) is correct.

Explanation: Given numbers are 16, 20 and 24.

Concept : The least number which is exactly divisible by each one of the given number is called their LCM.

Calculation:

$$\begin{aligned} \text{LCM of } 16, 20 \text{ and } 24 \\ 16 &= 2 \times 2 \times 2 \times 2 \\ 20 &= 2 \times 2 \times 5 \\ 24 &= 2 \times 2 \times 2 \times 3 \end{aligned}$$

$$\begin{aligned} \text{LCM of } 16, 20 \text{ and } 24 \\ &= 2 \times 2 \times 2 \times 2 \times 3 \times 5 \\ &= 240 \end{aligned}$$

To make number perfect square multiply it by 3 and 5 then

$$= 240 \times 3 \times 5 = 3600$$

45. Option (3) is correct.

Explanation: The place value of two sixes in 786364 is 6000 and 60 respectively.

$$\text{The required product} = 6000 \times 60 = 360000$$

46. Option (3) is correct.

Explanation: Teacher wants to understand the students' thinking process involved in the answers given by them.

Mathematics is subject which involves a lot of thinking and reasoning processes, students should always be kept busy in some or other thinking processes by the teacher to improve their analytical and thinking skills.

47. Option (3) is correct.

Explanation: Formative assessment is a range of formal and informal assessment procedures employed by teachers during the learning process in order to modify teaching and learning activities to improve student accomplishment.

48. Option (2) is correct.

Explanation: Estimation is used in daily life mathematics hence the teacher should appreciate the student's estimation of the answer to near accuracy.

In maths, estimation means having a rough calculation of the value, number, quantity or extent of something. We use estimation of numbers to make it easier and quicker to do mental calculations.

49. Option (3) is correct.

Explanation: (a) and (c) According to NCF(2005), the main goals of teaching mathematics in school are-

- (1) students should enjoy learning and implement Mathematics in their daily lives.
- (2) they should learn how to work as a team to find solution of a problem.
- (3) the teacher should be vigilant and see the mistakes.

These mistakes reflect students' thinking ability and gaps in learning. So, these provide an opportunity to teacher to find remedial solution.

50. Option (2) is correct.

Explanation: Data is a collection of numbers gathered to give some information. Data handling means collecting the set of data and presenting it in a different form.

51. Option (3) is correct.

Explanation: Using paper folding activities with symmetrical cut outs of circles and rectangular strips to represent fractions.

52. Option (2) is correct.

Explanation: Mathematics is a subject that is completely related to the real-life experiences of the students.

53. Option (1) is correct.

Explanation: The van Hiele theory describes how young people learn geometry

- Level 0 Visualization
- Level 1 Analysis
- Level 2 Abstraction
- Level 3 Deduction
- Level 4 Rigor

At the level of analysis, the student starts to recognise and name the figure. He can also classify geometrical figures on the basis of their properties.

54. Option (1) is correct.

Explanation: Plagiarised text According to Newman's Error Analysis theory, When a student starts to solve a mathematical problem he has to follow certain steps.

(1) **Reading:** Such error occurs when the student is not able to understand words, signs and symbols used in problem.

(2) **Comprehension:** Error occurs at this stage because the student has not understood the meaning of the question.

(3) **Transformation:** Since the student does not know which mathematical operation or process to be followed, such errors take place.

(4) **Process skill level:** Error occurs because the student is unable to follow the process, steps or mathematical operation accurately.

(5) **Encoding error:** This error occurs when the student has solved the problem correctly but misinterpreted the result.

In this question, the student has not understood the meaning of the question or what is asked in the question. So, this is a comprehension error.

55. Option (1) is correct.

Explanation: Mathematics is not a theoretical subject. It is based on solving problems that involve rote memorization, remembering, and recall techniques. It is said in the National Curriculum Framework 2005, "Developing children's abilities for mathematization is the main goal of mathematics education."

56. Option (2) is correct.

Explanation:

Cooperative learning projects

Here a group of students will be given a project or activity. Students work together on academic tasks in groups to help themselves.

Formative assessment is a range of formal and informal assessment procedures employed by teachers during the learning process to modify teaching and learning activities to improve student attainment.

57. Option (2) is correct.

Explanation: The student is unable to use the commutative law of addition in solving problems on addition. The student doesn't know properties of addition. Since, he doesn't know commutative law of addition he is using his fingers to count and add.

58. Option (3) is correct.

Explanation: Strategies used in problem-solving

- Trial and error
- Divergent thinking
- Analysis of question
- Graphic representation
- Solving backwards

59. Option (1) is correct.

Explanation: Open-ended questions are those that don't have a fixed answer or method to solve the questions. It can give the respondents to share their views in

language reflecting creativity, self expression and real views. Divergent thinking is a thought process used to generate creative ideas by exploring many possible solutions.

60. Option (2) is correct.

Explanation: Mathematics is Hierarchical as it Plagiarism is based on concepts and formulas. These concepts are interlinked. So, if a student wants to learn something he should have knowledge of all concepts related to the topic.

Environmental Studies

61. Option (2) is correct.

Explanation:

- Squirrels' front teeth continue to grow throughout their lives. To prevent their teeth from growing too long, squirrels need to constantly gnaw on objects.
- Cats have sharp, pointed teeth for tearing and cutting meat.
- Snakes always swallow their food for which they have sharp curved teeth.
- Tigers have carnassial teeth, which are long and pointed, designed for gripping their prey. They also have sharp teeth for cutting the prey into smaller pieces.

62. Option (3) is correct.

Explanation: Honey bees are flying insects that play a crucial role in the pollination of flowering plants and the production of honey.

Characteristics of honey bees include:

- (i) Honey bees become active during spring when the weather is warm.
- (ii) They gather nectar from flowers and convert it into honey.
- (iii) Honey bees are divided into three types:

Queen bee: She is the only bee that lays eggs.

Male bee: They have no specific role in the colony and are known as drones.

Worker bee: These are all female bees, excluding the queen. Worker bees perform various tasks throughout the day, such as collecting nectar and producing honey.

63. Option (1) is correct.

Explanation: Right to Forest Act, 2007 states that the people who have been living in forests for at least 25 years have a right over the forest land and what is grown on it. It ensures that:

- (i) tribals cannot be removed from the forest.
- (ii) granting of land to forest dwellers to the extent of their

- current holding but not more than 4 hectares
- (iii) work of protecting the forest should be done by gram sabha
- (iv) empowering of local tribal community
64. **Option (2) is correct.**
Explanation: Jhoom farming, also known as slash and burn farming, is a traditional practice where farmers clear forest land, burn the plants, and use the ashes as fertilizer. This helps restore soil nutrients for growing crops. However, it can harm the environment if not managed properly. On the other hand, organic farming is a method that avoids chemicals and pesticides. It uses natural fertilizers like compost and manure to nourish crops. Crop rotation is also practiced to maintain soil fertility and reduce pests and diseases. By practicing organic farming, farmers can support sustainable agriculture, protect the environment, and grow healthy crops.
65. **Option (2) is correct.**
Explanation: Malaria is caused by a parasite called Plasmodium, which is transmitted to humans through the bite of infected female Anopheles mosquitoes. The symptoms of malaria include chills, fatigue, diarrhea, night sweats, and body pain. The treatment for malaria usually involves prescription drugs like quinine, although the specific treatment may vary depending on the type of malaria and the location where it occurs. Apart from malaria, there are other mosquito-borne diseases:
- Dengue fever, discovered by Benjamin Rush and William Cullen, is caused by the Aedes aegypti mosquito. It is transmitted to humans through the bite of an infected female mosquito.
 - Chikungunya, discovered by RW Ross, is another mosquito-borne disease. It is transmitted by Aedes aegypti and Aedes albopictus mosquitoes and presents symptoms such as fever, joint pain, and rash.
 - Plague, caused by the bacterium Yersinia pestis, is not directly transmitted by mosquitoes. It is primarily spread through fleas that infest rodents, particularly rats. Alexandre Yersin identified the bacterium responsible for the plague in 1894.
66. **Option (2) is correct.**
Explanation: The Cinchona tree is a renowned source of quinine, which is used as medication to treat malaria. It is commonly found in the

high jungles of the Amazon basin, situated to the east of the Andes.

Key features of the Cinchona tree include:

- (i) The bark of the tree is utilized to prepare medicine for malaria.
- (ii) It promotes the release of digestive juices.
- (iii) It increases appetite.
- (iv) It also aids in the treatment of various vein-related issues and leg cramps.

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

Explanation: Snakes have two hollow teeth called fangs. Among snakes, only four types are venomous, which include:

- Cobra
- Common krait
- Russell's viper
- Saw-scaled viper

Snakes swallow their prey whole and inject poison into the person's body through their fangs when they bite.

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

Explanation: Indian Rock Python: Non-Poisonous. Snakes have a special way of sensing things around them. Unlike humans and many other animals, they don't have ears on the outside of their bodies, so they can't hear sounds like we can. Instead, snakes can feel vibrations through their skin. They are very good at sensing vibrations on the ground, which helps them know when something is moving nearby, like prey or danger. In our country, there are many different kinds of snakes, but only four of them are poisonous. These are the cobra, common krait, Russell's viper (also known as Dubois's snake), and saw-scaled viper (sometimes called Afai snake). These poisonous snakes have two special teeth that are hollow, called fangs. When they bite, they can inject poison into a person's body through their fangs. This can be very dangerous and can cause harm or even death if not treated properly.

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

Explanation: Vermicompost is the result of converting biodegradable waste into organic manure with the assistance of earthworms. Earthworms offer numerous benefits to the soil and farmers, including:

- **Aeration:** They help aerate the soil, promoting the presence of humus.
- **Organic Matter Breakdown:** Earthworms break down organic matter into simpler substances.
- **Soil Enrichment:** They act as free farm helpers, enhancing soil fertility.

■ **Moisture Regulation:** When dryness occurs, earthworms burrow deeper into the soil, providing essential moisture.

■ **Fishing Aid:** They can be used as bait to catch fish.

■ **pH Regulation:** Earthworms reduce soil alkalinity, creating optimal conditions for plant growth.

Overall, earthworms play a crucial role in improving soil quality and supporting agricultural practices.

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

Explanation: Pashmina is indeed a type of wool derived from goats that inhabit high altitude regions in Nepal and India. It is known for its softness and warmth, making it highly valued in the textile industry. Additional information about different types of wool can be provided:

■ **Sheep Wool:** Wool obtained from sheep is commonly used in handloom industries for making various products such as carpets, curtains, and clothing items. It is known for its insulation properties and versatility.

■ **Camel Wool:** Camel wool is known for its softness and warmth. It is often used in making tents, outer sweaters, and other winter garments. Camel wool has excellent insulating properties and can provide protection in harsh weather conditions.

■ **Alpaca Wool:** Wool from alpacas is used in the production of a wide range of items, including socks, scarves, toys, and jackets. Alpaca wool is highly regarded for its durability, light weight, and soft texture. It offers warmth and comfort while being breathable and hypoallergenic.

These different types of wool provide various benefits and are utilized in different industries for their unique properties.

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

Explanation: Air pollutants, such as carbon monoxide, are often emitted by poorly maintained vehicles and result from incomplete combustion during the burning of coal, petroleum, wood, and other substances.

Additional information can be included in the notes:

■ Fossil fuels are non-renewable resources that were formed millions of years ago and are currently used by today's generation. Examples include coal, petroleum products, and natural gas. These fuels require a significant amount of time to form.

- Carbon monoxide is a harmful and toxic gas that poses risks to human health. It reduces haemoglobin levels in the blood, which can lead to oxygen deprivation. Exposure to carbon monoxide can have various health effects, including inducing premature birth in pregnant women and weakening eyesight.
- Ensuring proper combustion and reducing emissions of air pollutants like carbon monoxide is crucial for safeguarding human health and the environment.

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

Explanation: Drip irrigation is a method of supplying the required amount of water to the roots of the plants/crops drop by drop.

The benefits of drip irrigation method are:

- (i) It is an efficient and economic way to sprinkle water.
- (ii) It reduces runoff and evaporation.
- (iii) It provides an accurate amount of moisture to the roots.
- (iv) It enhances plant productivity and quality.

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

Explanation: Pitcher plants are carnivorous plants with pitcher-shaped leaves that form passive pitfall traps. They attract insects and other prey to the mouth of the pitcher with a trail of nectar secreted by glands. The plants absorb essential nutrients from the trapped insects, which they lack in the soil.

Pitcher plants can trap and consume various creatures, including frogs, insects, and even mice. They possess a distinct scent that attracts insects. These plants are found in Australia, Indonesia, and parts of Meghalaya in India.

Additional Notes:

- Cuscuta plants are parasitic plants that absorb nutrients from the host plants they grow on.
- Sunflower plants obtain nutrients through the regular process of absorbing them from the soil, water, and sunlight.
- Cacti are plants that grow in desert areas and possess water-storing characteristics in their leaves and stems.

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

Explanation: Rainwater harvesting is the process of collecting and storing rainwater for future use. Here's how it works:

- During rainfall, instead of allowing the water to flow and get wasted, it is collected in tanks or other suitable containers.

- By collecting rainwater, it helps in preventing water runoff and conserves the precious resource.
- Rainwater harvesting plays a crucial role in enhancing the groundwater level, which is vital for long-term sustainable water management.
- It is especially beneficial in areas facing water scarcity or where access to clean water is limited.
- Rainwater collected through this method can be used for various purposes such as irrigation, domestic use, and replenishing groundwater sources.

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

Explanation: Diseases caused by mosquitoes include malaria, dengue, and chikungunya.

Notes:

- (i) Malaria is spread by the bite of an Anopheles mosquito.
- (ii) Pneumonia is an abnormal inflammatory condition of the lungs caused by Streptococcus pneumoniae. Symptoms include chest pain, fatigue, nausea, and vomiting.
- (iii) Dengue is caused by the Aedes aegypti mosquito. Symptoms include body pain and vomiting.
- (iv) Chikungunya is transmitted through the bite of infected mosquitoes, namely Aedes aegypti and Aedes albopictus. Symptoms include muscle pain, headache, and rash.

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

Explanation: Child-centered classrooms are those where learners actively participate in the activities happening in the class. Here, the teacher plays a passive role. The teacher facilitates the learning process and ample opportunities are provided to the students for exploration, experimentation, observation and questioning.

Features of child-centered classroom:

- (i) It ensures a conducive environment for students.
- (ii) The learning environment is democratic.
- (iii) Learning and assessment goes hand in hand.
- (iv) Students are given equal importance as teachers.
- (v) Students can learn through scaffolding.
- (vi) Students can easily socialize and learn better with their peers.

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

Explanation: Based on the extract from the unit "Across the Wall" in class V, we can conclude that students develop an understanding of gender equality while playing games. This encourages both

genders to participate in sports activities and promotes the imbibing of team spirit among children. Additionally, it creates awareness about gender stereotypes and their negative impacts. Moreover, it helps students connect to their daily routines and life experiences. It indicates a focus on promoting awareness, empathy, and critical thinking related to sports and its broader implications on society.

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

Explanation:

(i) **Lecture method of teaching:**

In this method, the teacher possesses all the knowledge which she transfers to the students in a productive way. Learners play a passive role in this method. There is a negligible conversation between teachers and students. It is not beneficial in primary classroom as students may be bored or arouse disinterest in learning.

(ii) **Chalk and talk method of teaching:** In this method, the teacher explains everything on the black board, and students copy everything in their notebooks. It is a traditional way of explaining concepts where learners act passively.

(iv) **Inquiry-based method:** It is a method of instruction provided by the teacher where students follow the instructions by the teacher and explore objects by themselves. They actively interact with the environment using the rules involved. It is the most suitable way to teach EVS in primary classes.

(iv) **Jug and mug approach:** In this method, the child is treated as an empty mug, whereas teacher is jug, full of knowledge. Here, the teacher shares all her knowledge to the students.

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

Explanation: Field visits are pre-planned visits to a place near the school with pre-planning and follow up activities.

Features of field visit/trips:

- (i) It enhances critical thinking and imagination power.
- (ii) It connects learners to the real world.
- (iii) It provides real-life experience.
- (iv) It arouses curiosity among learners which increases their potential to grasp concepts better.
- (v) Follow-up activities on the field visits will allow students to learn new concepts in an organized way.

80. Option (3) is correct.

Explanation: A happy EVS classroom includes:

- (i) active participation of students
- (ii) providing real-life experiences to students by connecting topics to the real world.
- (iii) students observe on their own and teachers helps in explaining and motivating them
- (iv) children are free to ask multiple questions
- (v) activities are pre-planned to connect better

81. Option (4) is correct.

Explanation: A family tree is a visual tool or chart used to represent the relationships between members of a family across multiple generations. It displays the connections and lineage within a family. Typically, the data is organized in a hierarchical manner, with older generations placed at the top and younger generations below. The family tree provides a clear and organized representation of family relationships, showing parent-child relationships, marriages, and extended family connections. It helps individuals understand their ancestry, trace their lineage, and gain insights into their family history. Overall, a family tree that includes relationships between members of the family across several generations provides a rich and complex dataset for children to analyze, fostering their analytical thinking and cognitive skills in various ways.

82. Option (1) is correct.

Explanation: Indicators for assessment in EVS are:

- (i) **Expression:** This includes creative writing or bodily movements.
- (ii) **Explanation:** It involves reasoning and the depth of understanding.
- (iii) **Classification:** It includes differentiation, grouping, and comparing things.
- (iv) **Observation and recording:** This encompasses making pictures, narrating stories, and describing images.
- (v) **Discussion:** It involves conversing on specific topics, including listening and providing information.
- (vi) **Questioning:** This includes critical thinking and expressing thoughts.
- (vii) **Cooperation:** It entails initiating help for others and taking responsibility as a wise citizen.

83. Option (2) is correct.

Explanation: "Mapping" refers to the ability to draw maps using symbols to represent rivers, land, cities, borders, and other features.

Asking students to draw the route from their home to school is an effective way to teach mapping. This activity is engaging for students because they are familiar with the route, making it interesting for them to participate.

84. Option (3) is correct.

Explanation: For teaching 'Animals' to the students of class 1, taking them to the zoo will provide a real-life experience. It will arouse their interest and a field trip will encourage their learning. Students will be able to connect the pictures shown by the teacher to real animals and also observe and understand the activities done by animals. This interactive approach will help them remember the concepts for a longer period of time. This strategy offers a hands-on and engaging experience, fostering a deeper connection and understanding of animals that goes beyond what mere descriptions or pictures can provide.

85. Option (4) is correct.

Explanation: William Beaumont was a surgeon in U.S. who was known as the "Father of Gastric Physiology". He arranged the steps involved in scientific method which are as follows:

- (i) Make an observation
- (ii) Ask a question
- (iii) Propose a hypothesis
- (iv) Make predictions
- (v) Test the predictions
- (vi) Record the results and draw conclusions

86. Option (3) is correct.

Explanation: To experience biological diversity, the best strategy is to plan a field trip to a bird sanctuary. This trip will generate interest among students and allow them to connect their bookish knowledge to the real world. In a bird sanctuary, children will have the opportunity to observe various animals live and witness their activities, which were previously discussed by the teachers in the classroom. This hands-on experience allows students to observe and apply the facts they have already learned. This comprehensive approach is more likely to leave a lasting impact and foster a deeper appreciation for the natural world.

87. Option (4) is correct.

Explanation: Gifted children refers to children who possess special abilities to perform specific tasks. They perform exceptionally out of various people of their peer group. It can be across any field like language, mathematics, aptitude etc. As Aditya is a gifted boy, the teachers should:

- (i) use some customized material to teach him

- (ii) facilitate his knowledge
- (iii) channelise his learning for improvement
- (iv) challenge his abilities to maintain interest
- (v) assign him extra responsibilities, such as helping other special children.

88. Option (1) is correct.

Explanation: Environmental Studies (EVS) aims to develop skills and provide information about issues concerning science and social science. It draws on these subjects to connect students with the real world.

Some key objectives of EVS are:

- Promoting scholastic and holistic development of children.
- Fostering good habits, values, and emotions to maintain a high-quality environment.
- Creating awareness about real-world aspects related to technology.

89. Option (1) is correct.

Explanation: Dramatization is a method of enacting different roles according to a theme. Its features are as follows:

- (i) It gives a larger impact on their minds.
- (ii) It provides learning the topics in a easier way.
- (iii) It provides visuals which creates images in the mind of the students.
- (iv) It enhances imaginative power.
- (v) Through dramatization, students may actively participate in learning.

90. Option (3) is correct.

Explanation: EVS text book provides information about various topic related to real life. It also tells about issues concerning the earth these days. It is equipped with the opportunities to explore the world according to themes of the environment. It constructs knowledge through all issues. By doing so, the textbook can create environmentally conscious and informed citizens who are equipped to address the challenges faced by our planet.

Language: English

91. Option (4) is correct.

Explanation: From the lines of paragraph 1 of the passage we can conclude that the actual availability of technology in rural areas is marginal, and it's the agriculture, which provides substance to the people. Also, if technology starts covering rural areas, will surely make an effect on crop production.

92. Option (3) is correct.

Explanation: Overuse of fertilizers led to damaged crops and wheat

surplus at some places, which can be concluded from paragraph 1 of the passage.

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

Explanation: From the paragraph 2 of the passage, we can conclude that technology is required to reduce power consumption, but the use is very low as agricultural power is available at free of cost.

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

Explanation: From the lines of the paragraph of the passage, we can conclude that cold storage and cold chains are of great importance because transportation of agricultural things requires temperature at which they can stay fresh.

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

Explanation: From the paragraph 1 of the passage we can conclude that more than half of the population depends on agriculture, as it states that "The backbone of the rural economy is agriculture, which also provides substance to over half the country's population."

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

Explanation: 'Vital' in para 2 means the same as essential.

Notes: Meanings

- (i) **lively:** full of energy
- (ii) **active:** ready to engage physically or mentally
- (iii) **energetic:** active or lively

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

Explanation: 'Technology' in paragraph 2 is used as a noun as it suggests the practical application of it in rural areas.

Noun: A noun is a word that names something, such as a person, place, thing, or animal, idea.

Example: dog, lighting, Shreya.

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

Explanation: 'Marginal' in paragraph 1 means little.

Notes:

- not much means almost nothing
- sufficient means being enough
- abundant means more than enough

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

Explanation: 'There is little incentive' is used as a noun in paragraph 2 of the passage, as it suggests encouraging a person to do some work.

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

Explanation: "Brace" means facing the situations "courageously." Here, the poet wants to say that one should not be scared of problems in the life and should face them bravely.

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

Explanation: In dodge it; it stands for the problems. Here, in the line

5 of the poem, the poet suggests to face the problems courageously.

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

Explanation: From the line 3 of the poem 'lift your chin' means to face the problems boldly.

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

Explanation: The poet wants us to avoid failing nerves even when we have a grim future. We should live in the present while little investing some thoughts for the future, irrespective of the fact that it might be gloomy.

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

Explanation: Rhyme scheme is observed by the sound in the end of a line.

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

Explanation: Grim means depressing, non-energetic, to be afraid of, etc. Here, the poets wants us fight for the things courageously and not to be afraid of future.

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

Explanation: Bilingualism refers to the usage of two languages in a classroom. In it, one language is mother-tongue and the other one is a language that will help in some work. But it was considered as a hindrance or a interference because of difficulty in language development concepts. Features of bilingualism are:

- (i) It facilitates learning.
- (ii) It supports language development.
- (iii) Less stressful for others to communicate.
- (iv) Make more versatile and inter-active.

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

Explanation: Translanguaging is the interchanging of language for better understanding and maximising communicative potential. It involves different languages used by a person in front of his peers, family etc. It has many educational benefits because it eradicates the fear of mistakes from the communicator and generates confidence to express their thoughts and means. It challenges the traditional way of expression and language boundaries.

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

Explanation: Creativity is doing something different and better rather than going on traditional paths or following particular methods. It enhances cognitive abilities to produce new and fresh. In classroom activities, for upgrading creativity, questions and topics should be novel and open ended. It enhances divergent thinking and problem analysing skills of the students.

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

Explanation: To make class more interesting, one needs to make students more interactive and break the monotony in the classroom for the better grasp of the concepts. Language learning ensures practical acquisition of knowledge. Finding examples of authentic spoken language would be best for relating class to real life situations.

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

Explanation: In a grammar lesson, there are following steps:

1. Students became aware of the correct meaning related to the text.
2. Teacher could provide practice drill to the students.
3. Learners use language for communication which builds confidence.

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

Explanation: Language education is the learning of communication comprehensively. It generates fluency over the language.

- Print rich environment means learning with printing based things such as pictures, diagrams, text, instructions etc.
- Phonics upgrades the ability to understand the different sound made by different words. It enhances reading skills.
- Dyslexia is an inability to read or comprehend the text properly. Here, the person faces difficulty in reading the text and identifying speech sounds.

Notes:

- Acoustics is the production of sound and promoting clear listening skills. It ensures clear transmission of sound and speech.

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

Explanation: Noam Chomsky is called as father of modern linguistics. He is one of the founder of the field of cognitive science. According to Chomsky, the ability to learn languages is an innate skill. Children are born with a language learning tool that he called a language acquisition device.

Now,

The colourless green ideas sleep peacefully is a grammatically well-formed sentence but is inaccurate in its meaning as the structural description is necessary that explains the contextual meaning.

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

Explanation: Cohesive devices are the tools that are helping in holding things together. It ensures meaningfulness of the sentences. It bounds the text for

further relationships. Example: Consequently, therefore, further more, however etc.

114. Option (4) is correct.

Explanation: It is the correct example of teacher language which is also grammatically right. A teacher should be polite and clear while providing instructions as they are the role models in student's life.

115. Option (1) is correct.

Explanation: 'Washback' is the fifth principle of language test. It is an administrative requirement to prove that learning goals have been achieved or not. Here, teachers use various tools to assess the students. It also motivates teachers to prepare their teaching methods with learning outcomes. Their results are the base on which learners are promoted to higher grade.

116. Option (2) is correct.

Explanation: A corpus is a large set of texts that is electronically or technically available on softwares. It involves:

- (i) natural discourse in diverse contexts.
- (ii) texts that are originated from another previous published text forms like journals, newspapers etc.
- (iii) build up in different shapes and sizes to serve the purpose accordingly

117. Option (2) is correct.

Explanation: Feedback plays an important role in teaching learning process.

Features of feedback are:

- (i) remedies for the errors are provided
- (ii) ample opportunities are provided to make errors for enhancing creativity.
- (iii) it helps children to attain foundational skills in a correct way
- (iv) assess learners understanding level
- (v) enables to rectify the errors and involves measures to improve learning

118. Option (3) is correct.

Explanation: Language acquisition is the process by which humans acquire the capacity to perceive and comprehend language, as well as to produce and use words and sentences to communicate. It happens when language is acquired unconsciously, without making much efforts. It is acquired while using it in day to day life. It's a natural process so one has to never fight his mother tongue too.

119. Option (2) is correct.

Explanation: English is the associate official language of the Indian union. Two languages are chosen to be official language for central admin work in Hindi and English.

120. Option (1) is correct.

Explanation: 'Comprehensible input' in language learning at the secondary stage is an authentic text slightly above the level of the learner. It is used to make language learning more effective, so that students may develop better understanding of the language. As language is acquired naturally so comprehensible input is made slightly above the level to maintain students interest and also to make learning deeper and efficient.

Language: Hindi

121. विकल्प (2) उचित है।

व्याख्या—जिन पेड़ों पर कौए घोंसला बनाते हैं, उन्हें ऋग्वेद में काकाम्बीर कहते हैं। काकाम्बीर को सरल भाषा में नीम का पेड़ कहा जाता है। ऋग्वेद संसार का सबसे प्राचीन धर्मग्रंथ माना गया है। यह संस्कृत भाषा में लिखा गया था जिसमें लगभग 10,552 मंत्र तथा 10 मंडल हैं।

122. विकल्प (2) उचित है।

व्याख्या—कौए वेशाख माह में अपना घोंसला बनाते हैं। इसे समृद्धि का लक्षण भी माना जाता है। इसे खुशहाली आने का संकेत भी कहा जाता है।

123. विकल्प (1) उचित है।

व्याख्या—नीम के फल को निबौरी कहते हैं। निबौरी के फायदे—

- (i) कीटनाशक दवाइयाँ बनाने में प्रयोग होता है।
 - (ii) वात-विकार के समय मालिश करने में मददगार होता है।
- 124. विकल्प (3) उचित है।**
- व्याख्या—**नीम की लकड़ी के फायदे—
- (i) ठोस व मजबूत होने से पानी के जहाज बनाने में उपयोगी होती है।
 - (ii) खिलौने, कृषि के औजार तथा बैलगाड़ियाँ बनाने में भी अधिक उपयोगी है।

125. विकल्प (1) उचित है।

व्याख्या—नीम के बीज 'निबौरी' से बने तेल को 'मारगोसा' कहते हैं। जिसका प्रयोग कीटनाशक दवाइयाँ तथा मालिश का तेल बनाने में होता है।

126. विकल्प (3) उचित है।

- (i) आश्रयदाता = आश्रय + दाता [संबंध तत्पुरुष समास]
- (ii) आश्रय का अर्थ 'सहारा' तथा दाता का अर्थ देने वाला।

संबंध तत्पुरुष समास

जिस तत्पुरुष समास से संबंध कारक विभक्ति को लोप हो जाए उसे संबंध तत्पुरुष समास कहते हैं। जैसे— जन्मदाता अर्थात् जन्म देने वाला।

127. विकल्प (2) उचित है।

व्याख्या—कर्कश एक विशेषण शब्द है, जिसका अर्थ होता है—कड़वा अथवा चुभने वाला।
विकल्प 1. कठोर (विशेषण) अर्थात् कड़ा
विकल्प 2. मधुर (विशेषण) अर्थात् मीठा
विकल्प 3. मधुरता (भाववाचक संज्ञा) तथा
विकल्प 4. मिठास (भाववाचक संज्ञा) एक दूसरे के लगभग समानार्थी शब्द हैं।

128. विकल्प (1) उचित है।

- (i) रेखांकित शब्द 'समृद्धि' भाववाचक संज्ञा है।
- (ii) समृद्धि का अर्थ अत्यंत सम्पन्नता है।
- (iii) संज्ञा— किसी वस्तु, व्यक्ति, स्थान, जाति व भाव के नाम का बोध कराने वाले शब्दों को संज्ञा कहते हैं।

संज्ञा के पाँच भेद हैं—

- (i) व्यक्तिवाचक संज्ञा
 - (ii) जातिवाचक संज्ञा
 - (iii) भाववाचक संज्ञा
 - (iv) समूहवाचक संज्ञा
 - (v) द्रव्यवाचक संज्ञा
- भाववाचक संज्ञा—**जो संज्ञा शब्द किसी व्यक्ति अथवा पदार्थ के भाव, गुण, दशा तथा अवस्था बताते हैं। उन्हें भाववाचक संज्ञा कहते हैं।

129. विकल्प (2) उचित है।

व्याख्या—हिन्दी मुहावरों में देह से जुड़े शब्दों की भरमार होने की बात की गई है। जैसे—

- (i) अक्ल पर पत्थर पड़ना अर्थात् बड़ों की बात न मानकर बेवकूफी करना।
- (ii) आँखों का तारा अर्थात् बहुत प्यारा लगना।

130. विकल्प (1) उचित है।

- (i) टाँग अड़ाना अर्थात् दूसरों के काम में दखल देना।
- (ii) हाथ थामना अर्थात् साथ देना।
- (iii) हाथ लगाना अर्थात् काम करने के लिए सहायक होना।
- (iv) हाथ बढ़ाना अर्थात् बढ़-चढ़कर काम को करने के लिए तत्पर होना। यहाँ, टाँग अड़ाना एक नकारात्मक मुहावरा है।

131. विकल्प (4) उचित है।

- (i) बीच-बचाव अर्थात् दो पक्षों के बीच सुलह कराना।
- (ii) बोल-चाल का अर्थ बातचीत करना है।
- (iii) इंगित का अर्थ संकेत करना है।
- (iv) हस्तक्षेप करना मतलब दखलअंदाजी करना होता है। यहाँ केवल हस्तक्षेप एक नकारात्मक शब्द है।

132. विकल्प (2) उचित है।

व्याख्या—'हस्तक्षेप' का जनतांत्रिक समाज में अभिप्राय है अनुचित काम को 'रोकना'।

133. विकल्प (3) उचित है।

- (i) बतीसी दिखाना (अर्थ—दौत दिखाना)—बिना शर्म—लिहाज के 'हँसना'।
- (ii) आँखों का तारा—बहुत प्यारा लगना।
- (iii) हाथ बढ़ाना—सहायता करना।
- (iv) लाल-पीला होना—गुस्सा करना।

इन मुहावरों में से लाल-पीला होना देह शब्द से जुड़ा नहीं है।

134. विकल्प (2) उचित है।

व्याख्या—प्रत्यय—वह शब्द जो दूसरे शब्दों के अंत में जुड़कर, शब्दों में बदलाव लाए वह प्रत्यय कहलाते हैं।

जैसे—सामाजिक—समाज + इक

135. विकल्प (1) उचित है।

व्याख्या—हाथ बढ़ाना का अर्थ है सहायता करना।

136. विकल्प (4) उचित है।

व्याख्या—शिक्षार्थी केंद्रित कक्षा में विद्यार्थियों की इच्छाओं, लक्ष्यों और रुचियों पर विशेष ध्यान दिया जाता है। इन कक्षाओं में अध्यापक केवल सहायता व निर्देशित करते हैं। विद्यार्थी खुद ही सीखने की प्रक्रिया में भाग लेते हैं। इसमें उनका पूर्व ज्ञान और अनुभव को शामिल करने की सलाह दी जाती है।

137. विकल्प (4) उचित है।

व्याख्या—समावेशन का अर्थ सबका मिलजुल कर काम करना। भाषा शिक्षा के दौरान सभी विद्यार्थी एक समानता से कक्षा में पढ़ते हैं और अपनी समायोजन क्षमता का विकास करते हैं।

138. विकल्प (3) उचित है।

व्याख्या—भाषा अध्यापक—शिक्षा में उन बातों व समस्याओं को ध्यान में रखा गया है जो पुरानी सोच व चयन नीति को बदलकर नवीन अन्तःदृष्टि प्रदान करते हैं। पहले व्यावहारिक भाषाविज्ञान पर ध्यान केंद्रित रहने की वजह से विद्यार्थी अपनी रुचि खो देते थे जिससे उनके दिमाग पर गलत असर भी पड़ता था।

139. विकल्प (3) उचित है।

व्याख्या—विद्यार्थी को अच्छी तरह से अभ्यास कार्य नहीं कर पाने पर अध्यापक को—

- (i) कठिनाई का कारण पता लगाना चाहिए।
- (ii) व्याकरण सिखाने के लिए सामूहिक रूप से ड्रिल करवाएँ।
- (iii) विद्यार्थियों को प्रोत्साहित करें।
- (iv) अवसर प्रदान करें जिससे वह डरे नहीं जवाब देने से शिक्षक को विद्यार्थियों के समझने के तरीके का समझकर विभिन्न उपायों का उपयोग करके प्रभावी रूप से भूतकाल की अवधारणा समझना चाहिए।

140. विकल्प (4) उचित है।

व्याख्या—पाठ्य सामग्री व्याकरण को पढ़ाने के लिए आवश्यक है। इससे विद्यार्थी सही

तरीके से व्याकरण को जान पाते हैं तथा उनका शुद्ध रूप से प्रयोग करना भी सीखते हैं। यह कक्षा को विद्यार्थी केंद्रित बनाते हैं तथा अलग-अलग अवसर देकर उनका सही प्रयोग करना सिखाते हैं। पाठ्य सामग्री आधारित पाठ शिक्षार्थियों को भाषा के विभिन्न पक्षों को समझने और उन्हें उसे अपने जीवन में उपयोगी बनाने में मदद करते हैं।

141. विकल्प (3) उचित है।

व्याख्या—भाषा शिक्षा की अवधारणा में—

- (i) चुनौतिपूर्ण अवधि की परिकल्पना
- (ii) बोधगम्य निवेश
- (iii) सकारात्मक पुनर्बलन आते हैं।

वास्तविकता में मस्तिष्क के स्वास्थ्य या नियंत्रण के विषय में है जो विज्ञान या चिकित्सा से संबंधित होता है, और भाषा शिक्षा से सीधा संबंध नहीं होता।

142. विकल्प (1) उचित है।

व्याख्या—राष्ट्रीय शिक्षा नीति 2020 के अनुसार विद्यालय में अधिगम के लिए बहुभाषिकता और भाषाओं की शक्ति आवश्यक है। इस नीति में मातृभाषा को अधिक महत्त्व दिया गया है। इसमें त्रिभाषा सूत्र को शामिल करने के लिए प्रस्ताव है जिसमें एक मातृभाषा, अंग्रेजी व एक अन्य भारतीय भाषा को पढ़ाने के लिए कहा गया है। यह नीति 'अधिगम के लिए आकलन' पर केंद्रित है। बहुभाषिकता और भाषाओं की शक्ति को समर्थित किया गया है ताकि विद्यार्थी एक से अधिक भाषा को सीख सकें और उन्हें भाषाओं के साथ संबंधित गहन अनुभव मिले।

143. विकल्प (1) उचित है।

व्याख्या—योजक उपकरण वह शब्द होते हैं जो दो वाक्यों को जोड़ने का काम करते हैं जैसे— इसलिए, अथवा, अन्ततः आदि। योजक उपकरण वाक्यों में किसी विशेष व्यक्ति वस्तु, या भाव को निर्दिष्ट करने के लिए उपयोग किया जाता है।

144. विकल्प (2) उचित है।

व्याख्या—निष्कर्ष निकालने से जुड़े पठन वह वाक्य दर्शाते हैं जो कि समाधान के बारे में पूछे या उत्तर जानने के लिए प्रोत्साहित करें। इसके दौरान विद्यार्थी अपना पूर्व ज्ञान याद करने की कोशिश में लगा रहता था। वाक्यों में क्रिया का स्थान स्थानिक वाक्यांश (Clause) के रूप में होता है और वाक्यांश क्रिया का संबंधित कार्य या घटना को संदर्भित करता है। वाक्य के पूरे मायने निकालने के लिए हमें वाक्य के क्रिया भाग को समझना और उससे निष्कर्ष निकालना आवश्यक होता है।

145. विकल्प (4) उचित है।

व्याख्या—अधिगम के लिए आकलन का अर्थ है शिक्षार्थी की हर प्रगति का मूल्यांकन करना। यह प्रतिपुष्टि व परामर्श देकर विद्यार्थियों की

क्षमताओं को बढ़ाना है। इससे विद्यार्थी की प्रगति में मदद होती है।

146. विकल्प (4) उचित है।

व्याख्या—मिश्रित अधिगम में हर प्रकार के उपागमों का उपयोग किया जाता है। वेब आधारित में कम्प्यूटर एवं नेटवर्क का सही ज्ञान होना अति आवश्यक है तथा पारंपरिक शिक्षा के दौरान विद्यार्थी की रुचि को बनाए रखना जरूरी है। यह अधिगम प्रक्रिया में संयोजन और एकीकरण की भूमिका निभाता है जिससे विद्यार्थियों को भाषा का अधिक गहन और सुचारु अध्ययन करने में मदद मिलती है।

147. विकल्प (1) उचित है।

व्याख्या—'भाषा जागरूकता' भाषा को सही तरीके से जानने के बारे में है। यह एक से अधिक भाषा को व्यक्त करने की कौशलता को प्रोत्साहित करती है। यह दूसरों के विचारों को हमें समझाती है। इसका सीधा असर बौद्धिक व विस्तृत चिंतन को बढ़ाने में है। भाषा जागरूकता के माध्यम से लोग अपने विचारों को समझाने और व्यक्त करने में सुचारु बन सकते हैं, और सही तरीके से संवाद कर सकते हैं। इससे समाज में समृद्धि, समाजिक समरसता और सम्मान का विकास होता है।

148. विकल्प (2) उचित है।

व्याख्या—'निवेश परिकल्पना' अनुशंसा करती है कि भाषिक निवेश भाषिक दक्षता के वर्तमान स्तर से एक चरण आगे अधिगम प्रतिफलों को सही तरह से प्राप्त करने के लिए आदर्श है। बोधगम्य निवेश अधिग्रहण के लिए आवश्यक है। भाषिक निवेश के द्वारा भाषिक दक्षता को विकसित करने के लिए हमें वर्तमान स्तर से एक चरण आगे जाना चाहिए।

149. विकल्प (3) उचित है।

व्याख्या—मातृभाषा/घर की भाषा का बालक अपने संस्कृति का पालन करना सीखता है। इसके दौरान विद्यार्थी सभी भाषाओं को समान अधिकार देना सीखता है। उसकी मातृभाषा ही उसे अन्य भाषाओं को समझने में मदद करती है। मातृभाषा आधारित बहुभाषिकता में, विद्यार्थी अपनी प्राथमिक शिक्षा की आधारभूत शिक्षा अपनी मातृभाषा या घर की भाषा में प्रारंभ करता है। इसके बाद, उन्हें अन्य भाषाओं से भी संपर्क करने का अवसर मिलता है और वे अधिक भाषाओं के अध्ययन में जुड़ते हैं। इस प्रकार, विद्यार्थी अपनी मातृभाषा के आधार पर अन्य भाषाओं को सीखने में सुगमता से समर्थ होते हैं।

150. विकल्प (1) उचित है।

व्याख्या—इस वार्तालाप से अध्यापक की कुछ त्रुटियाँ सामने आती हैं जैसे—

- (i) निर्देश सही से न समझाना।
- (ii) विद्यार्थियों को विस्तार में न बताना।
- (iii) आत्मविश्वास की कमी को न समझना।