# PRACTICE SET-1

### PART I: CHILD DEVELOPMENT AND PEDAGOGY

- 1. The period of learning where no improvement in performance is made, is called
  - (a) learning curve
  - (b) plateau of learning
  - (c) memory
  - (d) attention
- 2. The formula for calculating IO is
  - (a) Mental age × Chronological age
  - (b) Chronological age Mental age
  - Mental age
    Chronological age
  - (d) Chronological age + Mental age
- 3. Who has propounded the Law of Trial and Error of learning?
  - (a) Kohler
- (b) Payloy
- (c) Thorndike (d) Gestalt
- 4. In a normal zygote, the number of chromosomes in pair is
  - (a) 22
- (b) 23
- (c) 24
- (d) None of these
- 5. Operant Conditioning Theory is propounded by
  - (a) Hull
- (b) Thorndike
- (c) Hegarty
- (d) Skinner
- 6. Kohler is associated with which of the following?
  - (a) Theory of motivation
  - (b) Theory of development
  - (c) Theory of personality
  - (d) Theory of learning
- 7. Fluid Mosaic Model of intelligence was proposed by
  - (a) Cattell
- (b) Thorndike
- (c) Vernon
- (d) Skinner
- 8. Brainstorming model of teaching is used to improve which of the following?

- (a) Understanding
- (b) Application
- (c) Creativity
- (d) Problem solving
- 9. Goleman is associated with which of the following?
  - (a) Social intelligence
  - (b) Emotional intelligence
  - (c) Spiritual intelligence
  - (d) General intelligence
- 10. Find the odd one out.
  - (a) Theory of learning to learn
  - (b) Theory of identical elements
  - (c) Drive reduction theory
  - (d) Theory of generalisation
- 11. The lowest level of cognitive achievement is
  - (a) knowledge
  - (b) understanding
  - (c) application
  - (d) analysis
- 12. A boy who can ride a cycle is going to drive a motorbike. This is an example of
  - (a) horizontal transfer of learning
  - (b) vertical transfer of learning
  - (c) bilateral transfer of learning
  - (d) No transfer of learning
- 13. Which of the following is not the cause of plateau of learning?
  - (a) Limit of motivation
  - (b) Non-cooperation are as follows of school
  - (c) Physiological limit
  - (d) Limit of knowledge
- 14. "Learning is the modification of behaviour through experience and training". This statement was given by
  - (a) Gates and others
  - (b) Morgan and Gilliland
  - (c) Skinner
  - (d) Cronbach

- 15. 'Stanford-Binet Test' measures
  - (a) personality
  - (b) reading efficiency
  - (c) intelligence
  - (d) None of these
- 16. Who classified introvert personality and extrovert personality?
  - (a) Freud (c) Munn
- (b) Jung (d) Allport
- 17. The factors affecting the social development of children are
  - (a) economic elements
  - (b) social environmental elements
  - (c) physical elements
  - (d) hereditary elements
- 18. Which of the following is a primary law of physical development?
  - (a) Law of difference from mental development
  - (b) Law of irregular development
  - (c) Law of rapid growth
  - (d) Law of relation from imagination and emotional development
- 19. Which of the following is not the theory of development?
  - (a) Theory of conditioned reflex
  - (b) Theory of continuous growth
  - (c) Theory of interrelation
  - (d) Theory of uniform pattern
- 20. "Development results in new characteristics and new abilities". This statement is given by
  - (a) Gesell
  - (b) Hurlock
  - (c) Meredith
  - (d) Douglas and Holland
- 21. Instincts are classified in fourteen types by
  - (a) Drever
- (b) McDougall
- (c) Thorndike
- (d) Woodworth

- 22. "Attention is the concentration of consciousness upon one object rather than upon another". This statement is given by
  - (a) Dumville
- (b) Ross
- (c) Munn
- (d) McDougall
- 23. Which is not included in primary law of learning?
  - (a) Law of readiness
  - (b) Law of exercise
  - (c) Law of multiple response
  - (d) Law of effect
- 24. Which test is propounded by Dr. S. Jalota in Hindi for the children of 12 to 16 years?
  - (a) Non-verbal intelligence test
  - (b) General mental ability test
  - (c) Army alpha test
  - (d) Picture drawing test

- 25. Who propounded the two-factor theory of intelligence?

  - (a) Thorndike (b) Spearman
  - (c) Vernon
- (d) Stern
- 26. Which of the following pairs is not true?
  - (a) Stimulus-response theory of learning - Thorndike
  - (b) Operant conditioning theory of learning - BF Skinner
  - (c) Classical theory of learning Pavlov
  - (d) Holistic theory of learning -Hull
- 27. Whose name is associated with 'Father of the Eugenics'?
  - (a) Crow and Crow
  - (b) Galton
  - (c) Ross
  - (d) Woodworth

- 28. Who described different types of personality based on glands?
  - (a) Kretschmer (b) Jung
  - (c) Cannon
- (d) Spranger
- 29. "Creativity is a mental process to express the original outcomes". This statement is given by:
  - (a) Cole and Bruce
  - (b) Drevahal
  - (c) Dehan
  - (d) Crow and Crow
- 30. The tendency of 'Feeling of Revolt' is concerned with which of the following ages?
  - (a) Childhood
  - (b) Infancy
  - (c) Early adolescence
  - (d) Middle adolescence

### PART II : MATHEMATICS

- 31. Reduce 2530/1430 to lowest terms.
  - (a) 47/17 (c) 47/19
- (b) 23/13 (d) 29/17
- 32. What should be the missing digit so that the number 347 547 becomes exactly divisible by 11?
  - (a) 5
- (b) 3
- (c) 9
- (d) 2
- 33. 20% discount is offered on an item. By applying a promo code the customer wins 10% cash back. What is the effective discount?
  - (a) 30.8 percent
  - (b) 30 percent
  - (c) 12 percent
  - (d) 28 percent
- 34. When a discount of 20% is given on a monthly train pass, the profit is 44%. If the discount is 29%, then the profit is .....
  - (a) 73 percent
  - (b) 118.2 percent
  - (c) 17.4 percent
  - (d) 27.8 percent
- 35. The total surface area of a hemisphere is 166.32 sq. cm, find its curved surface area.
  - (a) 221.76 sq cm
  - (b) 36.96 sq cm
  - (c) 110.88 sq cm
  - (d) 55.44 sq cm

- 36. One diagonal of a rhombus is half the other. If the length of the side of the rhombus is 10 cm. what is the area of the rhombus?
  - (a) 40 sq. cm (b) 20 sq. cm
  - (c) 100 sq. cm (d) 80 sq. cm
- 37. In what ratio is the segment joining (12, 1) and (3, 4) divided by the y-axis?
  - (a) 4:1
- (b) 1:4
- (c) 4:3
- (d) 3:4
- 38. The line passing through (4, 3) and (v, 0) is parallel to the line passing through (1, 2) and (3, 0). Find *y*?
  - (a) 1
- (b) 2
- (c) 2
  - (d) 7
- 39. When a number is increased by 32, it becomes 116% of itself. What is the number?
  - (a) 384
- (b) 480
- (c) 200
- (d) 288
- 40. A student multiplied a number by 11/13 instead of 13/11. What is the percentage error in the calculation?
  - (a) 39.67 percent
  - (b) 28.4 percent
  - (c) 14.2 percent
  - (d) 19.83 percent

- 41. The two numbers are 63 and 77, HCF is 7. Find the LCM.
  - (a) 668
- (b) 693
- (c) 674
- (d) 680
- 42.  $5 \times [-0.6 (2.8 + 1.2)]$  of 0.3 is equal to
  - (a) 1.44
- (b) -1.08
- (c) 1.2
- (d) -3.6
- 43. In a class of 60 students there are 33 girls. The average weight of these girls is 62 kg and average weight of the full class is 66.5 kg. What is the average weight of the boys of the class?
  - (a) 72 kg
- (b) 71 kg
- (c) 70 kg
- (d) 73 kg
- 44. A bag has ₹ 20 in the form of 1 rupee, 50 paise and 10 paise coins in the ratio of 2:3:5. Find the number of 50 paise coins.
  - (a) 25 (b) 10 (d) 5 (c) 15
- 45. P and Q can do a project in 60 and 30 days respectively. In how many days can they complete 90% of the project if they work together?
  - (a) 9 days
- (b) 27 days
- (c) 36 days
- (d) 18 days

- 46. Rohit walks at 17 km/hr and Ruchira cycles at 22 km/hr towards each other. What was the distance between them when they started if they meet after 44 minutes?
  - (a) 42.9 km
- (b) 35.8 km
- (c) 21.5 km
- (d) 28.6 km
- 47. The difference between simple and compound interests compounded annually on a certain sum of money for 2 years at 18% per annum is ₹81. The sum is...........
  - (a) ₹ 2500
- (b) ₹5000
- (c) ₹ 10000
- (d) ₹7500
- 48. Factorise  $x^2 + 3x 18$ :
  - (a) (x + 18)(x 2)
  - (b) (x-1)(x+18)
  - (c) (x+6)(x-3)
  - (d) (x-6)(x+3)
- 49. Which one of the following statements is true?
  - (a) Zero should be introduced after number 9
  - (b) Zero should be introduced at the time of teaching place value
  - (c) Zero should be the first numeral to be taught
  - (d) Zero should be introduced after children develop number sense
- 50. A teacher plans the following activities to introduce the concept of 'half' to Class III students:
  - A. Shows pictures representing 'half'
  - B. Writes symbol for 'half'
  - C. Divides many types of concrete materials into 'halves'
  - D. Uses story or words to represent 'half'

Which one of the following; is the correct sequence of the activities that the teacher needs to follow?

- (a) C, A, D, B
- (b) C, D, A, B
- (c) A, B, C, D
- (d) B, A, C, D
- 51. Which one of the following is true about teaching and learning of Mathematics in Class I and II?

- (a) Lots of opportunities for practice should be provided
- (b) Only oral Mathematics problems should be done in Class I and II
- (c) Mathematics should be integrated with other subjects like language, art etc.
- (d) Mathematics should not be taught in Class I and II
- 52. "Mathematics is the mirror of civilization and culture". Who said this statement?
  - (a) Bacon
- (b) Hogben
- (c) Locke
- (d) Dutton
- 53. Most of the use of Mathematics done in the activities of human life, that is:
  - (a) cultural
  - (b) psychological
  - (c) social
  - (d) economical
- 54. Who has said, "Teacher, with the help of teaching equipment/ aids, make teaching stable and interesting"?
  - (a) Rusk
  - (b) Nun
  - (c) Mecon and Roberts
  - (d) Vanshidhar
- 55. In teaching mathematics, an "axiomatic method" does not include:
  - (a) euclidean method
  - (b) non-euclidean method
  - (c) genetic method
  - (d) formal axiomatic method
- 56. Which one of the following does not match curricular expectations of teaching Mathematics at the primary level?
  - (a) Represent part of whole as a fraction and order simple fractions
  - (b) Analyse and infer from representation of grouped data
  - (c) Develop a connection between the logical functioning of daily life and that of mathematical thinking
  - (d) Develop language and symbolic notations with standard algorithms of performing number operations

- 57. The main goal of Mathematics education is :
  - (a) to formulate theorems of Geometry and their proofs independently
  - (b) to help the students to understand Mathematics
  - (c) to develop useful capabilities
  - (d) to develop children's abilities for mathematisation
- 58. A teacher uses the exploratory approach, use of manipulatives and involvement of students in discussion while giving the concepts of Mathematics. She uses this strategy to:
  - (a) achieve the higher aim of teaching Mathematics
  - (b) develop manipulative skills among the students
  - (c) create a certain way of thinking and reasoning
  - (d) achieve the narrow aim of teaching Mathematics
- 59. A teacher asks Shailja of class V about the perimeter of a figure. She also asked Shailja to explain the solution in her words. Shailja was able to solve the problem correctly but was not able to explain it. This reflects that Shailja is having:
  - (a) poor confidence level and poor mathematical skills
  - (b) poor understanding of concept of perimeter but good verbal ability
  - (c) lower language proficiency and lower order mathematical proficiency
  - (d) lower language proficiency and higher order mathematical proficiency
- 60. As per the NCF 2005, the narrow aim of teaching Mathematics at schools is:
  - (a) to teach daily life problems related to linear algebra
  - (b) to develop numeracy related skills
  - (c) to teach algebra
  - (d) to teach calculation and measurements

### PART III: ENVIRONMENTAL STUDIES

- 61. 'AGMARK' is related with
  - (a) quality
- (b) packaging
- (c) processing (d) production
- 62. The problem of water pollution with arsenic is maximum in
  - (a) Uttar Pradesh
  - (b) Madhya Pradesh
  - (c) Bihar
  - (d) West Bengal
- 63. The Wildlife Protection Act was passed in
  - (a) 1960
- (b) 1962
- (c) 1972
- (d) 1975
- 64. The Process of curd production from milk is known as
  - (a) photosynthesis
  - (b) distillation
  - (c) fermentation
  - (d) sterilisation
- 65. Fundamental Duties are adopted from the Constitution of which country?
  - (a) Germany
  - (b) United Kingdom
  - (c) the USA
  - (d) the USSR
- 66. The Polestar is

  - (a) North Star (b) South Star
  - (c) East Star
- (d) West Star
- 67. 'Project Tiger' was started in India in
  - (a) 1972
- (b) 1973
- (c) 1981
- (d) 1985
- 68. The Valley of Flowers is located
  - (a) Jammu and Kashmir
  - (b) Himachal Pradesh
  - (c) Sikkim
  - (d) Uttarakhand
- 69. How many bones are present in an adult human being?
  - (a) 305
- (b) 275
- (c) 206
- (d) 175
- 70. The Headquarter of Greenpeace International is located in
  - (a) New York
- (b) Sydney
- (c) Amsterdam (d) Nagasaki

- 71. During light phase of photosynthesis,.....is oxidized and......is reduced.
  - (a) water, NADP
  - (b) NADPH,, CO,
  - (c) CO2, water
  - (d) CO<sub>2</sub>, NADPH,
- 72. What is not true for LPG?
  - (a) It is a clean fuel
  - (b) It has high calorific value
  - (c) It burns with blue flame
  - (d) It is methane emitting
- 73. The 'Origin of Species' is a work
  - (a) Aristotle
  - (b) Charles Darwin
  - (c) Mendel
  - (d) Robert Hooke
- 74. The Tropic of Capricorn is

  - (a)  $23\frac{1}{2}^{\circ}$  (b)  $23\frac{1}{2}^{\circ}$ N
  - (c)  $23\frac{1}{2}$ °N (d) 23°S
- 75. The Head Office of the **International Court of Justice** is situated in
  - (a) Geneva
- (b) The Hague
- (c) New York
- (d) Paris
- 76. The Constituent Assembly adopted our National Anthem on
  - (a) 20th January, 1950
  - (b) 24th January, 1950
  - (c) 21st May, 1949
  - (d) 13th November, 1949
- 77. Where is Pushkar Fair held?
  - (a) Jaipur
- (b) Udaipur
- (c) Jodhpur
- (d) Ajmer
- 78. Which of the following ultraviolet rays are more dangerous?
  - (a) UV-A
- (b) UV-B
- (d) None of these (c) UV-C
- 79. Which of the following is not an abiotic component of biosphere?
  - (a) Protein
- (b) Soil
- (c) Fungi (d) Phosphorus
- 80. 'Gir Lion Project' is situated in
  - (a) Gujarat
  - (b) Maharashtra
  - (c) Uttar Pradesh
  - (d) Madhya Pradesh

- 81. WWF stands for
  - (a) World Wide Fund
  - (b) World War Fund
  - (c) World Wildlife Fund
  - (d) World Watch Fund
- 82. The river Ganga rises from
  - (a) Aravalli range
  - (b) Ladakh glacier
  - (c) Gangotri glacier
  - (d) Milap glacier
- 83. Which of the following agencies is primarily concerned with the measurement of pollution in India?
  - (a) Green Tribunal
  - (b) Central Pollution Control Board
  - (c) Central Water Commission
  - (d) Survey of India
- 84. 'Cotopaxi' is an active volcano situated in
  - (a) Sicily
- (b) Hawaii
- (c) Andes
- (d) Rockies
- 85. Tsangpo river of Tibet, in India, is known as
  - (a) Ganga
- (b) Yamuna
- (c) Brahmaputra (d) Indus
- 86. In a food chain of grassland ecosystem, the top consumers are
  - (a) herbivorous
  - (b) carnivorous
  - (c) bacteria
  - (d) either carnivorous or herbivorous
- 87. The main atmospheric layer near the surface of the Earth is
  - (a) stratosphere (b) troposphere
  - (c) mesosphere (d) ionosphere
- 88. The number of permanent members of the UN Security Council is
  - (a) 3
- (b) 4
- (c) 5
- (d) 6 89. Sariska National Park is situated
  - (a) West Bengal (b) Gujarat
  - (c) Rajasthan (d) Assam
- 90. The main source of energy in an ecosystem is
  - (a) ATP
- (b) sunlight
- (c) DNA
- (d) RNA

### PART IV: LANGUAGE-I (ENGLISH)

Directions (Q. Nos. 91–120): Read the extract given below and answer the questions that follow by selecting the correct/most appropriate option.

How soon hath Time, the subtle thief of youth,

- (a) Stol'n on his wing my three-and-twentieth year!
- (b) My hasting days fly on with full career,

But my late spring no bud or blossom shew'th

Perhaps my semblance might deceive the truth

That I to manhood am arrived so near;

And inward ripeness doth much less appear,

That some more timely-happy spirits endu'th

Yet be it less or more, or soon or slow It shall be still in strictest measure ev'n

To that same lot, however mean or high

Toward which Time leads me, and the will of Heaven:

#### 91. The poet presents 'Time' as a/an-

- (a) enemy
- (b) spirit
- (c) friend
- (d) thief

#### 92. The poet regrets that-

- (a) he has not attained inner maturity
- (b) his teachers are not happy with his progress
- (c) his academic progress has been very slow
- (d) he is not popular with his peers

## 93. The poet envies his friends, because they-

- (a) have achieved name and fame
- (b) are popular with their friends
- (c) are blessed with robust health
- (d) have attained inward ripeness

### 94. 'The inner maturity' the poet longs for will come—

- (a) with the help of peers
- (b) with the help of teachers
- (c) by the will of God
- (d) through hard work

## 95. The poet is ..... about his future.

- (a) pessimistic
- (b) unconcerned
- (c) cynical
- (d) optimistic

### 96. The 'figure of speech' used in lines (a) and (b) is

- (a) personification
- (b) a hyperbole
- (c) an irony
- (d) a simile

Directions (Q. Nos. 97-111): Answer the following questions by selecting the correct/most appropriate options.

- 97. Which one of the following is the most important prerequisite for language learning?
  - (a) Children's motivation to learn the language
  - (b) List of aims and objectives of the language to learn
  - (c) Providing a good textbook to children to learn the language
  - (d) Using structural-situational approach of teaching
- 98. Ateacher asks the students of Class III to describing their best friend. He writes the students' responses on the blackboard. At last, states that all these describing words on blackboard are adjectives. This is—
  - (a) Immersion method
  - (b) Incidental method
  - (c) Inductive method
  - (d) Deductive method

#### 99. The rise and fall of tone is

- (a) Intonation
- (b) Pronunciation
- (c) Stress
- (d) Strain

## 100. Which one of the following is the most important about storytelling?

- (a) It broadens their knowledge about various authors
- (b) It enhances graded pattern and structure
- (c) It promotes whole language approach
- (d) It is an effective way of learning vocabulary

#### 101. Dictation does not help learners to

- (a) increase their concentration
- (b) improve their reading skill
- (c) improve their spelling
- (d) enhance their listening comprehension
- 102. An English teacher after completing a chapter from the textbook asks questions based on the text to—

- (a) maintain class discipline
- (b) keep students busy as the chapter is complete
- (c) attract students' attention
- (d) know their comprehension
- 103. Shreya, a teacher of Class IV, asked the learners to complete the dialogue in the given boxes and then to role-play the same using their dialogues. She is developing—
  - (a) speaking and writing skills
  - (b) all listening, writing, reading and speaking skills
  - (c) listening and speaking skills
  - (d) reading and writing skills
- 104. Which one of the following cannot be used in formative assessment?
  - (a) Debate
  - (b) Olympiad
  - (c) Retelling stories
  - (d) Role play

## 105. Teaching Learning Material (TLM) should be used by teacher as it

- (a) is not very expensive
- (b) motivates learners to further prepare such material at home
- (c) supplements teaching-learning process
- (d) prepares students mentally to sit in the class

### 106. While learning English as a second language—

- (a) the mother tongue should not be used by the learners
- (b) there is no role of mother tongue in learning L2
- (c) the use of mother tongue will facilitate learning
- (d) the use of mother tongue will create interference

# 107. The process of assessment in language of class should be conducted

- (a) during the teaching-learning process
- (b) for assessing the textual exercises at the end of the chapter
- (c) to know the level of students in the class
- (d) to know the efficiency of teachers in teaching

#### 108. As per the National Curriculum Framework (NCF), 2005, multilingualism in learning a language should be seen as a

(a) challenge for students to learn many languages

- (b) challenge for teachers to manage such classes
- (c) hindrance in teaching-learning English
- (d) resource in teaching-learning English
- 109. The most important factor which is responsible for the differentiation between language learning and language acquisition is
  - (a) language environment
  - (b) grammar of language
  - (c) assessment in language
  - (d) textbook of language
- 110. Which one of the following is an essential characteristic of a good textbook in English?
  - (a) The maximum number of textual exercises should be given to practice at the end of the lesson
  - (b) Every lesson should have a proper introduction at the beginning and a conclusion at the end
  - (c) It should be based on the guiding principles of curriculum and syllabus
  - (d) No difficult words should be given in the textbook at primary level
- 111. The maximum participation of students is possible while teaching English by the teacher using authentic tasks through?
  - (a) structural approach
  - (b) communicative approach
  - (c) grammar translation method
  - (d) direct method

Directions (Q. Nos. 112-120): Read the passage given below and answer the questions that follow by selecting the correct/most appropriate options.

As I kept strict watch over my way of living, I could see that it was necessary to economise. I, therefore, decided to reduce my expenses by half. My accounts showed numerous items spent on fares. Again, my living with a family meant the payment of a regular

weekly bill. It also included the courtesy of occasionally taking members of the family out to dinner and likewise attending parties with them. All this involved heavy items for conveyances, especially as, if the friend was a lady, custom required that the man should pay all the expenses. Also, dining out meant extra cost, as no deduction could be made from the regular weekly bill for meals not taken. It seemed to me that all these items could be saved, as likewise the drain on my purse. So, I decided to take rooms on my own account, instead of living any longer in a family and also to remove from place to place according to the work I had to do, thus gaining experience at the same time. The rooms were so selected, as to enable me to reach the place of business on foot in half an hour and so save fares. Before this I had always taken some kind of conveyance whenever I went anywhere, and had to find extra time for walks. The new arrangement combined walks and economy, as it meant a saving of fares and gave me walks of eight or ten miles a day. It was mainly this habit of long walks that kept me practically free from illness throughout my stay in England and gave me a fairly strong body.

Thus I rented a suite of rooms; one for a sitting room and another for a bedroom. This was the second stage. The third was yet to come.

# 112. The author could reduce his expenses by half by

- (a) having only one meal a day
- (b) renting rooms close to his office
- (c) travelling in a bus
- (d) cooking his own meals

# 113. ..... constituted a major part of the author's expenses.

- (a) Meals
- (b) Fares
- (c) Dining out
- (d) Entertainment

### 114. The author's choice of his new residence enabled him to

- (a) be close to his friends
- (b) work longer and harder
- (c) save money on fares
- (d) keep things under control

## 115. What gave the author a fairly strong body?

- (a) Yogic exercises
- (b) Self-discipline
- (c) Nourishing food
- (d) Long walks

# 116. The steps taken by the author to reduce his expenses show that he was

- (a) frugal
- (b) always short of money
- (c) saving money for emergencies
- (d) miser

### 117. The word 'numerous' most nearly means

- (a) enormous (b) many
- (c) goodness (d) politeness

### 118. The word which is opposite in meaning to 'courtesy' is

- (a) aggression (b) vulgarity
- (c) immodesty (d) rudeness

# 119. Which part of speech is the underlined word in sentence given below?

"I decided to reduce my expenses by half".

- (a) Preposition (b) Adjective
- (c) Adverb (d) Noun

# 120. "The new arrangement combined walks and economy".

'The Voice' in the above sentence has been correctly changed in

- (a) the new arrangement had combined walks and economy
- (b) walks and economy are combined in the new arrangement
- (c) walks and economy were combined in the new arrangement
- (d) walks and economy have been combined by the new arrangement

### भाग-V: भाषा-II (हिन्दी)

निर्देश ( प्र.सं. 121 से 150 ): निम्निलिखित प्रश्नों को ध्यानपूर्वक पढ़कर उचित विकल्प चुनिए। 121. भाषा सीखने की कौन-सी विधि मातृभाषा को मध्यस्थ बनाए बिना दूसरी भाषा को सीखने में सहायक होती है?

- (a) अनुवाद विधि (b) द्विभाषीय विधि
- (c) अप्रत्यय विधि (d) प्रत्यक्ष विधि
- 122. भाषा-शिक्षण में खेल का सर्वाधिक महत्वपूर्ण स्थान है क्योंकि-
- (a) भाषा-शिक्षक को कम श्रम करना पड़ता है
- (b) खेल भाषा को विस्तार देते हैं
- (c) खेल में आनन्द आता है
- (d) खेल में शारीरिक विकास होता है
- 123. पाठ के अन्त में अभ्यास और गतिविधियों का उद्देश्य.....नहीं है।
  - (a) भाषा का विस्तार करना
  - (b) सृजनात्मकता का विकास करना

- (c) बच्चों को अभिव्यक्ति के अवसर प्रदान करना
- (d) प्रश्नों के उत्तर सरलता से याद करवाना

### 124. पठन-पाठन के अन्त में ऐसे अभ्यास एवं गतिविधियां हों, जो-

- (a) सरल भाषा वाले हों
- (b) बच्चों को स्वयं कुछ करने और सीखने का अवसर प्रदान करें

- (c) केवल पाठ से ही सम्बन्धित हों
- (d) पाठ पर बिल्कुल आधारित न हों

### 125. भाषा-शिक्षण में बालक में मौखिक कौशल के विकास के लिए- ....... सबसे कम महत्वपूर्ण है।

- (a) किसी विषय पर चर्चा करना
- (b) बच्चों की बात को धैर्य से सुनना
- (c) प्रश्नों के उत्तर पूछना
- (d) अपनी बात कहने का पूरा मौका देना

#### 126. भाषा सीखने में मातृभाषा का व्याघात-

- (a) आंशिक रूप से होता है
- (b) पूर्ण रूप से होता है
- (c) नहीं होता है
- (d) होता है

### 127. भाषायी कौशलों के संदर्भ में कौन-सा कथन सत्य नहीं है?

- (a) भाषायी कौशल एक साथ सीखे जाते हैं, क्रम से नहीं
- (b) भाषायी कौशल एक-दूसरे से स्वतंत्र होते हैं
- (c) भाषायी कौशल एक क्रम से सीखे जाते हैं
- (d) भाषायी कौशल एक-दूसरे को प्रभावित नहीं करते

### 128. भाषा सीखने में होने वाली त्रुटियों के सन्दर्भ में कौन-सा कथन सत्य नहीं है?

- (a) त्रुटियां सीखने/सिखाने की प्रक्रिया का अभिन्न अंग हैं
- (b) त्रुटियां अस्थायी होती है
- (c) भाषा सीखने में होने वाली त्रुटियां स्थायी होती है
- (d) भाषा सीखने में होने वाली त्रुटियां यह समझने में मदद करती है कि बच्चे के मस्तिष्क में क्या चल रहा है

### 129. एक प्राथमिक शिक्षक के रूप में आप सतत् और व्यापक आकलन करते समय किसे सर्वोपिर मानते हैं?

- (a) कठिन शब्दों का श्रुतलेखन
- (b) लिखित प्रश्न-पत्र
- (c) पाठ से देखकर, सुलेख लिखना
- (d) बच्चों द्वारा विभिन्न सन्दर्भों में भाषा-प्रयोग की क्षमता

### 130. प्राथमिक स्तर पर बच्चों की पठन क्षमता का आकलन करने में किस प्रकार की सामग्री सर्वाधिक महत्वपूर्ण है?

- (a) आतंकवाद पर आधारित निबन्ध
- (b) बाल साहित्य की कोई संवादात्मक कहानी
- (c) पाठ्य-पुस्तक
- (d) औपचारिक पत्र

### 131. पहली और दूसरी कक्षा में भाषा-शिक्षण के साथ ही कला शिक्षा को समेकित करने का उद्देश्य नहीं है-

- (a) चित्रों के माध्यम से अभिव्यक्ति का विकास
- (b) बच्चों द्वारा आनन्द की प्राप्ति
- (c) बच्चों के लेखन में परिपक्वता लाना
- (d) बच्चों की रचनात्मकता का विकास

### 132. प्राथमिकता स्तर पर बच्चों कीघर की भाषा को अपनी कक्षा में स्थान देना जरूरी है क्योंकि घर की भाषा-

- (a) सरल होती है
- (b) बच्चे ने अभी पूर्णत: नहीं सीखी है
- (c) बच्चे की भाषायी पूंजी है
- (d) मानक स्वरूप लिए होती है

### 133. भाषा सीखने-सिखाने के सन्दर्भ में गृहकार्य का उद्देश्य होता है-

- (a) सीखने को विस्तार देना
- (b) अभिभावकों को प्रसन्न करना
- (c) बच्चों को कार्य में व्यस्त रखना
- (d) कॉपियां भरवाना

### 134. भाषा अर्जन के सम्बन्ध में कौन-सा कथन सत्य है?

- (a) भाषा सीखना एक उद्देश्य होता है
- (b) समाज-सांस्कृतिक परिवेश के अनुसार अर्थ-ग्रहण की प्रक्रिया स्वाभाविक होती है
- (c) भाषा अर्जन में बच्चे को बहुत अधिक प्रयास करना पड़ता है
- (d) भाषा अर्जन में किसी अन्य भाषा का व्याघात होता है

### 135. भाषा विकास के सम्बन्ध में कौन-सा कथन सही नहीं है?

- (a) भाषा विकास व्यक्ति निरपेक्ष है
- (b) बड़ों का सम्पर्क भाषा विकास की गति को तीव्र कर देता है
- (c) भाषा विकास व्यक्ति सापेक्ष है
- (d) प्रारम्भिक भाषायी परिवेश की समृद्धता भाषायी विकास में सहायक होती है

### निर्देश ( प्र.सं. 136 से 140 ): निम्निलखित प्रश्नों को ध्यानपूर्वक पढ़कर उचित विकल्प चुनिए। 136. कहानी, कविता, गीतों और नाटकों के माध्यम से बच्चे-

- (a) केवल मूल्यों का अर्जन करते है
- (b) केवल अपनी तर्कशक्ति का विकास करते हैं
- (c) अपनी सांस्कृतिक धरोहर से जुड़ते हैं
- (d) केवल मनोरंजन प्राप्त करते हैं

### 137. प्राथमिक स्तर पर बच्चों को भाषा सिखाने का सर्वोपिर उद्देश्य है-

- (a) मुहावरे-लोकोक्तियों का ज्ञान प्राप्त करना
- (b) कहानी-कविताओं को दोहराने की कुशलता का विकास करना
- (c) तेज प्रवाह के साथ पढ़ने की योग्यता का विकास करना
- (d) अपनी बात को दूसरों के समक्ष अभिव्यक्त करने की कुशलता का विकास करना

### 138. इनमें से कौन-सा प्राथमिक स्तर पर हिन्दी भाषा शिक्षण का उद्देश्य नहीं है?

- (a) सन्दर्भ के अनुसार लगाकर पढ़ने का प्रयास करना
- (b) चित्रकारी को स्वयं की अभिव्यक्ति का माध्यम बनाना
- (c) बच्चों को भाषा और स्कूल की भाषा में सम्बन्ध बनाते हुए उसे विस्तार देना
- (d) सुनी गई बातों को ज्यों-का-त्यों दोहराना

### 139. भाषा-कौशलों के सम्बन्ध में कौन-सा कथन सही है?

- (a) भाषा के कौशल अन्त: सम्बन्धित होते हैं
- (b) भाषा के सभी कौशलों को नये सिरे से सिखाने की आवश्यकता होती है
- (c) भाषा-कौशल एक-दूसरे से स्वतन्त्र होते हैं
- (d) भाषा के चारों कौशल एक क्रम से सीखे जाते हैं

#### 140. भाषा....और.....का एक उत्तम साधन है।

- (a) सुनना, बोलना, सोचना
- (b) पढ़ने, लिखने, सम्प्रेषण
- (c) सोचने, महसूस करने, चीजों से जुड़ने
- (d) पढ़ने, लिखने, समझने

### 141. भाषा सीखने का व्यवहारवादी दृष्टिकोण... पर बल देता है।

- (a) अनुकरण (b) रचनात्मकता
- (c) भाषा-प्रयोग (d) अभिव्यक्ति

#### 142. लिखना-

- (a) एक बेहद जटिल प्रक्रिया है
- (b) एक अनिवार्य कुशलता है, जिसे जल्दी प्राप्त किया जाना है
- (c) एक तरह की बातचीत है
- (d) एक अत्यन्त यान्त्रिक प्रक्रिया है
- 143. कक्षा 'एक' के बच्चे अपने....एवं....से प्राप्त बोलचाल की भाषा के अनुभवों को लेकर ही विद्यालय आते हैं।

- (a) घर-परिवार, पडोसी
- (b) घर-परिवार, परिवेश
- (c) घर-परिवार, दोस्तों
- (d) घर-परिवार, टी.वी.
- 144. कक्षा 'एक' और 'दो' के शुरूआती समय में पढ़ने का प्रारम्भ ...से हो और किसी....के लिए हो।
  - (a) अर्थ, उद्देश्य
  - (b) अक्षर ज्ञान, मनोरजंन
  - (c) शब्द-पहचान, मूल्यांकन
  - (d) अक्षर-ज्ञान, उद्देश्य
- 145. वाइगोत्सकी के विचारों पर आधारित कक्षा में.....पर सबसे अधिक बल दिया जाता है।
  - (a) कविता दोहराने
  - (b) कहानी सुनने
  - (c) कार्य-पत्रकों (Worksheets)
  - (d) परस्पर अन्त:क्रिया

- 146. हमारी कक्षाओं में बच्चे भिन्न-भिन्न भाषिक पृष्ठभूमि से आते हैं, अत:-
  - (a) उनको भाषाओं को भी कक्षा में सम्मान देना अनिवार्य है
  - (b) उनकी भाषाओं को सीखना सभी शिक्षार्थियों के लिए अनिवार्य है
  - (c) भाषा की पाठ्य-पुस्तक में उनकी सभी भाषाओं के शब्द, वाक्य होना अनिवार्य है
  - (d) उनकी सभी भाषाओं की जानकारी शिक्षक के लिए अनिवार्य है
- 147. इनमें से प्राथमिक स्तर का भाषा-आकलन का सर्वाधिक उचित तरीका है-
  - (a) किसी पाठ की पांच पंक्तियां पढ़वाना
  - (b) बच्चों को चित्र-वर्णन और प्रश्न पूछने के अवसर देना
  - (c) बच्चों से पत्र लिखवाना
  - (d) बच्चों से प्रश्नों के उत्तर लिखवाना

- 148. नासिरा पढ़ते समय अनेक बार अटकती है। उसे पढ़ने में कठिनाई होती है। उसकी समस्या मुख्यत:.....से सम्बन्धित है।
  - (a) पठन-अरूचि (b) बुद्धि-लब्धि
  - (c) डिस्लेक्सिया (d) डिस्ग्राफिया
- 149. कौन-सा प्रश्न बच्चों की भाषा-क्षमता का सही आकलन करेगा?
  - (a) लड़की ने किसके दाम नहीं बताए?
  - (b) लड़की टोकरी में क्या बेच रही थी?
  - (c) यदि तुम आम बेचोगे तो उसके कितने दाम लोगे और क्यों?
  - (d) आजकल आम का दाम कितना है?
- 150. प्राथमिकता स्तर पर बच्चों के लिए बाल-साहित्य के चयन का मुख्य आधार क्या होना चाहिए?
  - (a) छोटी रचनाएँ
  - (b) रोचक विषय-वस्तु
  - (c) रंगीन चित्र
  - (d) सरल जानकारी

### ANSWERS WITH EXPLANATIONS

- 1. (b) Periods of little or no noticeable progress in learning are called as plateau of learning. These are temporary standstills in the learning process. A learning plateau occurs when forward progress seems to have stopped while engaged in learning a new skill. These plateaus are normal and commonly experienced periodically while learning to play a musical instrument, speak a new language or learn some other complex discipline.
  - **2.** (c)
- **3.** (c) Trial and Error is a problem solving method in which multiple attempts are made to reach a solution. It is a basic method of learning that essentially all organisms use to learn new behaviours. EL Thorndike was the chief exponent of the Theory of Connectionism or Trial and Error
- **4.** (b) A healthy human zygote has a total of 46 chromosomes; 23 from the egg and 23 from the sperm. Because a zygote has two distinct sets of chromosomes, it is considered a diploid cell. The sperm and unfertilised egg are individually considered haploid cells because they have one set of chromosomes.
- **5.** (d) The Operant Conditioning Theory is propounded by BF Skinner. The theory is based upon the idea that learning

- is a function of change in overt behaviour. Changes in behaviour are the result of an individual's response to events (stimuli) that occur in the environment.
- 6. (d) In the 1920s, German psychologist Wolfgang Kohler was studying the behaviour of apes. He designed some simple experiments that led to the development of one of the first cognitive theories of learning which he called insight learning theory.
- **7.** (A) Fluid Mosaic Model of intelligence was proposed by Raymond B. Cattell. Fluid intelligence refers to quantitative reasoning, processing ability, adaptability to new environments and novel problem-solving.
- **8.** (d) Alex F Osborn is known as Father of Brainstorming. In his book 'Creative Problem Solving', he defines brainstorming as a strategy for creative productivity, which involves the process in which one goes through in an effort to generate ideas and problem solving.
- **9.** (b) Daniel Goleman is associated with the Emotional Intelligence (EI). The EI is the capability of individuals to recognise their own emotions and those of others discern between different feelings and label them appropriately.

- **10.** (c) All the given options are related to the learning theories that focus on acquiring knowledge. But, the drive reduction theory is a type of motivational theory. It was the first theory for motivation.
  - **11.** (a)
- **12.** (b) Learning of the lower level helps in learning at higher level is included in the vertical transfer of learning. In other words, vertical indicates that the transfer context builds on the learning context.
- 13. (b) Causes of plateau of learning
  - Limit of knowledge
  - Limit of enthusiasm or limit of inspiration or motivation
  - Useful methods of learning
  - · Complexity of work
  - Limit of physical activity
- **14.** (a) It is very difficult to give a universally acceptable definition of learning because various theories developed by psychologists attempt to define the term from different angles. Gates and others define, "Learning is modification of behaviour though experience and training".
- 15. (c) The Stanford-Binet Test measures the intelligence. This intelligence scale is an individually

administered intelligence test that was revised from the original Binet-Simon scale by Lewis M Terman. It is a cognitive ability and intelligence test that is used to diagnose developmental or intellectual deficiencies in young children.

- 16. (b) Carl Jung classified introvert personality and extrovert personality. Introverts are more comfortable living alone and being by themselves. They depend on their 'me time' to recharge. They become immersed in their inner world and run the risk of losing touch with their surroundings or their outer world. Extroverts, on the contrary, are actively involved in the world of people and things. They are socially active and more aware of what is going on around them
- 17. (b) Social development involves learning the values, knowledge and skills that enable children to relate to others effectively and to contribute in positive ways to family, school and the community. Children's development of social skills is affected by the nature of their family and early educational experiences. Thus, social-environmental elements affect the social development of children.
- 18. (c) Physical development is the process that starts in human infancy and continues upto late adolescence concentrating on gross and fine motor skills as well as puberty. It involves developing control over the body, particularly muscles and physical coordination. Therefore, law of rapid growth is the primary law of physical development.
- 19. (a) The theory of conditioned reflex was introduced by Pavlov in 1903. It is a reflexive or automatic type of learning in which a stimulus acquires the capacity to evoke a response that was originally evoked by another stimulus.
- **20.** (a) According to Gesell, development is more than a concept. It can be observed, appraised and to some extent even 'measured' in three ways, they are: (a) anatomic, (b) physiologic, and (c) behaviour. Behaviour signs, however, constitute a most comprehensive index of developmental status and developmental potentials. Development consists of a transition from lower to higher stage of activity or function.
- 21. (b) Instinct theory is a motivational theory propounded by William McDougall. He listed fourteen instincts including, hunger, curiosity, escape, pugnacity, sex, gregariousness, self-

assertion, submission, construction, acquisition, crying out or appeal, laughter, rest or sleep and comfort.

- 22. (a) Attention can be defined as an internal cognitive process by which one actively selects environmental information (i.e., sensation) or actively processes information from internal sources (i.e., visceral cues or other thought processes). Dumville in 1938 gave this definition of attention.
- 23. (c) Edward Thorndike developed the primary law of learning. There are three laws of learning, namely; readiness, exercise and effect. Since Thorndike set down his three laws in the early part of the 20th century, five additional principles have been added i.e., primacy, recency, intensity, freedom and requirement.
- **24.** (b) The group test of general mental ability (Samuhik Mansik Yogyata Pariksha) constructed by S Jalota (Hindi) which is related to children of 12 to 16 age groups.
- **25.** (b) Charles Spearman developed the two-factor theory of intelligence by using factor analysis. His research not only led him to develop the concept of the 'g' factor of general intelligence, but also the s factor of specific intellectual abilities.
- **26.** (d) The holistic theory of learning is propounded by Laird in 1985. The basic premise of this theory is that the individual personality consists of many elements specifically the intellect, emotions, the body impulse (or desire), intuition and imagination.

**27.** (b)

- **28.** (a) Kretschmer classified all human being into certain biological types (which include heredity, endocrine glands, physique and nervous system) according to their physical structure. Hence, Kretschmer defines different types of personality on the basis of glands.
- 29. (d) Creativity is defined as the tendency to generate or recognise ideas, alternatives or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others. Therefore, Crow and Crow define creativity as a mental process to express the original outcomes.
- **30.** (d) The tendency of 'Feeling of Revolt' is concerned with middle adolescence (Age 13-15). Most rebellion tendency is about creating needed differentiation to experiment with identity and needed opposition to gather power of self-determination.

**31.** (b) 
$$\frac{2530}{1430} = \frac{253 \div 11}{143 \div 11} = \frac{23}{13}$$

**32.** (b) Let missing digit be x

Sum of odd place digits – sum of even place digits = 0, 11, 22, .....

$$(3+7+5+7) - (4+x+4) = 0, 11, 22, ...$$

$$\Rightarrow 22 - (8+x) = 0, 11, 22$$

$$\Rightarrow 22 - 8 - x = 11$$

$$\Rightarrow 14 - x = 11$$

$$\Rightarrow 14 - 11 = x$$
Hence,  $x = 3$ , which is exactly

**33.** (d) Let M.P. be ₹ 100

divisible by 11.

S.P. = 
$$100 \times \frac{80}{100} = 780$$

Again by applying promo code

Net Price = 
$$80 \times \frac{(100-10)}{100}$$
  
=  $\frac{80 \times 90}{100}$  = ₹ 72

Hence, effective percent =

$$100\% - 72\% = 28\%$$
.

34. (d) By Tricky Method

Profit = 
$$(100 + P) \left( \frac{100 - y}{100 - x} \right) - 100$$
  
where P = 44%,  $x = 20\%$ ,  $y = 29\%$ 

$$= (100 + 44) \left( \frac{100 - 29}{100 - 20} \right) - 100$$

$$= 144 \times \frac{71}{80} - 100$$

$$= \frac{36 \times 71}{20} - 100 = \frac{2556}{20} - 100$$

$$= (127.8 - 100)\% = 27.8\%$$

**35.** (c) Total surface area of hemisphere  $= 3\pi r^2$ 

$$166.32 = 3 \times \frac{22}{7} \times r^2$$

$$r^2 = \frac{166.32 \times 7}{66}$$

$$= 2.52 \times 7$$

$$= 0.36 \times 7 \times 7$$

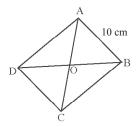
$$r = 0.6 \times 7$$

$$= 4.2$$

Curved surface area =  $2\pi r^2$ =  $2 \times \frac{22}{7} \times 4.2 \times 4.2$ =  $44 \times 0.6 \times 4.2$ = 110.88 sq. cm.

**36.** (d) Let the larger diagonal be d and smaller one be d/2

ABCD is a rhombus in which AC and BD intersects each other at O.



In 
$$\triangle AOB$$
,  
 $AO^2 + OB^2 = (10)^2$ 

$$\left(\frac{d}{2\times2}\right)^2 + \left(\frac{d}{2}\right)^2 = 100$$

$$\frac{d^2}{16} + \frac{d^2}{4} = 100$$

$$d^2\left(\frac{4+1}{16}\right) = 100$$

$$d^2 = \frac{16 \times 100}{5}$$

$$d^2 = 16 \times 20$$
$$d^2 = 320$$

Area of rhombus =

$$\frac{1}{2} \times d \times \frac{d}{2}$$

$$= \frac{1}{4} \cdot d^{2}$$

$$= \frac{1}{4} \times 320 = 80 \text{ cm}^{2}$$

37. (a) Let these points divided in the ratio  $m_1 : m_2$ 

$$\dot{x} = 0$$

$$x = \frac{m_1 x_2 + m_2 x_1}{m_1 + m_2}$$

$$0 = \frac{m_1 x_2 + m_2 x_1}{m_1 + m_2}$$

$$m_1 x_2 + m_2 x_1 = 0$$

$$\frac{m_1}{m_2} = -\frac{x_1}{x_2} = -\frac{12}{3} = -\frac{4}{1}$$

Hence, the required ratio = 4:1

38. (d) Slope on line first 
$$m_1 = \frac{y_2 - y_1}{x_2 - x_1}$$
  
=  $\frac{0 - 3}{y - 4} = \frac{-3}{y - 4}$ 

Slope of line second  $m_2 = \frac{0-2}{3-1}$ 

$$=\frac{-2}{2}=-1$$

But for parallel lines

$$m_1 = m_2$$

$$\frac{-3}{y-4} = \frac{-1}{1}$$
$$-3 = -y + 4$$

$$y = 4 + 3 = 7$$

**39.** (c) Let the number be *x*. According to question.

$$x + 32 = \frac{116}{100}x$$

$$\frac{116}{100}x - x = 32$$

$$x\left(\frac{116 - 100}{100}\right) = 32$$

$$16x = 32 \times 100$$

$$x = \frac{32 \times 100}{16} = 200$$

**40.** (b) Let the number be x.

% error = 
$$\frac{\frac{13}{11}x - \frac{11}{13}x}{\frac{13}{11}x} \times 100\%$$
$$= \frac{\frac{48}{11 \times 13}x}{\frac{13}{11}x} \times 100\%$$

$$= \frac{48 \times 11}{11 \times 13 \times 13} \times 100\%$$
$$= \frac{4800}{169}\% = 28.4\%$$

41. (b) H.C.F.  $\times$  L.C.M. = First Number

× Second Number

$$7 \times L.C.M. = 63 \times 77$$

L.C.M. = 
$$\frac{63 \times 77}{7}$$
 =  $9 \times 77$  = 693.

**42.** (d)  $5 \times [-0.6 (2.8 + 1.2)]$  of 0.3 =  $5 \times [-0.6 \times 4] \times 0.3$ =  $-12.0 \times 0.3 = -3.6$ 

43. (a) Total weight of 33 girls =  $33 \times 62 \text{ kg} = 2046 \text{ kg}$ Total weight of full class =  $60 \times 66.5 \text{ kg}$ = 3990 kgWeight of 27 boys =  $3990 - 600 \times 600 \times$ 

Average weight = 
$$\frac{1944}{27}$$
 = 72 kg

**44.** (c) Let number of coins be 2x, 3x

2046 = 1944

and 5*x* According to question,

$$2x \times 1 + \frac{50}{100} \times 3x + \frac{10}{100} \times 5x = 20$$

$$\Rightarrow 2x + \frac{3x}{2} + \frac{1}{2}x = 20$$

$$\Rightarrow \frac{4x + 3x + x}{2} = 20$$

$$\Rightarrow 8x = 40$$

$$x = 5$$

Number of 50 p coins = 3x = 3× 5 = 15

**45.** (d) P and Q's one day's work =

$$\left(\frac{1}{60} + \frac{1}{30}\right)$$

$$=\left(\frac{1+2}{60}\right) = \frac{3}{60} = \frac{1}{20}$$

P and Q's whole work will be done = in 20 days.

P and Q's 90% of work will be done

$$=\frac{20\times90}{100}$$
 = 18 days

**46.** (d) Total distance covered by them  $= 17 \times \frac{44}{60} + 22 \times \frac{44}{60}$ 

$$=\frac{44}{60}(17+22)$$

$$= \frac{44 \times 39}{60} = \frac{11 \times 39}{15} = \frac{11 \times 13}{5}$$
$$= \frac{143}{5} = 28.6 \text{ km}$$

47. (a) Difference of simple &

compound interest

$$I_{D} = P \left(\frac{R}{100}\right)^{2}$$

$$81 = P \times \frac{18}{100} \times \frac{18}{100}$$

$$P = \frac{81 \times 100 \times 100}{18 \times 18} = \text{ ? 2500}$$

**48.** (c) 
$$x^2 + 3x - 18$$
  
 $\Rightarrow x^2 + 6x - 3x - 18$   
 $\Rightarrow x(x+6) - 3(x+6)$   
 $\Rightarrow (x+6)(x-3)$   
**49.** (d) **50.** (a) **51.** (c) **52.** (b) **53.** (b)  
**54.** (c) **55.** (c) **56.** (b) **57.** (d) **58.** (c)  
**59.** (d) **60.** (b)

- **61.** (a) AGMARK is a certified mark employed on the agricultural products for assurance of the quality of the product. It was established under the Agriculture Produce (Grading and Marking) Act of India, 1937 (amended in 1986). AGMARK is the supervising agency. The Directorate of the Marketing and Inspection, Government of India, Acts as a Certifying Agency in order to certify the product conformity.
- **62.** (d) In India, chronologically, West Bengal, Jharkhand, Bihar, Uttar Pradesh in the flood plains of the Ganga, Assam and Manipur in the flood plains of the Brahmaputra and Imphal rivers and Rajnanadgaon village in Chhattisgarh State have been reported to be affected by arsenic contamination in groundwater.
- 63. (c) The Wildlife Protection Act, 1972 is an Act of the Parliament of India enacted for protection of plants and animal species. The Act provides for the protection of wild animals, birds and plants and for matters connected therewith or ancillary or incidental thereto. It extends to the whole of India, except the State of Jammu and Kashmir which has its own Wildlife Act.

**64.** (c) Milk is converted into curd or yogurt by the process of fermentation. The curd forms because of the chemical reaction between the lactic acid bacteria and casein.

**65.** (d)

- **66.** (a) Pole Star is also known as Lodestar, Guiding Star or North Star from its property of remaining in a fixed position throughout the course of the night and its use in celestial navigation. The Pole Star is a name of Polaris in the constellation Ursa Minor.
- 67. (b) Project Tiger is a tiger conservation programme launched in 1973 by the Government of India. The project aims at ensuring a viable population of Bengal tigers in their natural habitats and also to protect them from extinction and preserving areas of biological importance as a natural heritage forever represented as close as possible the diversity of ecosystems across the tiger's distribution in the country.
- **68.** (d) Valley of Flowers is a national park which is located in West Himalaya, in Uttarakhand. It is known for its meadows of endemic alpine flowers and the variety of flora.
- **69.** (c) The human skeleton is the internal framework of the body. It is composed of 270 bones at birth and decreases to 206 bones by adulthood after some bones have fused together.
- **70.** (c) Greenpeace is an independent global campaigning organisation that acts to change attitudes and behaviour, to protect and conserve the environment and to promote peace. Greenpeace is present in more than 55 countries across Europe, America, Asia, Africa and the Pacific with its headquarters in Amsterdam, the Netherlands.
- **71.** (a) During light phase water is oxidised in photosynthesis, which means it loses electrons and the released hydrogen is accepted by NADP, which means it gains electrons, hence is reduced to NADPH.
- **72.** (d) Liquefied Petroleum Gas (LPG) is a mixture of propane and butane liquefied at 15°C and a pressure of 1.7 7.5 bar. It emits CO<sub>2</sub> which is a greenhouse gas, but is cleaner when compared to gasoline.
- **73.** (b) The 'Origin of Species' is a work of scientific literature by Charles Darwin

- which was published on 24th November, 1859. It is considered to be the foundation of evolutionary biology.
- **74.** (c) The Tropic of Capricorn is an imaginary line of latitude going around the Earth at approximately 23.5° South of the equator. It is the southernmost point on Earth where the sun's rays can be directly overhead at local noon. Its northern equivalent is the Tropic of Cancer.
- 75. (b) The International Court of Justice (ICJ) is the principal judicial organ of the United Nations (UN). It was established in June, 1945 by the Charter of the United Nations and began work in April, 1946. The seat of the Court is at the Peace Palace in The Hague (Netherlands). Of the six principal organs of the United Nations, it is the only one not located in New York (United States of America).
- **76.** (b) 'Jana Gana Mana' by Rabindra Nath Tagore is known as the National Anthem of India. The song's Hindi version was adopted by the Constituent Assembly of India as the National Anthem on 24th January, 1950.
- 77. (d) The Pushkar Fair (Pushkar Camel Fair or locally Pushkar ka Mela) is an annual five-day camel and livestock fair held in the town of Pushkar (Ajmer) in Rajasthan. It is one of the world's largest camel fairs.
- **78.** (a) Ultraviolet (UV) radiation is part of the electromagnetic (light) spectrum that reaches the Earth from the Sun. It has wavelengths shorter than visible light, making it invisible to the naked eye. These wavelengths are classified as UV-A, UV-B, or UV-C. UV-A is the longest of the three at 320-400 nanometers and is more dangerous than rest of all.
- **79.** (c) Abiotic refers to non-living physical and chemical elements in the ecosystem. Its resources are usually obtained from the lithosphere, atmosphere and hydrosphere. Examples of abiotic factors are water, air, soil, sunlight and minerals.
- **80.** (a) The 'Gir Lion Project' was launched by the Government of India to relocate almost 600 resident Maldhari families and their livestock and banished hundreds of thousands of cattle that seasonally grazed in Gir Forest region of Gujarat in 1973.

- **81.** (c) WWF is stood for 'World Wildlife Fund'. It is one of the world's largest conservation organisations which were conceived on the 29th April, 1961.
- **82.** (c) The Ganga arises from the Gangotri glacier in the Himalayas at an elevation of about 7010 m in the Uttarkashi district of Uttarakhand. At its source, the river is called as the Bhagirathi. It descends down the valley up to Devprayag where after joining another hill stream Alaknanda, it is called Ganga.

83. (b)

- **84.** (c) Cotopaxi is an active stratovolcano in the Andes Mountains. It is located in Ecuador, in South America. It is one of the world's highest volcanoes.
- **85.** (c) The Brahmaputra which is known as Tsangpo in Tibet is one of the main rivers of Asia. It has its origin in the Himalayas of Tibet. The river runs across South Tibet to penetrate the Himalayan mountain ranges in huge canyons and subsequently into Arunachal Pradesh, here, it is called as Dihang.
- **86.** (b) A food chain in a grassland ecosystem may consist of grasses and other plants, grasshoppers, frogs, snakes and hawks. The hawks are the top carnivorous in this ecosystem.
- **87.** (b) Troposphere is the lowest region of the atmosphere which extends from the Earth's surface to a height of about 6–10 km. It contains approximately 75% of the atmosphere's mass and 99% of the total mass of water vapour and aerosols.
- **88.** (c) The permanent members of the United Nations Security Council, also known as the Permanent Five, Big Five or P5, are the five states which the UN Charter of 1945 grants a permanent seat on the UN Security Council (UNSC). They are China, France, Russia, the United Kingdom and the USA.
- **89.** (c) Sariska National Park and a tiger reserve are located in the Alwar district of the State of Rajasthan. It was given the status of a tiger reserve making it a part of India's Project Tiger in 1978

- : Sariska is also well known for its large population of Rhesus Monkeys, which are found in large numbers around Talvriksh.
- **90.** (b) The sunlight is the major source of energy for an ecosystem. Producers; such as plants, algae and cyanobacteria use the energy from sunlight to make organic matter from carbon dioxide and water.
- 91. (d) 92. (a) 93. (d) 94. (c) 95. (c) 96. (a) 97. (a) 98. (c) 99. (a) 100. (d) 101. (b) 102. (d)
- 103. (b) 104. (b) 105. (b) 106. (c)
- **107.** (a) **108.** (d) **109.** (d) **110.** (b) **111.** (b) **112.** (b) **113.** (b) **114.** (c)
- 115. (d) 116. (c) 117. (b) 118. (d)
- 119. (a) 120. (c) 121. (d) 122. (b)
- 123. (d) 124. (b) 125. (c) 126. (d)
- 127. (a) 128. (c) 129. (d) 130. (b)
- 131. (c)
- 132. (c) घर की भाषा बच्चे की भाषायी पूंजी होती है। इसी के बल पर वह अन्य नई बातों का अर्जन करता है तथा भाषा सीखने का प्रयास भी वह इसी गृह-भाषा के माध्यम से कराता है।
- 133. (a) भाषा सीखने-सिखाने के सन्दर्भ में गृहकार्य अधिगम को विस्तार देता है तथा रचनात्मकता की भी पकड़ बनती है।
- 134. (b) समाज एवं सांस्कृतिक परिवेश में ही बालक एक-दूसरे के साथ वार्तालाप करके भाषा-अर्जन करता है तथा अर्जन की यह प्रक्रिया ऐसे परिवेश में स्वाभाविक रूप से होती है।
- 135. (a) भाषा विकास व्यक्ति निरपेक्ष न होकर व्यक्ति सापेक्ष होता है तथा यह भाषायी परिवेश में त्विरत गति से होता है।
- 136. (c) भिन्न-भिन्न क्षेत्रों की भिन्न-भिन्न संस्कृति होती है। उस क्षेत्र की अपनी कहानी, कविता, गीत, नाटक एवं बोलियां अलग-अलग हो सकती है। इन रचनात्मक कार्यों के माध्यम से विद्यार्थी अपनी सांस्कृतिक घरोहर से जुडते हैं।
- 137. (d) प्राथमिक स्तर तक के छात्र/छात्राओं के लिए अपनी बात को दूसरों के समक्ष व्यक्त करने की कुशलता ही भाषा सिखाने का सर्वोपिर उद्देश्य है।
- 138. (d) कोई सन्दर्भ लेकर उस पर पढ़ने का प्रयास करना, चित्रकारी को स्वयं की अभिव्यक्ति का माध्यम बनाना तथा बच्चों कीघर-परिवार में बोली जाने वाली भाषा व स्कूल की भाषा में सम्बन्ध बनाते हुए विस्तार देना आदि सभी हिन्दी

- भाषा शिक्षण के उद्देश्य है जबिक सुनी हुई बातों को ज्यों-का-त्यों दोहराना इसका उद्देश्य नहीं हो सकता।
- 139. (a) भाषा के भिन्न-भिन्न कौशल जैसे सुनना, फिर बोलना या लिखना इत्यादि एक-दूसरे से अन्त: सम्बन्धित होते हैं।
- 140. (c) भाषा सोचने, महसूस करने और चीजों से जुड़ने का उत्तम साधन है।
- 141. (a) भाषा सीखने का व्यवहारवादी दृष्टिकोण अनुकरण पर बल देता है क्योंकि बालक के समक्ष किया गया कोई भी व्यवहार उसके मनोमस्तिष्क पर छप जाता है जिसका वह अनुसरण करने का प्रयास करता है।
- 142. (c) अपनी बात को मौखिक रूप से अथवा लिखित रूप से व्यक्त करना एक प्रकार की बातचीत होती है।
- 143. (b) कक्षा 'एक' के बच्चे अपने घर-परिवार एवं परिवेश से प्राप्त बोल-चाल की भाषा के अनुभवों को लेकर ही विद्यालय आते हैं।
- 144. (a) कक्षा 'एक' और 'दो' के शुरूआती समय में पढ़ने का प्रारम्भ अर्थ से हो और किसी उद्देश्य के लिए हो।
- **145.** (d) वाइगोत्सकी के विचारों के अनुसार कक्षा में परस्पर अन्त:क्रिया पर सबसे अधिक बल दिया जाता है।
- 146. (d) प्राथमिक स्तर की कक्षाओं में बच्चों की पारिवारिक भाषाएँ अलग-अलग होती हैं। उनकी अपनी भाषाओं को कक्षा में समान रूप से सम्मान देना चाहिए।

147. (b)

- 148. (c) किसी विषय को पढ़ते समय बार-बार अटकना मुख्यत: डिस्लेक्सिया समस्या से सम्बन्धित होता है।
- 149. (c) प्राथमिक कक्षा के छात्रों द्वारा चित्र समझाकर उसके बारे में कुछ विचार प्रस्तुत करना, उनकी भाषा कुशलता को इंगित करता है। अत: भाषा आकलन का यह सर्वोत्तम तरीका है कि उसे ऐसे अवसर प्रदान किए जाएं।
- 150. (b) प्राथमिक स्तर के बच्चों के लिए जितनी रोचक विषय-वस्तु होंगी, उसका वे उतनी ही रूचि से अर्जन करेंगे। ऐसे में उनके द्वारा सीखा गया व्यावहारिक ज्ञान प्रत्यक्ष या अप्रत्यक्ष रूप से भाषा की कुशलता को परिलक्षित करेगा। अत: बच्चों के लिए बाल साहित्य की विषय-वस्तु का रोचक होना जरूरी है।