CTET Solved Paper

Paper-2 6th January 2022

Time: 2 hours 30 mins. Total Marks: 150

Child Development and Pedagogy

- Assertion (A): Children are unable to learn optimally when they are undernourished or unwell.
 - **Reason (R):** All domains of development are interrelated-physical development has an impact on cognitive development.

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 but (R) is false.
- (4) Both (A) and (R) are false.
- 2. Which principle of development does this illustrate: The child learns to stand before she can walk and babble before she talks?
 - (1) Development is sequential
 - (2) Development proceeds from head to toe
 - (3) Development is disorderly
 - **(4)** Development progresses from centre to the extremities.
- **3. Assertion (A):** Children learn the knowledge, skills, values and customs of the society only through formal agencies.
 - **Reason** (R): Socialization is a simple and linear process that takes place in a well-planned manner. 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 but (R) is false.
 - (4) Both (A) and (R) are false.
- **4.** Jean Piaget's constructivism proposes that children progress through four stages of cognitive development primarily:
 - (1) by acting upon the environment.
 - (2) through social interactions with more knowledgeable others.
 - (3) by imitation of others.
 - (4) through anticipation of rewards.
- 5. According to Jean Piaget, at which stage of cognitive development can children 'operate on operations' and perform hypothetico-deductive thinking?
 - (1) Sensori-motor Stage
 - (2) Pre-operational Stage
 - (3) Concrete Operational Stage
 - (4) Formal Operational Stage
- 6. is very important in Lev Vygotsky's theory for cognitive development of children.
 - (1) Cultural tools
- (2) Maturation
- (3) Punishment
- (4) Adaptation

- 7. One of the major differences in the theories of Jean Piaget and Lev Vygotsky is:
 - (1) Piaget emphasized on the role of language in cognitive development.
 - (2) Vygotsky gave primary importance to hereditary capacities in learning.
 - (3) Vygotsky emphasized the role of culture in cognitive development.
 - (4) Piaget gave importance to what the child can do on her own as well as what she can do with support.
- 8. Carol Gilligan critiqued Lawrence Kohlberg's theory of moral development by arguing that men have morality of while women have morality of
 - (1) justice; care
 - (2) care; justice
 - (3) goodness; sacrifice
 - (4) sacrifice; goodness
- 9. Which of the following is a correctly matched pair of the type of intelligence and the end state possibilities as per the theory of Howard Gardner?
 - (1) Intelligence-Linguistic, End State Possibility-Accountant
 - (2) Intelligence-Spatial, End State Possibility-Architect
 - (3) Intelligence- Bodily kinesthetic, End State Possibility-Singer
 - (4) Intelligence-Naturalistic, kinesthetic-Teacher
- **10.** National Education Policy 2020 considers multilingualism
 - (1) as a hindrance in children's learning.
 - (2) as an asset in the classrooms.
 - (3) as a unnecessary complication in teaching-learning process.
 - (4) as a barrier to inclusive education.
- 11. In child-centered education, assessment
 - (1) is undertaken through few periodic examinations.
 - (2) takes place through written objective type tests.
 - (3) does not take place at all.
 - (4) is considered an integral part in the process of learning.
- **12.** What does National Education Policy 2020 propose for retention of students from socio-economically disadvantaged groups?
 - (1) Rote learning
 - (2) Standardisation of curriculum and assessment
 - (3) Performance-oriented testing
 - (4) Relatable and meaningful curriculum

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- 13. In several middle school classrooms it is observed that boys often raise their hands to answer more than girls and tend to dominate classroom discussions. In such context, the teacher should
 - (1) accept that boys are more intelligent than girls.
 - (2) accept that girls do not have the potential to study in middle class.
 - (3) analyze how gender differences are inborn and cannot be modified.
 - (4) analyze the context of the children and her own pedagogy.
- **14.** Which of the following defines a progressive classrooms?
 - (1) Learning for exams
 - (2) Focus on experiential learning
 - (3) Decontextualized curriculum
 - (4) Teacher centric pedagogy
- **15.** Which of the following questions tests higher-order thinking skills such as analysis and evaluation?
 - (1) What differences do you find between private and public health services in your area and why?
 - (2) What does the Civil Rights Act of 1964 state?
 - (3) How many states are there in India?
 - (4) How are the members of Legislative Assembly elected?
- **16.** With respect to inclusion of students with disabilities in regular schools, which of the following provision is against the Rights of persons with disabilities Act (2016)?
 - (1) Extra time for completion of examination paper
 - (2) Facility of scribe to meet the students' needs
 - (3) Compulsory second and third language courses
 - (4) Reasonable accommodation as per individual's needs
- **17.** To address the diverse learning needs of the students, which of the following is a barrier?
 - (1) Engagement in the activities in multiple ways
 - (2) Expression of opinion in multiple ways
 - (3) Labeling and ranking of students in multiple ways
 - (4) Representation of information in multiple ways
- **18.** Which of the following learning disability directly affects communication skills and comprehension abilities?
 - (1) Dyscalculia
- (2) Dysgraphia
- (3) Dysphoria
- (4) Dysphasia
- **19.** To ensure the successful inclusion of students with Dysgraphia, it is important to:
 - (1) allow use of audio recorder or a laptop in class
 - (2) extensively use written tests for assessment
 - (3) make it compulsory to write on plain/unruled sheets
 - (4) set fixed timeline to finish the given work
- **20.** Which of the following is NOT a characteristic of student with 'creativity'?
 - (1) Their problem-solving skills are of higher order
 - (2) They can solve problems through divergent ways
 - (3) They have low sense of curiosity to learn new topics
 - (4) They often come up with novel ideas and innovations

- **21.** Teachers in a middle grade classroom should:
 - (1) be open to make adaptations as per learners' needs
 - (2) focus their attention majorly on high achievers
 - (3) ignore learner diversity in the classroom
 - (4) use one standardized mode of assessment only
- **22. Assertion (A):** While teaching a concept, a teacher should encourage her students to brainstorm the instances and examples of contrast.

Reason (R): Non-examples don't play any role in understanding of a concept.

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 but (R) is false.
- (4) Both (A) and (R) are false.
- **23.** Few students in a class were not able to achieve the individual learning goals set for them. In such a scenario, a teacher should:
 - (1) consider their failure as dishonourable and shameful.
 - (2) expel these students and recommend them to a special school.
 - (3) keep very low expectations of success from them in future endeavours.
 - (4) view failure as a part of the developmental process of learning.
- 24. A teacher intends to assess declarative knowledge among her students. Which of the following question is appropriate for this purpose?
 - (1) How to bake a cake?
 - (2) How to balance a bicycle on a rough terrain?
 - (3) What is the formula for calculating 'volume'?
 - (4) What is the procedure of soil preparation for wheat plantation?
- **25.** A teacher intends to facilitate the development of metacognition among her students. Which of the following skills won't be helpful for this purpose?
 - (1) Evaluating
- (2) Monitoring
- (3) Planning
- (4) Rote-memorisation
- **26.** Constructivist approach considers learning as:
 - (1) disorganised and unilateral
 - (2) idiosyncratic and disconnected
 - (3) interactive and active
 - (4) passive and dependent
- **27.** Which of the following step is likely to hinder problem-solving skills among students?
 - (1) Activating the schema to comprehend the problem
 - (2) Focusing attention on relevant information about problem
 - (3) Getting stuck on one fixed way of representing a problem
- (4) Îdentifying the possible solutions of the problem28. Contemporary perspectives of cognitive development view misconceptions as:
 - (1) completely insignificant and an obstacle for teaching-learning process.
 - (2) Higher-order metacognitive skills found typically in 'gifted' students.
 - (3) Naive ideas and understanding having their roots in ones' past experiences.
 - (4) Neurological deficits and identifying characteristics of Dyslexia.

- 29. Students with performance-avoidance goals focus
 - (1) enjoyment of activity (2) fear of failing
 - (3) hope of success
- (4) sense of pride
- **30.** Which of the following set of attributions on success or failure on a task is likely to cause increase in students' motivation and attempts to engage in similar tasks in the future?
 - (1) External, Non-controllable
 - (2) External, Stable
 - (3) Internal, Stable
 - (4) Internal, Controllable

Mathematics and Science

- 31. $-25 \times (7 + 3)$ is not the same as
 - **(1)** $(-25) \times 7 + (-25) \times 3$ **(2)** $(-25) \times 10$
 - (3) -250
- (4) $(-25) \times 7 \times 3$
- 32. In Roman Numerals, which of the number is not correct?
 - (1) LXIII
- (2) XCII
- (3) LC
- (4) XLIV
- 33. Which of the following statement is **NOT** true?
 - (1) HCF and LCM of two numbers x and y are 15 and 120 respectively.
 - (2) HCF and LCM of two numbers x and y are 20 and 250 respectively.
 - (3) LCM and HCF of two numbers x and y are 70 and 14 respectively.
 - (4) LCM and HCF of two numbers x and y are 300 and 50 respectively.
- 34. On dividing $2\frac{1}{3}$ by $\frac{2}{5}$, the result is:

- 35. If A, B and C are digits and

then, value of C is:

(1) 6

(2) 7

(3) 8

- (4) 9
- 36. The annual income of Naresh is ₹5,76,000 and his annual savings is ₹72,000. The ratio of his annual savings to his expenditure is:
 - **(1)** 1:5
- (2) 1:6
- (3) 1:7
- **(4)** 1:8
- 37. If 3x + 5 = 0, then the value of $x^2 3x$ is equal to:

- **38.** The coefficient of x^2 in the sum of the expressions $-3x^3y^2 + 2x^2y^3$ and $-3x^2y^3 - 5y^4$ is:
 - **(1)** -3
- (2) $-y^3$
- (3) y^3

(4) 3

- **39.** On dividing $(x^3 5x^2 24x)(4x^2 9y^2)$ by x(x 8)(2x - 3y), the result is:
 - (1) (x + 3)(2x + 3y)
- (2) (x + 3)(2x 3y)
- (3) (x-8)(2x+3y)
- **(4)** (x-8)(2x-3y)
- $P = 3x^2 + y^2,$ **40.** If

and

$$Q = 2x^2 + 3y^2$$

 $R = 4x^4 + 5y^4$

- then, $P \times Q R$ is equal to (1) $2x^4 + 11x^2y^2 - 2y^4$ (2) $2x^4 + 9x^2y^2 - 2y^4$
- (3) $2x^4 + 13x^2y^2 + 2y^4$
- (4) $2x^4 + 10x^2y^2 + 2y^4$
- 41. Which of the following figures has a linear symmetry but no rotational symmetry?
 - (1) Parallelogram
- (2) Kite
- (3) Rectangle
- (4) Rhombus
- **42.** Three angles of a triangle are in the ratio 3:5:4 and the greatest angle is x.

Then, the value of $4x + 9^{\circ}$ is:

- (1) 349°
- **(2)** 309°
- $(3) 249^{\circ}$
- (4) 159°
- 43. The sum of the supplement and complement of an angle x is 240°. Then, the value of $3x - 20^{\circ}$ is:
 - (1) 15°
- (2) 30°
- (3) 25°
- (4) 50°
- 44. If F, V and E are respectively the number of faces, vertices and edges of a hexagonal pyramid, then which of the following statement is true?
 - (1) 2F + V E = 8
- (2) 2F + V E = 9
- (3) 2F + 2V E = 15
- (4) 3F + 2V 2E = 10
- 45. The lengths of the two diagonals of a rectangle ABCD are (6x + 3) and (4x + 7).

Then, the value of (6x + 3) + (4x + 7) is:

- (1) 20
- **(2)** 25
- (3) 30
- (4) 35
- 46. Sides of a triangle are of lengths 12 cm, 13 cm and 5 cm. Then, altitude corresponding to the longest side of the triangle is:
 - (1) $4\frac{8}{13}$ cm
- (2) $2\frac{4}{13}$ cm
- (3) $4\frac{5}{12}$ cm
- (4) $2\frac{9}{12}$ cm
- 47. The perimeter of a trapezium ABCD is 90 cm and length of each of its non-parallel sides AD and BC is 17 cm. If area of the trapezium is 420 cm², then distance between the two parallel sides of the trapezium is:
 - (1) 17 cm
- (2) 16 cm
- (3) 15 cm
- (4) 14 cm
- **48.** The curved surface area of a right circular cylinder is one-third of its total surface area.

If radius of the cylinder is 8 cm, then volume of the cylinder (in cm³) is:

- (1) 256π
- (2) 128π
- (3) 288π
- **(4)** 144π
- **49.** If mean of the observations 25, 29, 25, 32, 24 and *x* is 27 then median of the observations is:
 - **(1)** 32
- **(2)** 27
- (3) 26
- **(4)** 25

- **50.** Numbers 10 to 60 are written on separate slips (one number on one slip), they are kept in a box and they are mixed well. One slip is chosen from the box without looking into it. What is the probability that the number on the chosen slip is divisible by both 2 and 3?
 - (1) $\frac{1}{5}$
- (2) $\frac{3}{15}$
- (3) $\frac{10}{51}$
- (4) $\frac{9}{50}$
- **51.** Which of the following is **NOT** true for assessment?
 - (1) Assessment focuses on developing critical thinking and problem-solving skills among students.
 - (2) Assessment engages students in learning process.
 - (3) Assessment provides feedback to teacher to improve their pedagogy.
 - (4) Assessment is just a reflection of student's marks in the report card.
- **52.** A mathematics teacher records classroom observation either during or after the lesson by writing short notes in a brief narrative style. It is an example of maintaining:
 - (1) Rubrics
- (2) Anecdotal records
- (3) Checklist
- (4) Portfolio
- **53.** A middle school mathematics teacher asks his students to construct a rectangle with length 7 cm and breadth 4 cm. As the students completed the task, he further instructs them:
 - (i) increase the length and breadth by 2 cm each and draw to see what figure you get.
 - (ii) decrease the length and breadth by 2 cm and draw to see what figure you get.
 - (iii) increase the length by 1 cm and decrease the breadth by 1 cm. Can you predict the type of figure without drawing?

Which principle of Zoltan Dienes theory of mathematics learning is he using in the above activity?

- (1) Constructivity principle
- (2) Perceptual variability principle
- (3) Mathematical variability principle
- (4) Dynamic principle
- 54. Ratios are closely related to fractions but both have important distinctions. Which of the following is/are <u>True</u> with respect to the given statement?
 - (a) The ratio of boys to girls in a classroom is 3/5. This ratio is a fraction.
 - **(b)** The ratio of girls to total children in a classroom is 3/8. This is both a ratio and a fraction.
 - (c) Rimjhim walked 3/4 of a kilometre. This is a fraction and not a ratio.

Choose the correct option.

- (1) Only (b)
- (2) (a) and (c)
- (3) (b) and (c)
- (4) (a) and (b)
- **55.** A middle school mathematics teacher uses paper folding and dissection activities with her students for explorations in symmetries and geometric shapes. The students are able to observe geometrical properties of different shapes, verify properties without formal proofs, make connections between

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various shapes. According to Van-Hieles theory of development in geometry, the students are reasoning at the level of:

- (1) Establishing relationship
- (2) Recognition
- (3) Analysis
- (4) Axiomatics
- **56.** Which of the following is an example of a question with multiple answers?
 - (1) Given are the four digits 9, 3, 7, 5. Make the largest 4-digit number using all the given digits.
 - (2) Using four different digits without repetition, make the largest 4-digit number.
 - (3) Using four different digits, make the largest 4-digit number with a condition that 5 is always at ones place.
 - (4) Make one 4-digit number using both the digits 3 and 5 equal number of times.
- 57. Which of the following statement is **NOT** true for the given mathematical concept?
 - (1) The concept of a rectangle includes both spatial and length relationship.
 - (2) "Chance" is relationship between the frequency of an event happening compared with all possible outcomes.
 - (3) The concept of a "negative integer" is based only on the "magnitude" of the number.
 - (4) The concept of multiplication includes the concept of area of rectangle.
- 58. "Examination and class tests add to mathematics anxiety in some students". Which of the following is true for mathematics anxiety according to the given statement?
 - (1) Mathematics anxiety can be addressed by making assessment an integral part of the daily mathematics instruction with the focus on the progress of the student.
 - (2) Students facing mathematics anxiety should be asked to take a greater number of tests to overcome the anxiety.
 - (3) Students overcome mathematics anxiety by practicing a lot of questions before the examination.
 - (4) Students with mathematics anxiety should be exempted from giving examinations.
- **59.** According to National Curriculum Framework, NCF, (2005), "Technology can greatly aid the process of mathematical exploration." Which of the following statement reflects a reason that restricts this exploration?
 - (1) Use of calculators hampers the acquisition of basic computational skills in students.
 - **(2)** Use of technology will make the teacher's role irrelevant in the classrooms.
 - (3) With the use of technology problem-solving skills cannot be developed in students.
 - (4) It is expensive and hence the use of technology becomes luxurious in a country where vast majority of students cannot afford more than one notebook.

- **60.** "Algebraic thinking involves generalisation and symbolisation". Which one of the following explains the meaning of the given statement?
 - (a) Algebraic equations are solved by using mathematical symbols. Hence these symbols should be memorized
 - **(b)** Algebra involves the process of creating generalizations from arithmetic
 - (c) Algebra involves representing patterns and regularities in our world.
 - (d) Algebra is more abstract and symbolic. Hence cannot be taught through concrete experiences.
 - **(1)** (a) and (d)
- (2) (b) and (d)
- (3) (a) and (c)
- (4) (b) and (c)
- **61.** Read the following statement and choose correct response.

Assertion (A): A horse shoe magnet is a very strong magnet.

Reason (R): The poles of horse shoe magnet are very close to each other.

- (1) Both A and R are correct but R is not correct explanation for A.
- **(2)** Both A and R are correct but R is correct explanation for A.
- (3) A is correct but R is incorrect.
- (4) Both A and R are incorrect.
- **62.** The purpose of streamlining the body of a ship is to:
 - (1) reduce fluid drag
 - (2) increase up thrust
 - (3) increase displaced water
 - (4) reduce density of ship
- **63.** The following steps are involved in a dairy plant to prepare clarified butter/Ghee.
 - **A.** Milk is pasteurised
 - **B.** Then milk is set into curd
 - C. Curd is churned in centrifuged to separate butter
 - **D.** Butter is heated to get clarified butter (Ghee)
 - **E.** Filtered and packed

Which of the following above steps are physical changes and chemical changes?

- (1) Physical changes
- A, C, D, E
- Chemical changes (2) Physical changes
- B
- Chemical changes
- C, D, EA, B
- (3) Physical changes
- C, E
- Chemical changes
- A, B, D
- (4) Physical changes
- A, C, E
- Chemical changes
- B, D
- **64.** Identify the polymers on the basis of uses mentioned below:

Polymer	Uses			
A	used as padding in the packaging material for delicate items.			
В	used as an outer insulation layer for electrical wires.			
С	used in making electrical fittings.			
	used in making bottles and jars.			

- (1) A–Polystyrene; B–PVC; C–Bakelite; D–Polyester
- (2) A-Polyester; B-Bakelite; C-Fermica; D-Polyester
- (3) A–Polythene; B–Melamine; C–Bakelite; D–PVC
- (4) A–Polystyrene; B–PVC; C–Bakelite; D–Melamine

- **65.** Radhika connects a series arrangement of two identical cells with a series arrangement of two bulbs. Which should be done to make the bulb(s) grow dimmer?
 - (1) replace one cell with the piece of chalk
 - (2) replace one cell with a piece of metal wire
 - (3) replace one bulb with a piece of metal wire
 - (4) replace one bulb with a cell
- 66. A is used in making bread and other bakery products and the process involved is called as B. 'A' breaks down sugar into alcohol and C in the absence of Oxygen. This process is called as D. The 'C' forms bubble in dough increasing its E. A, B, C,
 - D, E respectively are:
 - (1) Lactobacillus, decomposition, hydrogen, fermentation, mass
 - (2) Lactobacillus, fermentation, hydrogen, aerobic respiration, volume
 - (3) Yeast, fermentation, carbon dioxide, anaerobic respiration, volume
 - (4) Yeast, fermentation, carbon dioxide, aerobic respiration, mass
- 67. The phases of the moon as we see from the Earth are due to changing relative positions of the Sun, the Moon, the Earth. Which of the following statements is true:
 - (A) on a full moon day, the Earth comes between the Sun and the Moon
 - (B) on a new moon day, the Moon is in between the Earth and the Sun
 - (C) on a full moon day, the Moon is in between the Earth and the Sun
 - (D) on a new moon day, the Earth is between the Sun and the Moon
 - (E) on an new moon day, the Sun is between the Moon and the Earth
 - (1) A, B
- (2) B, C
- (3) C, D
- (4) A, E
- **68.** Which of the following represents correct matching set of part of human eye and its function?

			-
a.	Cornea	(i)	Controls the amount of light entering eye
b.	Iris	(ii)	Acts as screen for the image
c.	Pupil	(iii)	Holds the lens in positions
d.	Retina	(iv)	Helps in focusing light and protect eye
e.	Ciliary Muscle	(iv)	Light enters eye through it

- (1) a-(v), b-(iv), c-(i), d-(ii), e(iii)
- (2) a-(iv), b-(i), c-(v), d-(ii), e(iii)
- (3) a-(ii), b-(iii), c-(v), d-(i), e(iv)
- (4) a-(iii), b-(iv), c-(v), d-(ii), e(i)
- **69.** Read the following statements and choose the correct option:

Assertion (A): The leaves of carrot plant has reticulate venation.

Statement 1 (S1): Plants having taproots have leaves with reticulate venation.

Statement 2 (S2): Plants having fibrous roots have leaves with reticulate venation.

- **Statement 3 (S3):** There is no relation between type of roots and venation in leaves.
- (1) A and S1 are true and S1 supports A
- (2) A and S2 are true and S2 supports A
- (3) A and S3 are true
- (4) A is not true and S3 is true
- **70.** Which of the following statement is/are true in the context of fertilisation and pollination in plants.
 - **A.** Ovary of the flower matures into fruit.
 - **B.** Seeds of the plant forms the ovules for fertilisation.
 - C. Pollination takes place after fertilisation.
 - D. In pollination, seeds are dispersed by wind, water, birds and insects.
 - **E.** Fertilisation takes place in the ovules.
 - (1) A, E
- (2) B, C
- (3) C, D
- (4) B, E
- **71.** Read the following statements and choose the correct option.

Assertion (A): White blood cells help in fighting with disease causing organisms

Reasoning (R): A white blood cell can change shape

- (1) Both A and R are correct and R is the correct explanation for A.
- **(2)** Both A and R are correct but R is not the correct explanation for A.
- (3) A is correct but R is incorrect.
- **(4)** A is incorrect but R is correct.
- **72.** The following table given the mass and volume of 3 immiscible liquids X, Y and Z.

	х	Y	Z
Mass (g)	4	8	6
V (cm ³)	1	10	3

Equal quantities of liquids are poured in a test tube containing 5ml of water. What will be the order of liquid settled from top to bottom?

Consider density of water as lg/cm³.

- (1) Y, Water, Z, X
- (2) X, Y, Z, Water
- (3) X, Z, Water, Y
- (4) Water, X, Y, Z
- **73.** When you increase the loudness of the ringtone of your mobile phone, the frequency of ringtone:
 - (1) increases
- (2) decreases
- (3) remains same
- (4) cannot be determined
- **74.** Which of the following statement is **not true** regarding modes of transfer of heat?
 - (1) Convection takes place in liquids and gases only
 - (2) Radiation cannot take place in gases
 - (3) Conduction can take place in gases
 - **(4)** Heat can be transferred through more than one mode simultaneously
- **75.** Metal X displaces 'Y' and metal 'Z' from their respective salt solutions. Metal 'Y' displaces metal 'W' from its salt solution but 'Z' does not displace 'W' from its salt solution. The most and least reactive metals respectively are:
 - (1) X, Z
- (2) X, W
- (3) Y, Z
- (4) Y, W

- **76.** Identify the following:
 - A. A non-metallic lubricant
 - **B.** A metal which does not react with water but reacts with steam
 - C. A metal which is constituent of baking powder
 - D. A non-metal used in fire crackers
 - A, B, C, D respectively are:
 - (1) Phosphorus, Zinc, Sodium, Sulphur
 - (2) Carbon, Copper, Sodium, Phosphorus
 - (3) Carbon, Copper, Calcium, Sulphur
 - (4) Phosphorus, Copper, Calcium, Sulphur
- 77. A is called as Master Gland as it controls the secretion of hormones from B, C, thyroid and adrenal glands. 'A' also secretes D hormone whose production E in adolescence.
 - A, B, C, D, E respectively are:
 - (1) Pituitary, Pancreas, Hypothalamus, Thyroxin, increases
 - (2) Hypothalamus, Pituitary, Pancreas, Growth, decreases
 - (3) Hypothalamus, Ovary, Testes, Growth, decreases
 - (4) Pituitary, Ovaries, Testes, Growth, increases
- 78. Which of the following statement is/are true regarding fungi
 - A. They are plants
 - B. They cannot perform photosynthesis
 - C. All fungi are unicellular
 - **D.** Some fungi help in producing antibiotics
 - (1) A, B, C
- (2) A, B, D
- (3) B, C, D
- (4) A, C, D
- 79. Reena is suffering from vomiting and lack of appetite, doctor diagnoses it as a viral disease caused due to contamination of water. Reena is suffering from:
 - (1) Hepatitis
- (2) Cholera
- (3) Dysentry
- (4) Typhoid
- 80. Soil 'A' has low water holding capacity and high percolation rate. The organic matter level in the soil is low. Soil 'B' has high water holding capacity and very slow percolation rate. It has high amount of organic matter. Soil 'C' has medium water capacity, percolation rate and organic matter content.
 - Identify the soils 'A', 'B' and 'C'.
 - (1) A-sand, B-silt, C-clay
 - (2) A-sand, B-clay, C-silt
 - (3) A-clay, B-silt, C-sand
 - (4) A-clay, B-sand, C-silt
- **81.** Which of the following aligns the most with the inquiry-based approach to teaching and learning of science?
 - (1) Students carrying out the activities as prescribed in the text book
 - (2) Students sitting in groups and planning an investigation together
 - (3) Teacher demonstrating various scientific principles through toys.
 - (4) Teacher assigning innovative activities as homework to students

82. A teacher takes her class VI students to a nearby garden and asks them to look at various plants and fill the following table by ✓ in appropriate column:

Plant		Height			Stem		
Name	Shorter than me	Much taller than me	Slightly taller than me	Green	Tender	Thick	Hard
1. Tulsi							
2							
3							

Which of the following process skill(s) would this activity require?

- A. Observing
- **B.** Hypothesising
- C. Classifying
- (1) A & B
- (2) B & C
- (3) A & C
- (4) A, B & C
- **83.** Which of the following does **NOT** match with the equitable use of ICT in science pedagogy?

Encouraging the use of free and open source software for creating digital teaching-learning environment like the:

- (1) Virtual labs
- (2) Ensuring the availability of appropriate multimedia software in English and other Indian languages
- (3) Encouraging teachers to be users rather than developers of technology.
- (4) Ensuring digital access for all sections of society
- **84.** Which of the following best describes the meaning of process validity of a science curriculum?
 - (1) Students should be given the opportunity to engage with the ways in which scientific knowledge gets constructed.
 - (2) Students must be made familiar with the role of various bodies in the process of development of science curriculum
 - (3) The science curriculum of the school must pass through a specified sequence of steps in order to be valid
 - **(4)** Curriculum content must be correct and free from errors
- **85.** Which of the following is in agreement with our contemporary understanding of assessment in science at upper primary stage?
 - (1) Merit ordering of students should be introduced to encourage healthy competition.
 - (2) Annual examination should be given much more weightage than internal assessment.
 - (3) The periodic tests should have both a written and an experimental component.
 - (4) Open book examination should be avoided as it encourages the heart of copying.

- **86.** Which of the following is **NOT** aligned with the recommendations of NCF-2005 regarding science education at upper primary stage.
 - (1) Experiments should be avoided as they are difficult to conduct at this stage
 - (2) Students should be engaged in data-collection from easily available sources
 - (3) There should be an emphasis on the process skills of science
 - (4) Practical knowledge about local specific technologies should be included
- 87. Which of the following is **NOT** in consonance with the recommendations of NEP 2020 in respect of science pedagogy?
 - (1) Bilingual text books and teaching-learning material to be used
 - (2) Experience of vocational crafts to be first introduced at Sr. Secondary level
 - (3) Curriculum to be rooted in local context.
 - (4) Scientific temper & evidence based thinking to be encouraged
- 88. Which of the following episodes best illustrates the tentative nature of science.
 - (1) A teacher asking students to share their experiences with different kinds of materials which they come across in their daily lives.
 - (2) A teacher holding a classroom discussion about the limitations of various concepts of structure of atom like Thompson's plum pudding model, Rutherford's atomic model
 - (3) Teacher drawing a diagram to explain the structure of atom and also highlighting its various features
 - (4) Teacher asking open-ended questions to probe students alternative concepts regarding the nature of matter.
- 89. Read the following paragraph:

"In 1929, Alexander Fleming was working on a culture of disesase causing bacteria. Suddenly, he found the spores of a little green mould in one of his culture plates. He noticed that the presence of this mould prevented the growth of bacteria. In fact, it also killed many of these bacteria. From this mould, penicillin was prepared."

Which of the following understanding(s) about development of scientific knowledge is conveyed in this paragraph?

- **A.** Science proceeds systematically according to the pre-determined steps.
- **B.** Science required careful observation
- (1) Only A
- (2) Only B
- (3) A & B
- (4) Neither A nor B
- **90.** A teacher gives the example of human circulatory system to explain the concept of closed electric circuit to her student. She compares the heart to battery and flow of blood to flow of electric current. Which pedagogoc device is she using?
 - (1) Argumentation
 - (2) Analogy
 - (3) Real Artefact
 - (4) Open-ended questioning

Oswaal CTET Year-wise Solved Papers

Language: English

Direction (91-99): Read the passage given below and answer the questions that follow by selecting the correct/most appropriate options.

- 1. Vaccines work by training and preparing the body's natural defences the immune system to recognize and fight off the viruses and bacteria they target. After vaccination, if the body is later exposed to those disease-causing germs, the body is immediately ready to destroy them, preventing illness. As of 3 June 2021, WHO has evaluated that a number of vaccines against COVID-19 have met the necessary criteria for safety and efficacy: AstraZeneca, Pfizer etc.
 - Some national regulators have also assessed other COVID-19 vaccine products for use in their countries. Vaccines provide a high degree of protection against getting seriously ill and dying from the disease, although no vaccine is 100% effective.
- 2. The COVID-19 vaccines are safe for most people 18 years and older, including those with pre-existing conditions of any kind, like auto-immune disorders, hypertension, diabetes, asthma, pulmonary, liver and kidney disease, as well as chronic infections that are stable and controlled. Children and adolescents tend to have milder infection as compared to adults, so unless they are part of a group at higher risk of severe COVID-19, it is less urgent to vaccinate them than older people. More evidence is needed on use of different COVID-19 vaccines in children. Vaccine trials for children are ongoing and WHO will update its recommendations when the evidence or epidemiological situation warrants a change in policy.
- After vaccination, in most cases, minor side effects: Arm soreness, Mild fever, Tiredness, Headaches, Muscle or joint aches, indicate that a person's body is building protection to COVID-19 infection. Contact your care provider if there is redness or tender ness (pain) where you got the shot increases after 24 hours, or if side effects do not go away after a COVID-19 vaccine, you should not receive additional doses of the vaccine. It's extremely rare for severe health reactions to be directly caused by vaccines. Taking painkillers such as paracetamol before receiving the COVID-19 vaccine to prevent side-effects is not recommended. This is because it is not known how painkillers may affect how the vaccine works. However, you may take paracetamol or other painkillers if you do develop side effects such as pain, fever, headache, or muscle aches after vaccination.
- 4. Even after you're vaccinated, keep taking precautions While a COVID-19 vaccine will prevent serious illness and death, we still don't know the extent to which it keeps you from being infected and passing the virus on to others.

Sub-Questions:

- **91. Assertion (A):** After vaccination the immune system recognizes and fights off the viruses and bacteria they target.
 - **Reasoning (R):** Vaccines work by training and preparing the body's natural defences-the immune system-to recognize and fight off the viruses and bacteria they target.
 - (1) Both A and R are true and R is not the correct explanation of A.
 - (2) Both A and R are true and R is the correct explanation of A
 - (3) A is true but R is false.
 - (4) A is false but R is true.
- **92.** According to WHO:
 - "No vaccine is 100% protective but they have met the necessary criteria for efficacy". How is it so?
 - (1) WHO has evaluated and recommended the vaccine.
 - (2) National regulators have assessed the vaccine.
 - (3) The vaccine has been found to protect against getting seriously ill or dying.
 - (4) The vaccine has been found to give complete protection against the disease.
- 93. Pick the option which is opposite in meaning to the word "chronic" as used in the passage.
 - (1) acute
- (2) terminable
- (3) curable
- (4) incurable
- **94.** Study the following statements.
 - (a) Vaccine is not recommended for children because they have milder infection.
 - (b) Vaccines are safe for all people 18 years and older.
 - (1) (a) is true and (b) is false
 - (2) (b) is true and (a) is false
 - (3) Both (a) and (b) are true
 - (4) Both (a) and (b) are false
- 95. Given below are 4 real life situations pertaining to COVID-19 pandemic. Choose the option which perfectly describes "a high risk group" according to WHO.

A	В	С	D
Asympto- matic children and adults who can easily spread the disease far and wide	Children with pre- existing conditions, auto- immune disorders and chronic diseases	Adults with pre-existing conditions, auto- immune disorders, and chronic infections	children whether with or without pre-existing

- (1) A & C
- (2) B & C
- (3) C & D
- (4) A & B
- **96.** Study the following statements:
 - (a) After vaccination a person has a great chance of infection.
 - **(b)** The minor side effects indicate that a person's body is building protection.
 - (c) COVID-19 infection is rare among children.
 - **(1)** (a), (b) and (c) are all true.
 - (2) (a), (b) and (c) are all false
 - (3) (a) is false and (b) and (c) are true
 - (4) (a) and (b) are true while (c) is false

Paper-2: 6th January, 2022

97. Given below are 4 situations where the second shot of COVID-19 vaccination should not be administered. Choose the option which perfectly describes such a situation.

A	В	С	D
Immediate severe allergic reaction to a first dose of the COVID-19 vaccine	Post vaccination side effects go away after a few days	There are no side effects like fever, body ache and tiredness after vaccination	Redness/ tenderness (pain) where you got the shot keeps on increasing.

- (1) (a) and (b) are true
- (2) (b) and (c) are true
- (3) (a) and (d) are true

99. 'and fights off the virus'.

- (4) (c) and (d) are true
- 98. Which of the following words means the same as 'evaluated' (para 1)?
 - (1) indicated
- (2) assessed
- (3) described
- (4) revealed
- The underlined word is a/an

- (1) Adjective
- (2) Adverb
- (3) Preposition
- (4) Conjunction

Direction (100-105):

POEM

The Grass Is Like Me

You know, the grass is like me

Its true nature revealed

When trodden under foot

But when drenched

Does it bear witness

To burning disgrace

Or blazing fury?

Yes, the grass is like me

It lifts its head

Only to be continually sheared

Into flat velvet by the frenzied machine.

How many ways do you have to flatten a woman? But the earth

And women continue to rise up.

If you ask me, you had the right idea

A foot path was spot on

Those who can't endure

Are patched down into the scorched earth

Merely straw

A path for the oppressors

Not grass

You know, grass is like me

- 100. In which mood does the poem conclude?
 - (1) Gloomy
- (2) Cynical
- (3) Defiant
- (4) Reflective
- 101. Who according to the poem, would your associate with the 'oppressors'?
 - (1) Ignorant men
- (2) Autocrats
- (3) Submissive women
- (4) Patriarchy
- 102. The poem's promise lies in:
 - (1) regeneration
 - (2) vilification
 - (3) revolutionary violence
 - (4) compliance

- 103. What literary devices does the titular name include?
 - (1) Refrain and metonymy
 - (2) Metaphor and conceit
 - (3) Refrain and simile
 - (4) Simile and apostrophe
- 104. 'It lifts its head'.

Which of the statements given below is true in the light of this?

- (1) Grass grows up again.
- (2) Grass is personified.
- (3) It is a fallacy.
- (4) Grass is used as a metaphor.

105. Which category of women does the poet refer to in "those who "can't endure, are patched down..."?

- (1) Feminists
- (2) Women with voice
- (3) Dominant
- (4) Subservient

106. In a classroom, if a teacher writes a topic on the board and asks the students to help him organise related words and concepts in cluster around the central topic. What is the teacher doing?

- (1) Word mapping
- (2) Brainstorming
- (3) Free-association
- (4) Quick writing

107. In the primary classes, it is recommended that children should be taught in their mother tongue because:

- (1) it enables children to comprehend well
- (2) it promotes regional languages
- (3) it is easy to teach in
- (4) it helps to mange the class well

108. Communicative Comperence is a subset of functional grammar and its approach in teaching will allow students to:

- (1) learn structures and use them accurately
- (2) use structures in a range of output texts
- (3) learn grammar through meaningful communica-
- (4) enable teachers to expose students to grammar in the lower classes

109. Subhash has the ability to think and talk about languages, so he has:

- (1) multi-linguistic awareness
- (2) phonemic awareness
- (3) symbolic awareness
- (4) perceptual skill

110. A paragraph in English will be considered good if it:

- (1) is in descriptive language
- (2) is written in good handwriting
- (3) has correct punctuation
- (4) presents ideas in coherent way

111. Identify the principles of cooperative language

- (1) Positive interdependence, group formation, individual accountability and social skills
- (2) Positive dependence, group formation, individual accountability and social skills
- (3) Positive intradependence, group formation, group accountability and social skills
- (4) Positive intradependence, group formation, social accountability and social skills.

- **112.** "Language is people; language is person in contact; language is person in response". This idea refers to
 - (1) interactional view
- (2) cognitive view
- (3) genre view
- (4) behaviouristic view
- - (1) draw out the desired information
 - (2) enrich their vocabulary
 - (3) develop competence in linguistic items
 - (4) know meaning of words
- **114.** Which one of the following models puts main emphasis over semantic and communicative dimensions rather than grammatical characteristics of language?
 - (1) Structural Model
- (2) Cognitive Model
- (3) Genre Model
- (4) Functional Model
- 115. Consider the statement A and B
 - (a) Teacher should be silent as much as possible in classroom and learners should be encouraged to produce as much language as possible.
 - **(b)** Colour charts and coloured Cuisenaire rods should be used to elicit proper pronunciation.

There are the premises of

- (1) Suggestopedia
- (2) Silent way
- (3) Laxical Approach
- (4) Natural Approach
- **116.** A CEO of a company calls the sales manager and handover a rule book to be circulated in his her own department.

What is this known as?

- (1) Horizontal Communication
- (2) Vertical Communication
- (3) Spiral Communication
- (4) Diagonal Communication
- **117.** Being a culturally responsive teacher essentially requires
 - (a) He/She should consider students culture as an
 - **(b)** He/She should support learning environment based on creative learning approach.
 - **(1)** (a) is right
- **(2)** (b) is right
- (3) Both (a) and (b) right (4) Both (a) and (b) wrong
- **118.** If a teacher is to rate each part of the student's product or process then which type of tool will be effective?
 - (1) Checklist
- (2) Holistic Rubrics
- (3) Analytical Rubrics
- (4) Schedule
- **119.** The knowledge that one has about one's processes of thinking and the ability to monitor thought processes is known as?
 - (1) Symbolism
- (2) Scaffolding
- (3) Metacognition
- (4) Conservation
- **120.** A teacher of class VIII selected a passage from a newspaper and dropped every fifth word to be filled by her learners for their unit test. What typology question does this come under?
 - (1) Grammar question
 - (2) Cloze question
 - (3) Fill in the blanks
 - (4) Reading comprehension

Language: Hindi

निर्देश (121-128): निम्नलिखित अनुच्छेद को ध्यानपूर्वक पढ़िए तथा पूछे गए प्रश्नों के उत्तर के रूप में उचित विकल्प का चलन कीजिए—

ऐलिफेंटा गुफांए जिस टापू पर हैं, उस टापू का असली नाम धारापुरी है। मराठी भाषा में धारापुरी का मतलब होता है गुफाओं का शहर। इन गुफाओं को ठोस पत्थर काटकर बनाया गया। कहा जाता है कि इन गुफाओं को नौवीं शताब्दी से तेरहवीं तक के सिल्हारा वंश के राजाओं ने बनाया था। गुफाओं की कुछ मूर्तियों को राष्ट्रकूट वंश ने भी बनवाया था। 1535 में इस टापू पर गुजरात के सुल्तान का राज था। जब पुर्तगालियों ने इस टापू पर अपना कब्जा जमाया, तब उन्होंने इसका नाम धारापुरी से ऐलिफेंटा केब्स (ऐलिफेंटा गुफाएं) रख दिया। तब यहां हाथी की एक बहुत बड़ी मूर्ति भी थी। इसीलिए उन्होंने इसे नाम दिया 'हाथी की गुफाएं', पर पुर्तगालियों ने इस मूर्ति का कोई ध्यान नहीं रखा। जिस संभोवाले मंडप में यह मूर्ति लगी हुई थी, पुर्तगालियों ने उसे शूटिंग गैलरी बना दिया। और एक दिन वह मूर्ति गिरकर टूट गई। यह टूटी हुई मूर्ति अब मुम्बई के जीजामाता उद्यान में रखी हुई है।

- 121. ऐलिफेंटा की गुफाओं के टापू का असली नाम क्या है?
 - (1) ऐलिफेंटा
- (2) धारापुरी
- (3) घारापुरी
- (4) मायापुरी
- 122. किस भाषा में धारापुरी का अर्थ (गुफाओं का शहर है)
 - (1) कोंकणी
- (2) गुजराती
- (3) मराठी
- (4) मलयालम
- 123. इन गुफाओं को कैसे बनाया गया है?
 - (1) चट्टानों को जोड़कर(3) ईंट सीमेंट से
- (2) ठोस पत्थर काटकर(4) पेड़ों को काटकर
- 124. ऐलिफेंटा गुफाओं को किसने बनवाया था?
 - (1) पुर्तगालियों ने
- (2) डचों ने
- (3) अंग्रेजों ने
- (4) सिल्हारावंश के राजा ने
- 125. पुर्तगालियों का हाथी की मूर्ति के प्रति कैसा नजरिया था?
 - (1) सहेजकर रखना
- (2) लापरवाही बरतना
- (3) देखभाल करना
- (4) ट्टी मूर्ति दोबार बनवाना
- 126. वर्तमान में टूटी मूर्ति कहां है?
 - (1) मुम्बई के समुद्री तट पर
 - (2) मुम्बई के जीजामाता बाग में
 - (3) मुम्बई के चर्चगेट पर
 - (4) मुम्बई के गेटवे ऑफ इंडिया पर
- 127. मूर्ति शब्द संज्ञा है-
 - (1) व्यक्तिवाचक
- (2) जातिवाचक
- (3) भाववाचक
- (4) गुणवाचक
- 128. खम्भोंवाले मंडप में रेखांकित शब्द है-
- (2) विशेषण
- (3) संज्ञा
- **(4)** सर्वनाम

निर्देश (129-135): निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़िए तथा पूछे गए प्रश्नों के उत्तर दीजिए—

मनुष्य और प्रकृति के बीच प्राचीनकाल से ही गहरा संबंध रहा है। प्रकृति की गोद में जन्म लेकर मानव ने सभ्यता का विकास किया है। प्रकृति की देन पेड़-पौधे और वनस्पतियां हमेशा से हमारे जीवन के लिए आवश्यक रहे हैं। असाध्य रोगों का प्रकृतिक जड़ी-बूटी से इलाज करने वाले बैद्य जीवक से जब उनके गुरु जी ने कोई ऐसी वनस्पति ढूढ़ने के लिए कहा जिसका कोई गुण न हो तो वो वे खाली हाथ लौट आए।

Paper-2: 6th January, 2022

आज के प्रदूषण के युग में तो पेड़-पौधों की उपयोगिता और भी बढ़ गई है। कई वृक्षों की छाल और जड़े अनेक प्रकार की दवाइंया बनाने के काम आती हैं। वृक्षों के महत्व को देखते हुए ही हमारे देश में प्रतिवर्ष जुलाई माह के प्रथम सप्ताह को भी इसी दिशा में महत्वपूर्ण भूमिका निभानी है। जब वृक्ष हमें फल, फूल, छाया, गोंद, कागज, लकड़ी तथा अन्य अनेक पदार्थ देते हैं तो हमें भी उनकी रक्षा में तत्पर रहना चाहिए। पेड़-पौधों की रक्षा में ही हमारी रक्षा है।

- 129. 'प्रकृति की गोद में मनुष्य ने सभ्यता का विकास किया है' का अर्थ
 - (1) मनुष्य प्रकृति की गोद।
 - (2) मनुष्य अपनी सभी आवश्यकताओं की पूर्ति के लिए प्रकृति पर निर्भर है।
 - (3) प्रकृति सुंदर लगती है।
 - (4) मनुष्य आदिकाल में जंगलों में वास करता था।
- 130. प्रदूषण के युग में पेड़-पौधों की उपयोगिता और बढ़ गई है क्योंकि-
 - (1) प्रदूषण के परिणामों को उग्र होने से रोकते हैं।
 - (2) प्रदूषण फैलाते हैं।
 - (3) प्रदूषण में योगदान देते हैं।
 - (4) प्रदूषण के प्रमुख कारक हैं।
- 131. वृक्ष से हमें क्या प्राप्त नहीं होता है?
 - (1) कागज
- **(2)** दवाइयां
- (3) प्लास्टिक
- (4) 펭 리
- 132. हमारे देश में वन महोत्सव मनाया जाता है-
 - (1) प्राचीनकाल से
 - (2) वृक्षों के महत्व के कारण
 - (3) वृक्षों के महत्व न होने के कारण
 - (4) सरकारी आदेश होने के कारण
- 133. 'उपयोगिता' शब्द में उपसर्ग है-
 - (1) उप
- (2) **इ**ता
- (3) गिता
- (4) ता
- 134. 'प्रथम सप्ताह' में रेखांकित शब्द है-
 - **(1)** संज्ञा
- (2) सर्वनाम
- (3) कारक
- (4) विशेषण
- 135. पेड़-पौधों की रक्षा में ही हमारी रक्षा है क्योंकि-
 - (1) पेड़-पौधे पृथ्वी को हरा-भरा रखते हैं।
 - (2) पेड़-पौधे वातावरण को ठंडा रखते हैं।
 - (3) हम अपनी सभी आवश्यकताओं के लिए प्रत्यक्ष/अप्रत्यक्ष रूप से पेड़-पौधों पर निर्भर हैं।
 - (4) पेड़-पौधे परिवेश की सुंदरता में वृद्धि करते हैं।
- 136. निम्नलिखित में से कौन-सी भाषा की एक विशेषता नहीं है?
 - (1) भाषा यादृच्छिक है।
 - (2) भाषा स्थिर है।
 - (3) भाषा सांस्कृतिक अनुभवों पर आधारित होती है।
 - (4) भाषा एक अर्जित और सीखी हुआ व्यवहार है।
- 137. किस परिकल्पना में यह सुनिश्चित किया गया है कि विद्यार्थी व्याकरण के नियमों को जानें और उन्हें सचेतन भाव से याद करें?
 - (1) प्राकृतिक अनुक्रम परिकल्पना
 - (2) मॉनिटर परिकल्पना
 - (3) निवेश परिकल्पना
 - (4) मनोभावात्मक छनन परिकल्पना

- 138. समग्र भाषा पद्धति का विचार किसके संबंध में प्रतिक्रिया स्वरूप
 - (1) टॉप डाउन पठन सिद्धांत
- (2) बॉटम अप पठन सिद्धांत
- (3) मूर्त से अमूर्त भाषा शिक्षण (4) ज्ञात से अज्ञात भाषा शिक्षण
- 139. कक्षा VII की शिक्षिका शिक्षार्थियों को भाषा के कुछ वाक्यांश देती है जैसे कि "मैं ठीक हूँ।", "मेरे अनुसार" "क्या मामला है।",
 - आपके अनुसार वह कक्षा में कौन-सा उपागम अपनाती है?
 - (1) सम्प्रेषणात्मक उपागम
- (2) संदर्भ में व्याकरण
- (3) संरचनात्मक उपागम
- (4) संरचनात्मक उपागम
- 140. वह प्रश्न जो शिक्षार्थियों को पठन सामग्री को पढ़ने जैसे दिए गए निवेश से आगे जाने में समर्थ बनाते हैं, उसे क्या कहते हैं?
 - (1) निष्कर्ष निकालने से संबंधित प्रश्न
 - (2) संकलनात्मक प्रश्न
 - (3) दूसरे के स्थान पर स्वयं को रखने से जुड़े प्रश्न
 - (4) रचनात्मक लेखन प्रश्न
- 141. अ और ब कथनों पर विचार करें-

अ-अकादिमक भाषा विशेषताओं की विशेषता है जो अकादिमक विषयों के लिए विशिष्ट है।

ब-अकादिमिक भाषा के क्षेत्र में व्याकरण, शब्दावली और भाषा के सभी विषय क्षेत्रों के विमर्श हैं।

- (1) अ सही है।
- (2) ब सही है।
- (3) अ और ब दोनों सही हैं।
 - (4) अ और ब दोनों गलत हैं।
- 142. चित्र बोध किसे बढ़ावा देने के लिए प्रभावशाली हैं?
 - (1) सुनने का कौशल
- (2) बोलने का कौशल
- (3) पढ़ने का कौशल
- (4) लिखने का कौशल
- 143. किसी एक भाषा की कक्षा के लिए निम्नलिखित में से क्या सबसे अधिक उपयुक्त है?
 - (1) लक्ष्य भाषा की आकृतियों और अर्थों के बीच संबंध स्थापित
 - (2) भाषा सीखने के लिए ड्रिल द्वारा आकृतियों, व्याकरण के नियमों की व्याख्या करना।
 - (3) पाठृयपुस्तक का गहन उपयोग करना।
 - (4) अनुवाद के माध्यम से गहन अभ्यास करना।
- 144. प्रभावशाली सम्प्रेषण के लिए प्रेषक को किस बात पर ध्यान नहीं देना चाहिए था?
 - (1) सुनने वाले की सामाजिक-आर्थिक स्थिति
 - (2) सुनने वाले का ज्ञान
 - (3) सुनने वाले की रूचि
 - (4) सुनने वाले की संस्कृति और सामाजिक रीतियाँ
- 145. एक भाषा से दूसरी भाषा में जाना (ट्रान्सलैंग्वेज) के बारे में क्या सही नहीं है?
 - (1) भाषाओं के बीच अनुवाद।
 - (2) एक ही बोली जाने वाली या लिखित अभिव्यक्ति में विभिन्न भाषाओं के शब्दों का मिश्रण।
 - (3) यह बहुभाषावाद को समुन्नत करता है।
 - (4) यह विद्यार्थियों को एक भाषा के प्रयोग तक सीमित करता है।
- 146. छठी कक्षा के कुछ विद्यार्थी सीखने की अक्षमता से पीड़ित हैं। उस कक्षा के शिक्षक होने के नाते आप कक्षा को कैसे समावेशी बनाएंगे ?
 - (a) उनका एक विशेष समूह बनाकर।

- (b) विषय-वस्तु को सामग्री की सहायता से प्रस्तुत करके। (c) उन्हें कक्षा के अन्य सभी विद्यार्थियों के साथ मिलाकर। (d) उन्हें कक्षा की जिम्मेदारियों में शामिल करके। (1) a, b and d (2) a, c and d (3) b, c and d (4) b, c and d 147. एक कक्षा में एक विद्यार्थी अपने साथियों से हिन्दी में बात कर रही थी। जब उसके शिक्षक ने बुलाया तो उसने तुरंत उन्हें अंग्रेजी में अपनी प्रतिक्रिया व्यक्त की। निम्नलिखित में से यह किसका उदाहरण है? (2) कोड मिक्सिंग (1) कोड स्विचिंग (3) अर्थ निकालना (4) अर्थ का विस्तार 148. निम्नलिखित में से कौन-सा परीक्षण स्वभाविक रूप से भाषा कौशलों को मापता है और जिसमें पूर्ण तार्किक स्पष्टीकरण की आवश्कयता होती है? (2) व्यक्तिनिष्ठ (1) पठन अवबोधन (3) वस्तुनिष्ठ (4) बहुविकल्पीय प्रश्न 149. कक्षा VIII की शिक्षिका अपनी कक्षा को पाँच-पाँच के समूह में बाँटकर उनकी रुचि के अनुसार विषय-वस्तु का विस्तार करने वाली अलग-अलग थी देती है। समूहों को उससे संबंधित विचारों तथा सूचना को एकत्रित करने, लोगों का साक्षात्कार लेने तथा उसे
- समझकर रिपोर्ट लिखने के लिए कहा गया। विद्यार्थियों को संलग्न करने वाली इस गतिविधि को क्या कहेंगे? (1) परियोजना कार्य
- (2) प्रदत्त कार्य
- (3) समूह कार्य
- (4) पोर्टफोलियो कार्य
- 150. भारत की 'शिक्षा में भाषा नीति' किस रूप में जानी जाती है?
 - (1) बहुभाषिक शिक्षा
- (2) त्रिभाषां सूत्र
- (3) शिक्षा पाठ्यचर्या में भाषा
- (4) भाषा नीति में शिक्षा

ANSWER KEY

Child Development and Pedagogy

1. (1)	2. (1)	3. (4)	4. (1)	5. (4)
6 (1)	7 (2)	0 (1)	0 (2)	10 (2)

6. (1) **7.** (3) **8.** (1) **10.** (2)

Oswaal CTET Year-wise Solved Papers

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

Mathematics & Science

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

Language: English

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

Language: Hindi

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

CTET Solved Paper (Answers with Explanation)

Paper-2 6th January 2022

Child Development and **Pedagogy**

Option (1) is correct.

Explanation: Development describes the growth of the human mind and body throughout their lifespan. Physical health impacts mental health and vice versa.

The domains of development like physical, social, emotional and cognitive development are interlinked and interrelated so that a child's progress in one domain influences the progress in other domains of development by the principle of interrelation.

Hence, Both (A) and (R) are true and (R) is the correct explanation of (A).

Option (1) is correct.

Explanation: Sequential Development means the growth happens in a set of patterns or order, but the speed of their development may differ. In the physical development of a child, he/she will roll, crawl, walk and eventually can run.

The development follows a predictable pattern. Children acquire/learn skills and achieve milestones in a predictable sequence. For example, a child must learn to hop and run before they can skip.

Option (4) is correct.

Explanation: 'Socialization' is a learning process that begins shortly after birth

Early childhood is the period of the most intense and crucial socialization and home, family, peers, and friends play a key role in learning.

It is then that we acquire language and learn the fundamentals of our culture. It is also when much of our personality takes shape.

In the development of children, socialization plays a key role and is affected by family, school, peers, and mass media. So, not only do formal agencies but other factors like family and friends and social groups also play a vital role in the development of a child.

Option (1) is correct.

Explanation: Jean Piaget's theory states that humans create knowledge through the interaction between their experiences and ideas. He stated that the individual is at the center of the knowledge creation and acquisition process.

Piaget believed that intelligence develops from the action. He "believed that children create knowledge through interactions with the environment. Children are not passive receivers of knowledge; rather, they actively work at organizing their experience into more complex mental structures."

To build more complex schemas, children must interact with their environment.

Option (4) is correct.

Their mental

Explanation: Jean Piaget proposed that when the child is at the formal operational stage:

capabilities developed to the maximum level. Children become capable of hypothetical and deductive reasoning. Children can create logical combinations and verify hypotheses. Including this formal Operational Stage, piaget has given four stages which are Sensori-motor Stage, Pre-operational Stage and Concrete Operational Stage

Option (1) is correct.

Explanation: In Vygotsky's system, children's cognitive development is affected by culture in two ways. First, children acquire most of their knowledge (the contents of thought) through culture.

Learning is a social process where development occurs through interactions with people who possess more knowledge or skill than the learner. We are born with four 'elementary mental functions': Attention, Sensation, Perception, and Memory which allow us to use these elementary skills to develop and finally gain 'higher mental functions.

He believed that parents, caregivers, peers, and the culture at large are responsible for developing higherorder functions.

Option (3) is correct.

Explanation: In Vygotsky's system, children's cognitive development is affected by culture in two ways.

First, children acquire most of their knowledge (the contents of thought) through culture.

Learning is a social process where development occurs through interactions with people who possess more knowledge or skill than the learner.

We are born with four 'elementary mental functions': Attention, Sensation, Perception, and Memory which allow us to use these elementary skills to develop and finally gain 'higher mental functions.

He believed that parents, caregivers, peers, and the culture at large are responsible for developing higherorder functions.

Option (1) is correct.

Explanation: Kohlberg's theory is based on rationality, duty, impartiality, and the universally accepted abstract principle of justice.

Gilligan's model is based on female characteristics of care and relationship. Women as per Kohlberg's model are inferior to men so long as moral development is concerned.

Carol Gilligan emphasizes that women's ways of thinking are often undervalued compared to men.

Hence, Carol Gilligan critiqued Lawrence Kohlberg's theory of moral development by arguing that men have the morality of Justice while women have the morality of care.

Option (2) is correct.

Explanation: Spatial intelligence: It is the concept of being able to successfully perceive and derive insight from visual data, understand visual information in real and abstract words and an ability to envision information.

Option (2) is correct.

Explanation: The policy emphasizes that mother tongue/local language/ regional language as the medium of instruction at least till Grade 5, but preferably till Grade 8 and beyond. To the extent possible, mother tongue as the medium of instruction until at least Grade 5 - It is well understood that young children learn and grasp nontrivial concepts more quickly in their home language/mother tongue.

Option (4) is correct.

Explanation: Assessment Is a systematic process of gathering a range of information relating to a child, to help identify their strengths and needs. Assessment can provide a baseline of information against which a child's future development can be measured.

child-centered education assessment:

Ensure students are actively engaged in their learning goals by encouraging them to critique their work and identify areas of progress that need improvement putting this ownership on students promotes sustainable, self-regulated learning.

- Teachers understand learners and create lessons based on their specific needs
- Assessments should enhance their learning and/or provide them with an opportunity to receive feedback.
- Make assignment and test instructions clear to students.
- Choose assessment methods that are interesting and challenging to your students.

Peer collaboration: Students should involve with one another and with the teacher.

Further, well-defined collaborative work can increase students' sense of control and power in the classroom.

12. Option (4) is correct.

Explanation: Some of the key features of NEP 2020 for students from socioeconomically disadvantaged groups are:

- Recognizing, identifying, and fostering each student's unique capabilities, by educating teachers and parents to promote each student's holistic development in academic and non-academic spheres
- Respect for diversity and the local context in all curricula, pedagogy, and policy.
- Full equity and inclusion to ensure that all students thrive in the education system.
- Learning should be Holistic, Integrated, Enjoyable, and Engaging.
- To bridge the gaps between the language spoken by the child and the medium of teaching.
- The language of the transaction between teachers and students will remain the home language/ mother tongue where home language/mother-tongue textbook material is not available.
- Local sign languages will be respected and taught as well, where possible and relevant.
- Teaching for specific learning disabilities, teachers would require subject-teaching knowledge and an understanding of education's subject-related aims and the relevant skills for the understanding of the unique requirements of children.

13. Option (4) is correct.

Explanation: The ways by which teachers can ensure equality among boys and girls in the classroom:

- Enlighten students about gender equality by teaching students about its significance.
- Encouraging all students to participateinextracurricularactivities regardless of gender, creating a gender-inclusive curriculum, and making behavioral changes.

- Avoid separating male and female students.
- Discouraging male students to interrupt female students when they are speaking.
- By promoting all genders working together.
- By avoiding stereotypes (including subtle ones). Include literature that is inclusive and free of gender stereotypes.
- By eliminating gendered words.

4. Option (2) is correct.

Explanation: A progressive classroom Emphasizes learning by doing – hands-on projects, expeditionary learning, and experiential learning. It allows a flexible learning process, where the student can actively participate in the teaching-learning process. Here, the learning is based on the needs and capabilities of the individual child.

Experiential [learning] is a philosophy and methodology in which teachers engage with students in direct experience to increase knowledge, develop skills, and clarify values.

For example: Going to the zoo to learn about animals through observation, instead of reading about them.

Hence, experiential learning is an essential component of progressive classrooms.

15. Option (1) is correct.

Explanation: Critical thinking is a higher-order thinking skill that goes beyond basic observation of facts and memorization when we want our students to be evaluative, creative, and innovative.

Evaluating means making judgments about something based on criteria and standards. This requires checking and critiquing an argument or concept to form an opinion about its value. Often there is not a clear or correct answer to this type of question.

Analyzing critically means the search for meaning, exploring consequences, and deepening students' thinking and engagement to develop critical literacy which involves analyzing and evaluating ideas and texts beyond the literal level.

Thus, Higher-order thinking skills have 3 dimensions, namely: analysis, evaluation, and creating ideas.

16. Option (3) is correct.

Explanation: Indian Parliament has enacted the Rights of a person with disability Act, 2016 which defines "inclusive education" as "a system of education wherein students with and without disability learn together and the system of teaching and learning is suitably adapted to meet the learning needs of diverse types of students with learning disabilities.

Under inclusive learning, a child must be taught in his home language /or mother tongue or the language with which he/she is comfortable. The curriculum should be learner-friendly.

Hence, compulsory second and third language courses are a hindrance in achieving the goals of inclusive learning for the disabled.

17. Option (3) is correct.

Explanation: A student labeled as learning disabled may be ridiculed or singled out.

This may lead to differences with peers and cause the student to withdraw and become isolated.

Labeling may lead to low self-esteem and feelings of helplessness due to a student's inability to compete in the classroom setting.

A teacher may have preconceived ideas of the labeled child's capabilities and may not teach the child to their fullest capability. This can create ineffective schooling.

Hence, labeling and ranking students inmultiple ways may affect the diverse learning needs of the students.

18. Option (4) is correct.

Explanation: "Wernicke's dysphasia involves damage to a part of the brain called Wernicke's area. Wernicke's area helps us to understand the meaning of words and language."

The most common symptoms of dysphasia include difficulty speaking, difficulties with expression and understanding spoken language. People with dysphasia also show signs of withdrawal from social situations.

People with dysphasia might have trouble putting the right words together in a sentence, understanding what others say, reading, and writing.

19. Option (1) is correct.

Explanation: Dysgraphia is a neurological condition causing difficulty in transferring thoughts into written language for their age and ability to think, despite instruction and education.

Dysgraphia can present with many different symptoms at different ages. It is considered as a learning difference.

Causes:

- Dysgraphia can sometimes be acquired because of an illness, degenerative disease, or brain injury. This can cause a child (or even an adult) to lose their writing skills.
- The other type is called developmental dysgraphia, where difficulties acquiring writing skills show up in childhood.
- Measures to help the learner with this disability:
 - Provide typed copies of classroom notes or lesson outlines to help the student take notes.
 - Provide extra time to take notes and copy material.

- To allow the student to use an audio recorder or a laptop in class.
- Provide paper with different colored raised lines to help form letters in the right space.

20. Option (3) is correct.

Explanation: Creativity requires students to have the courage to try new things and experiment with different ideas.

Creativity requires research, bravery, risk-taking, and perseverance.

Criticism should not be feared but seen as an opportunity for growth. It involves fluency, or the ability to generate many ideas, flexibility, or the ability to switch from one perspective to another, and originality in picking unusual associations of ideas.

Hence, to say that creative students have a low sense of curiosity to learn new topics is not a correct statement.

21. Option (1) is correct.

Explanation: The middle grades consist of early-adolescent students, ten to fourteen years of age, in grades six to eight.

Adaptability is something teachers require regularly and plays a key role in helping them achieve the demands of their work. In our prior research. Middle school teachers typically do the following:

Create lesson plans to teach students (either an entire class or smaller groups) a subject, such as science or history.

Assess students to evaluate their abilities, strengths, and weaknesses.

22. Option (3) is correct.

Explanation: Brainstorming is a group problem-solving method which requires a spontaneous contribution of creative ideas and solutions. Every member of the group is encouraged to think aloud and suggest as many ideas as possible based on their diverse knowledge.

Examples provide an instance of similarity whereas non-examples provide a contrast. In non-example, Students figure out what attributes are relevant to the newly learned concept and which are not.

Hence, the statement that nonexamples do not play any role in the understanding of a concept is false.

23. Option (4) is correct.

Explanation: In the learning process, failure or not achieving the desired goal or results is considered as a developmental process.

It can help you to become a better, more successful person. In addition, failure can teach you valuable lessons that will help you not to make the same mistakes again in the future.

Finally, failure can help you to build resilience and persistence.

From our failures, we find out what does not work and we can adjust our future attempts, we learn about ourselves in the process and gain a bit of empathy towards others that might be struggling as well.

Hence, failure is a part of the developmental process.

24. Option (3) is correct.

Explanation: Declarative knowledge is knowledge about what the world is like. E.g., bananas grow on trees; spring follows winter; such-and-such a person was absent (or present) on a particular occasion.

Declarative knowledge is the knowledge of facts, data, and pieces of information, such as mathematical or scientific facts that can only be learned through memorization. It is an association between two or more items that are linked through memorization.

25. Option (4) is correct.

Explanation: Rote learning is the memorization of information based on repetition. Learners often resort to rote memorization because they are unable to relate newly acquired information to prior knowledge.

Meaningful learning is characterized by relating newly acquired information to prior knowledge.

Metacognition, simply put, is the process of thinking about thinking. It is important in every aspect of school and life since it involves self-reflection on one's current position, future goals, potential actions and strategies, and results.

Hence, rote memorization will not facilitate metacognition.

26. Option (3) is correct.

Explanation: In Constructivism, the student transforms from a passive recipient of information to an active participant in learning. With the teacher's help, students construct their knowledge actively rather than just mechanically ingesting knowledge from the teacher or the textbook.

27. Option (3) is correct.

Explanation: Problem-solving skills are the ability to identify problems, brainstorm and analyze answers, and implement the best solutions.

The solving problem requires multiple perspectives. To approach a problem from a single perspective will lead to stagnation and failure.

When children solve problems individually or in a group, they learn to look at problems from a new perspective. Therefore, it makes them capable of taking more calculated risks.

28. Option (3) is correct.

Explanation: A misconception refers to a wrong assumption or understanding.

Misconception analysis involves discovering and understanding, misunderstandings and uncovering false assumptions. Addressing misconceptions in lesson plans makes teaching much better, and easier. Students have a better understanding of what is taught, leaving their preconceptions behind when they are incorrect.

The misconception is just a basic part of the teaching-learning process and not high-order thinking.

These are not neurological defects but can be reduced by clearing the concepts.

29. Option (2) is correct.

Explanation: Students with avoidance–oriented performance goals are concerned with avoiding failure in front of others. They are extrinsically motivated by the fear of inferior performance.

Performance-avoidance goals (the desire to avoid performing more poorly than others do) have deteriorating effects on performance.

Approach goals have positive outcomes. For example, to move to the countryside for peace.

Avoidance goals, on the contrary, have negative outcomes, for example, moving out of the city because it is noisy and busy.

30. Option (4) is correct.

Explanation: Ineducation, motivation helps children and young people to focus their attention on a key goal or outcome which helps in maintaining their attention for longer periods. Students who are motivated display goal-orientated behaviors.

Internal motivation arises out of direct enjoyment for engaging in each task.

Controlled motivation is a type of motivation where an individual acts out of the desire for external rewards or fear of punishment.

If the student can handle the task perfectly then being able to control motivates him to engage in such types of tasks.

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31. Option (4) is correct.

Solution: According to distributive property,

$$a \times (b + c) = (a \times b) + (a \times c)$$

Here,
 $-25 \times (7 + 3) = -25 \times 7 + (-25) \times 3$
 $= (-175) + (-75)$
 $= -250$
 $= -25 \times 10$
 $= -250$

32. Option (3) is correct.

Solution: According to Roman numerals,

$$\begin{split} L &= 50, I = 1, V = 5, X = 10, C = 100, \\ D &= 500, M = 1000 \\ Here, \quad LXIII = 50 + 10 + 1 + 1 + 1 \\ &= 63 \\ XCII &= (100 - 10) + 1 + 1 \\ &= 90 + 2 = 92 \end{split}$$

LC does not represent any Roman numeral.We can subtract the near by number from the left.

As we know,

$$\begin{array}{ccc} L &= 50 \\ \text{and} & C &= 100. \end{array}$$

Now, we have to subtract C from L to get digit.

$$50 - 100$$

According to the rule, the result should not be less than (1/10)th of greater number.

So,we can't write LC.

$$XLIV = (50 - 10) + (5 - 1)$$

= $40 + 4 = 44$

33. Option (2) is correct.

Solution:

Concept: When we divide LCM of two numbers by HCF of two numbers, it gets divided completely. It doesn't leave any remainder.

When $250 \div 20$, we get 10 as remainder.

34. Option (4) is correct.

Solution:

$$2\frac{1}{3} = \frac{(3 \times 2) + 1}{3}$$

[Mixed fraction]

$$= \frac{7}{3}$$
On dividing $\frac{7}{3}$ by $\frac{2}{5}$, we get:

$$= \frac{7}{3} \div \frac{2}{5}$$
$$= \frac{7}{3} \times \frac{5}{2} = \frac{35}{6}$$

35. Option (3) is correct.

Solution: If A, B and C are digits, then the value of A, B and C are:

• For ones place, it is given that

nes place, it is g
$$B + 1 = 8$$

$$B = 8 - 1$$

$$B = 7$$

• For tens place, it is given that A + B = 1

Putting the value of B = 7 in it, we get

$$A + 7 = 1
A = 1 - 7
= -6 [not possible]
∴ A + 7 = 11 [1 is carry over]
A = 11 - 7
A = 4$$

• For hundreds place, it is given that 3 + A = C

Putting value of A in it, we get: = 3 + 1 + A

$$= C$$
[1 is carry over 3(add)]
$$\Rightarrow 4 + 4 = C$$

$$C = 8$$

36. Option (3) is correct.

Solution:

Annual income of Naresh = Rs. 5,76,000

Expenditure of Naresh

Ratio of savings to expenditure

$$= 72000 : 504000$$

= 1 : 7

Option (1) is correct.

Solution: According to question,

$$3x + 5 = 0$$

$$3x = -5$$

$$x = \frac{-5}{3}$$

By putting the value $\left(x = \frac{-5}{3}\right)$ in x^2 -3x, we get

$$\Rightarrow x^2 - 3x = \left(\frac{-5}{3}\right)^2 - 3\left(\frac{-5}{3}\right)$$
$$= \frac{25}{9} + \frac{15}{3}$$
$$= \frac{70}{9} \text{ or } 7\frac{7}{9}$$

38. Option (2) is correct.

Solution: Sum of the expression is: $(-3x^3y^2 + 2x^2y^3) + (-3x^2y^3 - 5y^4)$ $-3x^3y^2 + 2x^2y^3 - 3x^2y^3 - 5y^4$ By solving same power coefficients together, we get:

$$\Rightarrow -3x^3y^2 + (2x^2y^3 - 3x^2y^3) - 5y^4$$

\Rightarrow -3x^3y^2 - x^2y^3 - 5y^4

Here, the coefficient of x^2 is $-y^3$.

Option (1) is correct.

Solution: By factorising polynomials,

we get:

$$(x^3 - 5x^2 - 24x) = x(x^2 - 5x - 24)$$

$$= x(x^2 - 8x + 3x - 24)$$

$$= x\{x(x-8) + 3(x-8)\}$$

$$= x(x-8)(x+3)$$

[splitting the middle term] $(4x^2 - 9y^2) = (2x)^2 - (3y)^2$

$$(4x^2 - 9y^2) = (2x)^2 - (3y)^2$$
$$= (2x + 3y)(2x - 3y)$$

[formula used: $a^2 - b^2 = (a + b)(a - b)$] Now, According to question,

$$=\frac{(x^3-5x^2-24x)(4x^2-9y^2)}{x(x-8)(2x-3y)}$$

$$= \frac{x(x-8)(x+3)(2x+3y)(2x-3y)}{x(x-8)(2x-3y)}$$

By cancelling same terms, we get =(x+3)(2x+3y)

Option (1) is correct.

 $P = 3x^2 + y^2$ Solution:

$$Q = 2x^2 + 3y^2$$

$$R = 4x^4 + 5y^4$$

By putting values of P, Q and R in equation, we get:

$$= P \times Q - R$$

$$= (3x^2 + y^2)(2x^2 + 3y^2) - (4x^4 + 5y^4)$$

$$= 3x^2(2x^2 + 3y^2) + y^2(2x^2 + 3y^2)$$

$$- (4x^4 + 5y^4)$$

$$= (6x^4 + 9x^2y^2 + 2x^2y^2 + 3y^4)$$

$$- (4x^4 + 5y^4)$$

$$= 6x^4 + 9x^2y^2 + 2x^2y^2 + 3y^4 - 4x^4$$
$$-5u^4$$

By solving same power together, we

$$= (6-4)x^4 + (9+2)x^2y^2 + (3-5)y^4$$

= $2x^4 + 11x^2y^2 - 2y^4$

41. Option (2) is correct.

Solution: Kite has only 1 line of symmetry and no rotational symmetry. Note:

	Line of symmetry	Rotational symmetry order
Parallelogram	No	2
Rhombus	2	4
Rectangle	2	2

Option (2) is correct.

Solution:

Angles of a triangle are = 3:5:4Let the ratio be y

So,
$$3y + 5y + 4y = 180^{\circ}$$
 [Angle sum property of triangle]

$$\Rightarrow 12y = 180^{\circ}$$

$$y = 15^{\circ}$$

Putting value of y to get angles

$$3y = 3 \times 15$$

= 45°
 $5y = 5 \times 15$
= 75°
 $4y = 4 \times 15$
= 60°

It is given that the greatest angle is x.

[greatest angle] Putting value of x in $4x + 9^\circ$, we get $\Rightarrow 4(75^{\circ}) + 9^{\circ}$

309°

Option (3) is correct. **Solution:** Let the angle be x

Sum of supplement and compliment $= 240^{\circ}$

Supplement of
$$x = (180^{\circ} - x)$$

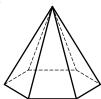
Complement of $x = (90^{\circ} - x)$ Now, According to question,

 $x = 15^{\circ}$ By putting the value of x in given expression $3x - 20^{\circ}$, we get

$$3x - 20^{\circ} = (3 \times 15^{\circ}) - 20^{\circ}$$

= $45^{\circ} - 20^{\circ}$
= 25°

44. Option (2) is correct. Solution:



In a hexagonal pyramid, Number of faces = 7Number of vertices = 7Number of edges = 12

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We know that

$$F + V = E + 2$$

[Euler's formula]

So, According to option (2)

$$2F + V - E = 9$$

By putting values, we get:

$$= (2 \times 7) + 7 - 12$$
$$= 14 + 7 - 12$$
$$= 9$$

Hence, by trial and error method we get answer.

45. Option (3) is correct.

Solution: Length of diagonals of a rectangle are equal.

So, for rectangle ABCD

$$(6x + 3) = (4x + 7)$$

$$\Rightarrow 6x - 4x = 7 - 3$$

[transpositioning]

$$2x = 4$$
$$x = 2$$

Putting value of x in diagonals, we get

ing value of x in diagonals, w

$$(6x + 3) = (6 \times 2) + 3$$

$$= 12 + 3$$

$$= 15$$

$$(4x + 7) = (4 \times 2) + 7$$

$$= 8 + 7$$

$$= 15$$

Sum of diagonals

$$= 15 + 15$$

= 30

46. Option (1) is correct.

Solution:

Length of sides of triangle

$$= 12 \text{ cm}, 13 \text{ cm}, 5 \text{ cm}$$

Area of triangle using Heron's formula

$$= \sqrt{S(S-a)(S-b)(S-c)}$$

$$S = \frac{a+b+c}{2}$$

$$= \frac{12+13+5}{2}$$

Now,

Area =
$$\sqrt{15(15-12)(15-13)(15-5)}$$

= $\sqrt{15(3)(2)(10)}$
= $\sqrt{900}$

 $= 30 \text{ cm}^2$

We also know that,

Area of triangle

$$=\frac{1}{2}$$
 × base × height

So,

$$30 = \frac{1}{2} \times 13 \times \text{height}$$

Height =
$$\frac{30 \times 2}{13}$$

= $\frac{60}{13}$
= $4\frac{8}{12}$ cm

47. Option (3) is correct.

Solution: Perimeter of trapezium ABCD = 90 cm

Length of non-parallel sides AD and BC = 17 cm

Area of trapezium = 420 cm^2 We know that

Area of trapezium =
$$\frac{1}{2}$$
 × sum of

parallel sides \times height ...(1)

Sum of all the sides = a + b + c + d

$$\Rightarrow a + 17 + c + 17 = 90$$

$$\Rightarrow a + 17 + c + 17 = 90$$

$$\Rightarrow \qquad a+c+34=90$$

$$a + c = 56 \text{ cm}$$

So, putting values in equation 1, we

Area =
$$\frac{1}{2} \times (a + c) \times h$$

$$420 = \frac{1}{2} \times 56 \times h$$

$$h = \frac{420 \times 2}{56}$$

$$h = 15 \, \mathrm{cm}$$

Option (1) is correct.

Solution:

Radius of cylinder = 8 cm Curved surface area of cylinder

$$=\frac{1}{3} \times \text{Total surface area of}$$

Volume = ?

Now,

$$\Rightarrow 2\pi rh = \frac{1}{3} \left[2\pi r(h+r) \right]$$

[:. Total surface area of cylinder = $2\pi r(h + r)$ and Curved surface area of cylinder = $2\pi rh$

Cancelling $2\pi r$ from both sides, we have

$$3h = h + r$$

$$3h = h + r$$
$$3h - h = r$$

$$2h = r$$

$$\Rightarrow r = 2h$$

$$\Rightarrow h = \frac{r}{2}$$

$$=\frac{8}{2}$$
 [radius = 8 cm]

$$= 4 \text{ cm}$$

Volume of cylinder

$$=\pi r^2 h$$

$$= \pi \times 8 \times 8 \times 4$$

$$= 256\pi \text{ cm}^3.$$

Option (3) is correct. Solution:

Mean

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

Here, mean of the observations 25, 29, 25, 32, 24 and x is 27.

number of observations = 6

So,
$$27 = \frac{25 + 29 + 25 + 32 + 24 + x}{6}$$

$$27 = \frac{135 + x}{6}$$

$$x = 27 \times 6 - 135$$

= 162 - 135
 $x = 27$
Mean = 27

For median, we arrange numbers in ascending order,

For even number terms, median is

$$\frac{1}{2} \left\{ \left(\frac{n}{2} \right) + \left(\frac{n}{2} \right) + 1 \right\}^{\text{th}} \text{ term}$$

Here n i.e., number of observations

Putting n in given formula, we get

$$\frac{1}{2} \left\{ \left(\frac{6}{2} \right) + \left(\frac{6}{2} \right) + 1 \right\}^{\text{th}} \text{ term}$$

$$=\frac{1}{2} \{3rd + (3+1)th\} \text{ term}$$

$$= \frac{1}{2} (3rd + 4th term)$$

$$= \left(\frac{25+27}{2}\right)$$

50. Option (2) is correct.

Solution:

Probability

Number from 10 to 60

Numbers that are divisible by 2 and 3 both

Probability (number chosen in divisible by 2 and 3)

$$=\frac{9}{51}$$

$$=\frac{3}{17}$$

51. Option (4) is correct.

Explanation: Assessment is the feedback provided to the children to recognise the lapse in learning and providing remedies to do learning in an appropriate way. Following are the characteristics of the assessment:

- It should focus on developing critical thinking and problem solving skills.
- (ii) It engages students with learning process.
- (iii) It should provide feedback to teacher to improve pedagogy.

52. Option (2) is correct.

Explanation: Anecdotal records are observing students learning throughout the session, either during or after the lesson by writing short notes in a brief narrative style. It brings out clear picture of how much a student has understood. It is also proven helpful in preparing lesson plans and arranging activity for students.

Notes:

- Rubric is a set of guidelines which assures that delivery of lessons is done in an effective way so that students understand the standards and mathematical concepts.
- Checklist is a set of rules or instructions which examines specific elements in the part done by students.
- Portfolio is an assembled work done by evaluators by analysing coursework, learning achievement, etc.

53. Option (3) is correct.

Explanation: According Zoltan Paul Dienes theory, mathematics should be learnt using games, activities or some interest arousing play.

There are 4-principles of Dienes theory:

- Constructivity principle
- Perceptual variability principle
- Mathematical variability principle
- Dynamic principle

Note:

Mathematical variability principle figures out that by even manipulating concepts or providing attributes, the outcomes will be general to students if they actively participated in learning the concept.

54. Option (3) is correct.

Explanation: Fractions is when dividing something into equal parts whereas ratio is comparing two things.

Here, both the statements (b) and (c) are correct as in option (a) ,the ratio is given but nothing is taken parts from whole.

55. Option (1) is correct.

Explanation: Van-Hieles theory describes how one can understands the concept of geometry. He gave 5 levels of geometrical thinking for better understanding. These are as follows:

- 1. Visualization
- 2. Analysis
- 3. Abstraction
- 4. Deduction
- Rigor

56. Option (4) is correct.

Explanation: Here, the student will be able to answers in multiple ways in option (4). Student can use creative and divergent thinking skills for this question. Prior information of place values will help to answer it in multiple ways.

57. Option (3) is correct.

Explanation: The concept of negative number is based on magnitude and its negative sign both. Integers includes all positive, negative numbers and zero in it.

58. Option (1) is correct.

Explanation: Mathematics anxiety occurs in student due to lack of processed information and not understanding the concept correctly. There are methods to address mathematical anxiety such as:

- **1.** Providing remedial teaching for difficulties.
- **2.** Diagnosing test to observe the learnings.
- **3.** Avoiding scoring/numbering to address children.
- Not taking term-end examinations or by doing in it a continuous manner throughout the session.

59. Option (4) is correct.

Explanation: According to NCF, 2005, technology plays an important role in learning mathematics. Mathematical concepts can be understood by visualization techniques. So, government should provide technology resources to learn mathematics in a explorative way.

60. Option (4) is correct.

Explanation: Algebra involves the process of generalizing the rules and putting it forward to apply them in real life situations. It deals with representing patterns and regularities in our world.

61. Option (2) is correct.

Explanation: A horse shoe magnet is a strong magnet in which the poles are very near to each other to generate high power magnetic fields. It is a type of permanent magnet that produces strong magnetic fields between the poles and highest at their poles.

62. Option (1) is correct.

Explanation: A streamlined body is a shape in which it is narrower or sharp pointed from front and broader in the center part. A ship is always made in streamlined shape as to reduce fluid drag.

63. Option (4) is correct. Explanation:

 Physical changes are those in which there is change in physical properties without disturbing chemical compositions. Example: pasteurisation of milk, curd is churned in centrifuge to separate

- butter, filtration and packing of something.
- Chemical changes are those in which there are changes in the matter throughout, product formed is new and is usually irreversible. Example: milk setting to be curd, butter heated to get clarified butter.

64. Option (1) is correct.

Explanation:

- Polysterene is used as padding in the packaging material for delicate items.
- PVC is used as an outer insulation layer for electrical wires.
- Bakelite is used in manufacturing of electrical fittings.
- Polyester is used in manufacturing of bottle and jars.

65. Option (2) is correct.

Explanation: To make bulb glow dimmer, she should connect one cell to a piece of metal wire as power in the circuit is directly proportional to voltage and current *i.e.* P = IV

[P = Power, I = Current, V = Voltage]

66. Option (3) is correct.

Explanation: Here the process is anaerobic respiration in which yeast breaks down sugar into alcohol and carbon dioxide. Anaerobic means without oxygen.

- Yeast is used in making bakery product where fermentation is required.
- Carbon dioxide helps in rising the volume of the dough, making it soft and fluffy.

67. Option (1) is correct.

Explanation: According to the phases of the Moon,

- On a full moon day: The Earth comes in between the Sun and Moon. Here, on this we can see complete illuminated area of the Moon from earth.
- 2. On a new moon day: The Moon comes in between the Sun and the Earth, also we are not able to see the Moon from the Earth.

68. Option (2) is correct.

Explanation: Human eye helps us to see the world around us. Here are some parts of eye and the functions they perform:

1. Cornea: It helps in protecting the eye by preventing dangerous particles to enter in. It also helps in focussing on light rays entering in the eye.

- Iris: By adjusting its size, it controls the amount of light which can enter in to the eye.
- Pupil: It is the aperture that allows light to enter into eye.
- Retina: It acts as a screen for the image as it has large number of light sensitive cells.
- Ciliary muscle: It is like the support system for the eye which holds the lens in position.

69. Option (1) is correct.

Explanation: Plants which have reticulate venation, they possess tap roots.

70. Option (1) is correct.

Explanation: Fertilization occurs after pollination.It is a process in which sperm cell fuses with egg cell to form zygote. This process takes place in ovule. After fertilization, ovule develops into seed.

71. Option (1) is correct.

Explanation: White blood cells are the cells that protects the body by flighting against disease causing organism. They easily changes shape to encover the bacteria and prevent them to enter in to the blood stream. They also work against toxicity caused in the body.

72. Option (1) is correct. Explanation: We know that,

Density =
$$\frac{\text{Mass}}{\text{Volume}}$$

Density of liquid
$$X = \frac{4}{1}$$

= 4 gn

$$= 4 \text{ gm/cm}^3.$$
 Density of liquid Y = $\frac{M}{V} = \frac{8}{10}$
= 0.8 gm/cm³.

Density of liquid $Z = \frac{6}{3}$

 $= 2 \text{ gm/cm}^3$

Density of water = 1 gm/cm^3 Here, density order is 4 > 2 > 1 > 0.8OR Y < water < Z < X.

73. Option (3) is correct.

Explanation: Loudness is directly proportional to the square of the amplitude. It does not depend upon frequency. So, if we increase the loudness of the ringtone of mobile phone, it will not cause any change in the frequency of ringtone.

74. Option (3) is correct.

Explanation: Heat can be transferred into 3 modes *i.e.* conduction, convection and radiation:

- Conduction occurs only in solids.
- Convection occurs in liquids and gases.
- Radiation transfers through electromagnetic waves.

75. Option (1) is correct. Explanation:

- Metal X is more reactive than Y and Z metal as it displaces them both i.e. X > Y and Z.
- Y metal is more reactive than W as it displaces it i.e. Y > W.
- W is more reactive than Z as it cannot displaced by it i.e. W > Z.

76. Option (1) is correct. Explanation:

- Phosphorus is a non-metallic lubricant.
- Zinc reacts with steam but not water.
- Baking poweder consists of sodium, hydrogen, carbon and oxygen.
- Sulphur is used in making of gunpowder for fire crackers.

77. Option (4) is correct.

Explanation: Pituitary gland is called as Master gland as it controls the secretion of hormones from ovaries, testes, thyroid and adrenal glands. It also secretes growth hormone whose production increases in adolescence period.

78. Option (2) is correct.

Explanation: Fungi are both multicellular and unicellular organisms that do not have chlorophyll. They obtain their nutrients from dead and decaying matters. They show one similarity with the plants as they possess cell wall. Penicillin is an antibiotic which is prepared from fungi.

79. Option (1) is correct.

Explanation: Hepatitis is a viral disease caused by consumption of contaminated water. It hinders in bile production, metabolism, synthesis of proteins. It mainly attacks the liver tissue.

80. Option (2) is correct. Explanation:

- Sandy soil has low water holding capacity and high percolation rate i.e. it allows water to pass through it is very easily. Their particles are very large and have high spaces between them organic matter level is also low.
- Clayey soil has high water holding capacity and very slow percolation rate. There particles are very small. Aeration is poor but has high level of organic matter.
- Silt has medium water capacity, percolation rate and organic matter content. They occurs as a deposit in river beds.

81. Option (2) is correct.

Explanation: Inquiry-based approach is the process that requires large number of question explanation through exploration, real-life experiences and problem-solving skills.

For teaching and learning of science, this method is widely used. It allows divergent thinking, improves cognitive abilities, encourages innovation and creativeness among learners. Here, students can learn by sitting in groups and planning an investigation together by understanding concepts and solving difficulties of each other.

82. Option (3) is correct.

Explanation: Here, by taking students to the garden, teacher tries to make them observe the height of plants comparing to themselves. They have to classify the plants and fill in the details in appropriate tables.

83. Option (3) is correct.

Explanation: ICT *i.e.* information and communication technology brings a lot changes in science pedagogy. It's equitable use allows:

- 1. freely use e-learning and virtual labs for better understanding.
- It ensures the availability of appropriate multimedia software in English and other Indian languages.
- 3. It ensures digital access to all sections of society.

84. Option (1) is correct.

Explanation: Process validity is the opportunity given to the students to construct their knowledge in their own way. They should be allowed to engage themselves in number of ways with the science perspective. It could go beyond textbooks and restricted approach towards creative thinking and constructing their own knowledge and concepts.

85. Option (3) is correct.

Explanation: For upper primary stage, to assess the students for understanding in science, teacher should:

- **1.** take examination in a continuous way.
- **2.** have both contextual and experiential learning.
- take periodic tests and not only pen and paper tests for scoring students.

86. Option (1) is correct.

Explanation: According to NCF 2005, learning science at upper primary stage ensures:

- 1. maximum class engagement.
- 2. learning with experiencing.
- 3. relating to real-life situations.
- **4.** emphasising on development of scientific skills.
- 5. practical knowledge about specific technologies should be included.

87. Option (2) is correct.

Explanation: According to NEP 2020, Science pedagogical aspects are:

- 1. curriculum to be rooted in local context.
- **2.** scientific temper and evidence based thinking to be encouraged.

- 3. bilingual text books should be used for better understanding.
- 4. Experiment should be conducted after completing the lesson for better understanding.

88. Option (2) is correct.

Explanation: The tentative nature of scientific knowledge refers to the understanding the point that science deals with evidence strictly, without it nothing can be stated strongly. For instance, a teacher holding a discussion about limitations of Thompson's model as it can be proven using various evidences provided. It allows students to think in a creative way and acknowledging concepts.

89. Option (2) is correct.

Explanation: Observation is the most important tool in science understanding as it allows learners to observe, analyse and think accordingly. It involves the perception of concepts. Here, Alexander Fleming carefully observes spores of a little green mould in his culture plates.

90. Option (2) is correct.

Explanation: Analogy is comparison of two different yetsimilar kind of things, details or information. Here, the teacher enables the students to understand the concept of flow of current with their own body blood flow. Students already knows about human circulatory system and now they can understand new topic in relation with previous information.

Language: English

91. Option (2) is correct.

Explanation: The following lines from the passage:

"Vaccines work by training and preparing the body's natural defensesthe immune system to recognize and fight off the viruses and bacteria they target. After vaccination, if the body is later exposed to those diseases-causing germs, the body is immediately ready to destroy them, preventing illness."

It is true to say that both (A) and (R) are true and R is the correct explanation of (A).

92. Option (3) is correct.

Explanation: "Vaccines provide a high degree of protection against getting seriously ill and dying from the disease, although no vaccine is 100% effective"

The above line is self-explanatory.

93. Option (1) is correct.

Explanation: 'Acute' means Symptoms or signs that begin and worsen quickly but last for a brief period; not chronic as 'Chronic' means a disease that continues for a long time.

Curable means a disease that can be cured.

Uncurable means a disease that cannot be cured.

Hence, 'acute' is the word opposite of 'chronic'.

94. Option (3) is correct.

Explanation: "Children and adolescents tend to have a milder infection as compared to adults, so unless they are a part of a group at higher risk of severe COVID-19, it is less urgent to vaccinate them than older people." Clearly states that (a) is true.

"The COVID-19 vaccines are safe for most people 18 years and older, including those with pre-existing conditions of any kind,"

Hence, statement (b) is also true.

Option (2) is correct.

Explanation: "Children and adolescents tend to have a milder infection as compared to adults, so unless they are a part of a group at higher risk of severe COVID-19, it is less urgent to vaccinate them than older people."

The above lines from the passage state that statement (B) is true.

"The COVID-19 vaccines are safe for most people 18 years and older, including those with preexisting conditions of any kind, like autoimmune disorders, hypertension, diabetes, asthma, pulmonary, liver and kidney disease, as well as chronic infections that are stable and controlled."

The above lines state that statement (C) is correct.

96. Option (3) is correct.

Explanation: "After vaccination, cases, minor side effects: arm soreness, mild fever, tiredness, headaches, muscle or joint aches, indicate that person's body is building protection to COVID -19 infection." The above lines state that (a) is false and (b) is correct.

"Children and adolescents tend to have a milder infection as compared to adults, so unless they are a part of a group at higher risk of severe COVID-19, it is less urgent to vaccinate them than older people." The above lines state that option (c) is correct.

Option (3) is correct.

Explanation: "Contact your care provider if there is redness or tenderness (pain) where you got the shot increases after 24 hours, or if side effects do not go away after a COVID-19 vaccine, you should not receive additional doses of the vaccine."

The above lines state that Statement (A) and statement (D) are correct.

Option (2) is correct.

Explanation: 'Evaluate' is to assess the quality, importance, or value of something and then form an opinion. Hence, 'assessed' is the right synonym for the word 'evaluated.'

99. Option (2) is correct.

Explanation: An 'Adverb' gives added information about time, manner, place and cause or degree to a verb, an adjective, a phrase, or another verb. 'Off' means 'away from' in the phrase "and fights off the virus."

Hence, the correct answer is 'adverb.'

100. Option (3) is correct.

Explanation: The mood of the poem is defiant.

These lines from the poem:

"How many ways do you have to flatten a woman?

But the earth

And women continue to rise up." The poem's mood sets up as the poet says that woman's desire to express or unfurl cannot be suppressed. The dominant society may curb it repeatedly but her desire will rise again.

101. Option (3) is correct.

Explanation: The following lines from the poem "The Grass is Like Me" by Kishwar Naheed:

"Those who can't endure

Are patched down into the scorched earth

Merely straw

A path for the oppressors."

The poet compares herself to grass. She is trying to tell us that defeat makes the way for the bigger or the stronger. Similarly, the women who remain recessive, make way for the dominant society.

Hence, submissive women will make way for the 'oppressors.'

102. Option (3) is correct.

Explanation: The poem 'The Grass is Like Me' is a feminist poem by Kishwar Naheed.

The poet raises her voice against the oppressors in society who keeps curbing women's desire to rise in society. The poet is trying to tell us that defeat makes the way for the bigger or the stronger.

The defeated grass is cut and fallen on the ground. The remaining straw makes way for the stronger machine. She challenges all women who submit to the will and demands of society.

"How many ways do you have to flatten a woman?

But the earth

And women continue to rise up." Hence, it is correct to say that the poem's promise lies in 'revolutionary violence.'

103. Option (3) is correct.

Explanation: The titular name "The Grass Is Like Me" includes a refrain because the line "the grass is like me" is repeated throughout the poem. It also includes a simile because the speaker is comparing themselves to

the grass in order to reveal a truth about their shared nature. Hence, the correct answer is option (3).

104. Option (2) is correct.

Explanation: In the phrase:

'It lifts its head':

'Head' is women and 'grass' is personified with women.

The poet is states the state of women in society is like the way grass is cut down and trampled upon only to rise again.

Hence, the grass is personified with women.

105. Option (2) is correct.

Explanation: The poet here uses the grass to personify the condition of women.

The phrase 'patched down' refers to those who are suppressed.

The poet says that as soon as a woman starts becoming aware and begins developing a sense of identity, her sense of identity is suppressed by the oppressive notions of the patriarchal society that she is a part of.

Hence, 'women with the voice' is the correct answer.

106. Option (1) is correct.

Explanation: 'Brainstorming' is a method that involves the spontaneous contribution of creative ideas and solutions. This requires unconstrained and intensive participation in which every member of the group is encouraged to think aloud and present as many ideas as possible based on their diverse knowledge.

During 'Brainstorming it is desirable to generate as many ideas as possible during the session.

The teacher should ensure that the ideas suggested should not be criticize, and wild and ambitious ideas should be welcome.

107. Option (1) is correct.

Explanation: India is a multilingual country where many languages and dialects are spoken.

Mother tongue is a language that children learn by birth. The first language the child learned at home establishes personal, social, and cultural identity.

Education in the mother tongue is a key factor for inclusion and quality learning, and it also improves learning outcomes and academic performance.

This is crucial to avoid knowledge gaps and increase the speed of learning and comprehension, especially in primary school.

Children learn better and faster in a language they can understand (preventing delays in learning). Children tend to show increased selfesteem and enjoy school more.

The Mother-Tongue Approach should inculcate the following:

- Listening.
- Repetition.
- Step-by-Step Mastery.
- Memory.
- Parental Involvement.

108. Option (3) is correct.

Explanation: Communicative competence refers to a learner's ability to use language to communicate successfully.

It includes verbal and non-verbal behavior.

Communicative Competence refers to the unconscious knowledge of grammar that allows a speaker to use and understand language.

Communication competence is needed to understand communication ethics, develop cultural awareness, use computer-mediated communication, and think critically. Competence involves knowledge, motivation, and skills.

For example, a competent communicator will engage in turn-taking while conversing instead of interrupting.

A teacher would know when it is appropriate to ask questions to further the conversation and take feedback from the receiver to know when the conversation is over.

Hence, communicative competence allows students to learn grammar through meaningful communication.

109. Option (1) is correct.

Explanation: Multilinguistic awareness is using or being able to use severallanguages, with equal fluency. India is called a multilingual country as more than 1600 languages are spoken here.

It is believed that multilinguist children develop superior reading and writing skills and have better analytical, social, and academic skills than their unilingual peers.

In a globalizing world, learning a new language expands the mind and worldview. It opens one to new cultures and diversity.

Speaking a second or third language will boost confidence and increase self-esteem.

110. Option (4) is correct.

Explanation: A paragraph is a series of sentences organized and coherent, all related to a single topic.

Paragraphs contain three main parts: a topic sentence, supporting sentences and a concluding sentence. To write a good paragraph we need to consider the following:

Control the idea and create a topic sentence.

Elaborate on the controlling idea. Give an example (or multiple examples) with an explanation. Complete the paragraph's idea in the next paragraph. Hence, good paragraph writing in English involves ideas, presentation, and coherence.

111. Option (1) is correct.

Explanation: Language learning is most successful when it is internal (when the learner desires to learn), rather than external motivation.

'Cooperative Language Learning' involves heterogeneous grouping where students form groups with fellow students who are different from themselves.

Social skills: The variables on which students differ include past achievement, social class, nationality, ethnicity, religion, sex, diligence, and personality

- Comparing understandings
- Asking for help
- Offering suggestions and feedback
- Responding productively to suggestions and feedback
- Asking for reasons
- Providing reasons
- Disagreeing politely, providing specific praise and thanks
- Attending group functioning

Group formation:

Groupformationencouragesstudents to look first to their groupmates when they need help or want feedback.

They are encouraged to take on some of the roles seen as the exclusive domain of teachers.

When students help each other within their capability, teachers can provide help beyond their current abilities.

Maximizing two aspects of peer interactions. First, the quantity of peer interactions increases when group activities are used, particularly when the number of members in each group is kept small

Second, the quality of peer interactions increases when students use higher-order thinking skills.

Individual accountability:

Individual accountability means group members must do their fair share in the groups.

Unless students feel accountable, if some act as moochers, group morale may suffer, and students may lose faith in the use of groups for learning due to these moochers' presence.

Positive Interdependence

When students feel positively interdependent on groupmates, their outcomes are positively correlated, i.e., the feeling that what helps one helps others, and what hurts one hurts others.

Positive interdependence also motivates to learn, because of shared responsibility among students where they are learning for themselves as well as for the benefit of their groups.

112. Option (1) is correct.

Explanation: The interactional Model of language' states that learners can benefit from taking part in interaction because of avariety of developmentally helpful opportunities, conditions, and processes.

The Interactionist approach claims that if language ability develops out of a desire to communicate, then one's environment will heavily affect how well and how quickly one learns to talk.

Language is people.....

Language is a system of conventional spoken, manual (signed), or written symbols, by which human beings express themselves.

A language is a person in contact....... When speakers of two or more languages or varieties interact and influence each other and when speakers of different languages interact closely, it is typical for their languages to influence each other.

A language is a person in response...... All normal children who grow up in normal households, surrounded by the conversation of other members in the house, in the community outside, and among peers, acquire the language that is being used around them.

113. Option (1) is correct.

Explanation: Scanning means examining everything closely and minutely for getting detailed information.

It is a reading technique of reading quickly to find specific information. It is a practice of looking over the whole text to get the required idea in a brief time.

Hence, scanning is a reading activity which helps the learners to draw out the desired information from/the text.

114. Option (4) is correct.

Explanation: 'The functional model' of language puts the main emphasis on semantic and communicative dimensions rather than a grammatical characteristic of language as it is linked with the concept of communicative competence which refers to a learner's ability to use language to communicate successfully.

This communication can be oral, written, or non-verbal. It ignores the grammatical characteristics of language.

It is the skill to use language in reallife situations to fulfil communicative needs

115. Option (2) is correct.

Explanation:

Suggestopedia: This approach is based on the power of suggestion in learning; the notion being that positive suggestion would make the learner more receptive and, in turn, stimulate learning.

The Silent Way: It is the name of a method of language teaching devised by Caleb Gattegno. It is based on the premise that the teacher should be silent as much as possible in the classroom but the learner should be encouraged to produce as much language as possible.

It is based on the tenet "teaching must be subordinate to learning."

The teacher uses colorful teaching-learning materials.

A lexical approach: This approach in language teaching refers to the belief that the building blocks of language learning and communication are not grammar, functions, notions, or some other unit of planning and teaching but lexis, that is, words and word combinations.

The natural approach: The natural approach aims to develop communication primarily with beginners. It is a set of principles that can be applied to a wide range of learners and teaching situations, and concrete objectives depend on the specific context in which it is used. The correct answer is the 'silent way.'

116. Option (2) is correct.

Explanation: Vertical communication: It means that information is passed from one person to the next according to a linear system based on their titles.

This type of communication is used when a company follows a hierarchical structure or for important, sensitive information.

The main purpose of a vertical communication system is to control the flow of information and decision-making.

Top-to-down communication usually consists of orders, mandates, policy decisions, directions, and instructions.

The advantages of vertical communication include greater efficiencies, reduced costs, and more control along the manufacturing or distribution process.

Hence, the rule book is an example of vertical communication.

117. Option (3) is correct.

Explanation: Multicultural education helps all students feel inclusive in the curriculum and the classroom.

Multicultural education is an idea which seeks to create equal educational opportunities for all students, including those from different racial, ethnic, and social-class groups.

The goal of multicultural education is to advocate for better learning opportunities, especially for those who are marginalized based on the color of their skin, or where they come from. The goal of multicultural education is to lead debate and discussion on

topics such as educational, economic, and social equity.

Multicultural education fosters equality, justice, and equity, and it establishes the reality of philosophical ideals in classroom environments. In a multicultural classroom, a teacher is required to:

Build relationships with students. Approach students with curiosity. Foster a growth mindset in the class-room

Help students build Confidence.

Foster inclusion.

Based on the above theories, statements A and B both are correct.

118. Option (3) is correct.

Explanation: Rubrics means a set of instructions or rules.

Rubrics are sets of scoring guidelines that can provide consistency in evaluating student work.

It allows a teacher to assess students' achievements based on multiple criteria using a single rubric.

Analytic rubrics provide more detailed feedback to students and instructors about their performance. Scoring is usually more consistent across students and graders with analytic rubrics.

Students' writing is evaluated based on vocabulary, grammar, composition, or mechanics. Results are based on multiple sub-grades.

The rules for analytical rubrics include:

- To identify the purpose and aims of assessing students.
- To identify what to assess.
- Select an appropriate type of rubric.
- To identify the performance criteria for assessing student work.
- To identify the levels of performance.

A holistic rubric:

It consists of a single scale with all criteria to be included in the evaluation like clarity, organization, and mechanics.

With a holistic rubric, the rater assigns a single score (usually on a 1 to 4 or 1-to-6-point scale) based on an overall judgment of the student's work.

A checklist:

An assessment tool listing the specific criteria for the skills, behavior, or attitudes that participants should demonstrate to show successful learning from training.

Hence, to rate each part of a student's product or process, Analytical Rubrics are the best method.

119. Option (3) is correct.

Explanation: Metacognition is the process of thinking about one's thinking and learning. It is to plan, monitor, and assess one's understanding and performance.

Metacognition includes a critical awareness of:

- (a) One's thinking and learning and,
- (b) Oneself as a thinker and learner. **Conservation:** It is a logical thinking ability of a person which determines that a certain quantity will remain the same despite adjustment of the numbers

Scaffolding: It provides temporary support to an inexperienced learner to help them complete a task or acquire a skill, and then gradually withdraw that support.

Symbolism is when an idea, feeling, emotion, or other concept is used to represent something else.

Hence, the knowledge that one about one's processes of thinking and the ability to monitor thought processes is called 'Metacognition.'

120. Option (2) is correct.

Explanation: The name 'cloze' comes from the word 'closure', which is an idea in Gestalt psychology.

Cloze words involve letters being removed from particular words in a passage of text. The child then needs to fill these in correctly.

Hence, 'Cloze question' is the right answer.

Language: Hindi

121. विकल्प (2) सही है।

व्याख्या — ऐलिफेंटा गुफाएँ जिस टापू पर हैं, उस टापू का असली नाम धारापुरी है। मराठी भाषा में धारापुरी का मतलब होता है, गुफाओं का शहर। ऐलिफेटा गुफाएँ जिस टापू पर हैं, उस टापू का असली नाम धारापुरी है।

गुफाओं की कुछ मूर्तियों को राष्ट्रकूट वंश ने भी बनवाया था।

1535 में इस टापू पर गुजरात के सुल्तान का राज था।

जब पुर्तगालियों ने इस टापू पर अपना कब्जा जमाया तब उन्होंने इसका नाम धारापुरी से ऐलिफेंटा केव्स नाम रख दिया।

122. विकल्प (3) सही है।

व्याख्या—मराठी भाषा में धारापुरी का अर्थ गुफाओं का शहर है। ऐलिफेंटा गुफाएँ जिस टापू पर हैं, एस टापू का असली नाम धारापुरी है। इन गुफाओं को टोस पत्थर काटकर बनाया गया है। भारत में मराठी मुख्यत: महाराष्ट्र में बोली जाती है। इसके अतिरिक्त यह गोवा, कर्णाटक, गुजरात, आंध्र प्रदेश, मध्य प्रदेश, तमिल नाडु और छत्तीसगढ़ में बोली जाती है।

मराठी भारत में एक आर्य भाषा है जो मुख्य रूप से महाराष्ट्र में उपयोग की जाती है।

मराठी की मुख्य बोली मानक मराठी है और इसे बोलिभाषा कहा जाता है।

123. विकल्प (2) सही है।

व्याख्या—ऐलिफेंटा की गुफाएँ जिस टापू पर हैं, उसका असली अर्थात् वास्तविक नाम धारापुरी है। इन गुफाओं को ठोस पत्थर काटकर बनाया गया है। कहा जाता है कि इन गुफाओं को नौवीं शताब्दी से तेरहवीं तक के सिल्हारा वंश के राजाओं ने बनाया था।

यह पाषाण-शिल्पित मंदिर समूह लगभग 6,000 वर्ग फीट के क्षेत्र में फैला है।

जिसमें मुख्य कक्ष, दो पार्श्व कक्ष, प्रांगण व दो गौण मंदिर हैं।

इन भव्य गुफाओं में सुंदर उभाराकृतियां, शिल्पाकृतियां हैं व साथ ही हिन्दू भगवान शिव को समर्पित एक मंदिर भी है।

124. विकल्प (4) सही है।

व्याख्या—इन गुफाओं को नौवीं शताब्दी से तेरहवीं तक के सिल्हारा वंश के राजाओं ने बनवाया था। यह गुफाएँ ठोस पत्थरों को काटकर बनाई गईं।

एलीफेंटा गुफाएं पश्चिमी भारत में एलीफेंटा द्वीप (जिसे अन्यथा घरापुरी द्वीप के रूप में जाना जाता है) पर स्थित हैं, जिसमें एक संकरी घाटी से अलग दो पहाड़ियों की विशेषता है।

चट्टानों को काटकर बनाई गई एलीफेंटा गुफाओं का निर्माण लगभग पांचवीं से छठी शताब्दी के मध्य में किया गया था।

एलोरा एलीफेंटा की गुफाओं का निर्माण राष्ट्रकूट शासकों द्वारा किया गया था, जो उच्च बेसाल्ट खड़ी चट्टान की दीवारों को काटकर इसे बनाने के लिए जाने जाते हैं।

लगभग दूसरी शताब्दी ईसा पूर्व के आसपास, ब्राह्मणों के द्वीप पर आने से पहले, बुद्ध का एक बड़ा स्तूप, जिसके चारों ओर सात छोटे स्तूप थे, बनाने के लिए, एलिफेंटा स्थल पर सबसे पहले हीनयान बौद्धों का कब्जा था।

हिंदू गुफाओं में चट्टानों को काटकर बनाई गई पत्थर की मूर्तियां हैं, जो शैव हिंदू संप्रदाय, जो भगवान शिव को समर्पित है, का प्रतिनिधित्व करती हैं।

1987 में, इसे कलाकृति के संरक्षण के लिए यूनेस्को की विश्व धरोहर स्थल घोषित किया गया था और वर्तमान में इसका प्रबंधन भारतीय पुरातत्व सर्वेक्षण (ASI) द्वारा किया जाता है।

125. विकल्प (2) सही है।

व्याख्या—पुर्तगालियों का हाथी की मूर्ति के प्रति लापरवाही बरतने वाला न्ज़रिया था।

जब पुर्तगालियों ने इस टापू पर अपना कब्ज़ा जमाया, तब उन्होंने इसका नाम धारापुरी से ऐलिफेंटा केव्ज (ऐलिफेंटा गुफाएँ) रख दिया। तब यहाँ हाथी की एक बहुत बड़ी मूर्ति भी थी, इसीलिए उन्होंने इसे नाम दिया 'हाथी की गुफाएँ' पर पुर्तगालियों ने इस मूर्ति का कोई ध्यान नहीं रखा।

16वीं शताब्दी में पुर्तगाली यहां खोज के उद्देश्य से आए थे। जिसके बाद उन्होंने गोवा पर कब्जा कर लिया था।

450 साल तक पुर्तगालियों ने गोवा पर राज किया।

126. विकल्प (2) सही है।

व्याख्या—यहाँ हाथी की एक बहुत बड़ी मूर्ति थी, इसीलिए इन्होंने इसे नाम दिया 'हाथी की गुफाएँ', पर पुर्तगालियों ने इस मूर्ति का कोई ध्यान नहीं रखा। जिस संभोवाले मंडप में यह मूर्ति लगी हुईं थीं, पुर्तगालियों ने उसे शूटिंग गैलरी बना दिया और एक दिन वह मूर्ति गिरकर टूट गई। यह टूटी हुई मूर्ति अब मुम्बई के जीजामाता उद्यान में रखी हुई है।

127. विकल्प (2) सही है।

व्याख्या—मूर्ति शब्द जातिवाचक संज्ञा है। जातिवाचक संज्ञा

- िकसी वस्तु, प्राणी या स्थान विशेष की जाति का बोध कराने वाले शब्दों को जातिवाचक संज्ञा कहते हैं।
- सम्पूर्ण प्रजाति का बोध कराते हैं।
- 🔳 जातिवाचक संज्ञा सदैव बहुवचन होती है।
- उदाहरण के लिए—मानव, पक्षी, किसान, महिलाएँ, इत्यादि।

जिस शब्द से किसी प्राणी या वस्तु की समस्त जाति का बोध होता है,उन शब्दों को जातिवाचक संज्ञा कहते हैं। यथा- घोड़ा, फूल, मनुष्य, वृक्ष आदि।

अत: स्पष्ट है मूर्ति शब्द जातिवाचक संज्ञा है।

128. विकल्प (2) सही है।

व्याख्या—खंभोंवाले मण्डप 'विशेषण' शब्द है। विशेषण

- संज्ञा अथवा सर्वनाम शब्दों की विशेषता बताने वाले शब्दों को विशेषण कहते हैं।
- उदाहरण के लिए—काला, मोटा, छोटा, इत्यादि।

विशेषण के प्रकार

- गुणवाचक विशेषण
- संख्यावाचक विशेषण
- व्यक्तिवाचक विशेषण
- सर्वनामिक विशेषण
- परिमाणवाचक विशेषण

129. विकल्प (2) सही है।

व्याख्या—'प्रकृति की गोद में मनुष्य ने सभ्यता का विकास किया है' का अर्थ है—मनुष्य अपनी सभी आवश्यकताओं की पूर्ति के लिए प्रकृति पर निर्भर है।

मनुष्य और प्रकृति के बीच प्राचीनकाल से ही गहरा सम्बन्ध रहा है। प्रकृति की गोद में जन्म लेकर मानव ने सभ्यता का विकास किया है। प्रकृति की देन पेड़-पौधे और वनस्पतियाँ हमेशा से हमारे जीवन के लिए आवश्यक रहे हैं। प्रकृति शब्द में प्र उपसर्ग का प्रयोग किया गया।

प्रकृति शब्द में प्र उपसर्ग का प्रयोग किया गया। मूलशब्द कृति है।

कृति का अर्थ रचना है।

उपसर्ग की परिभाषा -वह शब्दांश या अव्यय, जो किसी शब्द के आरंभ में जुड़कर मूल शब्द के अर्थ में विशेषता ला दे या उसका अर्थ ही बदल दे। जैसे—अ + छूता = अछूता, कु + चौला = कुचौला इत्यादि।

उपसर्ग के भेद-

संस्कृत के उपसर्ग

- हिंदी के उपसर्ग
- उर्दू के उपसर्ग
- अंग्रेजी के उपसर्ग

130. विकल्प (1) सही है।

व्याख्या—प्रदूषण के युग में पेड़-पौधों की उपयोगिता और बढ़ गई है क्योंकि प्रदूषण के परिणामों को उग्र होने से रोकते हैं।

कई वृक्षों की छाल और जड़ें अनेक प्रकार की दवाइयाँ बनाने के काम आती हैं। वृक्षों के महत्त्व को देखते हुए ही हमारे देश में प्रतिवर्ष जुलाई माह के प्रथम सप्ताह को भी इसी दिशा में महत्त्वपूण म्मिका निभानी है। जब वृक्ष हमें फल, फूल, छाया, गोंद, काग्ज, लकड़ी तथा अन्य अनेक पदार्थ देते हैं।

प्रदूषण शब्द में प्र उपसर्ग का प्रयोग किया गया। मूल शब्द दूषण है।

दूषण का अर्थ है– मारनेवाला।

उपसर्ग की परिभाषा -वह शब्दांश या अव्यय, जो किसी शब्द के आरंभ में जुड़कर मूल शब्द के अर्थ में विशेषता ला दे या उसका अर्थ ही बदल दे। जैसे—अ + छूता = अछूता, कु + चौला = कुचौला इत्यादि।

131. विकल्प (3) सही है।

व्याख्या—वृक्ष से हमें प्लास्टिक प्राप्त नहीं होती है क्योंकि प्लास्टिक मानव निर्मित है, इसीलिए यह प्राकृतिक नहीं है।

कई वृक्षों की छाल और जड़ें अनेक प्रकार की दवाइयाँ बनाने के काम आती हैं। वृक्ष हमें फल, फूल, छाया, गोंद, कागज़, लकड़ी तथा अन्य अनेक प्राकृतिक पदार्थ देते हैं जो मानव के लिए लाभदायक होते हैं।

प्लास्टिक का अर्थ –कृत्रिम या अर्द्ध कृत्रिम रीति से बनाया गया एक पदार्थ।

132. विकल्प (2) सही है।

व्याख्या—हमारे देश में वन महोत्सव वृक्षों के महत्त्व के कारण मनाया जाता है।

वृक्षों के महत्त्व को देखते हुए ही हमारे देश में प्रतिवर्ष जुलाई माह के प्रथम सप्ताह को भी इसी दिशा में महत्त्वपूर्ण भूमिका निभानी होती है। जब वृक्ष हमें फल, फूल, छाया, गोंद, लकड़ी इत्यादि अनेक पदार्थ देते हैं तो हमें भी उनकी रक्षा में तत्पर रहना चाहिए।

वन महोत्सव का उद्देश्य हमारे द्वारा वनों को उगाने और बचाने के महत्व को फैलाना और वनों की कटाई के दुष्प्रभावों के बारे में जागरूकता पैदा करना है।

133. विकल्प (1) सही है।

व्याख्या—'उपयोगिता'शब्द में 'उप' उपसर्ग है। उपसर्ग

- ऐसे शब्दांश जो किसी शब्द के पहले जुड़कर उसके अर्थ में परिवर्तन कर देते हैं।
- उदाहरण के लिए—उप + हार = उपहार अर्थात् भेंट।
- उपसर्ग कभी भी अविकारी शब्दों के साथ नहीं जुड़ते।

उपसर्ग के प्रकार

- हिन्दी भाषा के उपसर्ग
- संस्कृत भाषा के उपसर्ग
- विदेशी भाषा के उपसर्ग
- वह शब्दांश या अव्यय, जो किसी शब्द के आरंभ में जुड़कर मूल शब्द के अर्थ में विशेषता ला दे या उसका अर्थ ही बदल दे। जैसे—अ + छूता = अछूता, कु + चौला = कुचौला इत्यादि।
- 1. संस्कृत के उपसर्ग
- 2. हिंदी के उपसर्ग
- 3. उर्दू के उपसर्ग
- 4. अंग्रेजी के उपसर्ग

खंभोंवाले शब्द विशेषण हैजो शब्द संज्ञा और सर्वनाम की विशेषता बताता है उसे विशेषण कहते हैं जैसे-अच्छा लड़का, बुरा लड़का। इस वाक्य में अच्छा और बुरा शब्द विशेषण है, क्योंकि इनमें लड़का का विशेषता बताया जा रहा है लड़का शब्द संज्ञा है।

134. विकल्प (4) सही है।

व्याख्या—'प्रथम सप्ताह' में रेखांकित शब्द विशेषण है।

विशेषण

- संज्ञा अथवा सर्वनाम शब्दों की विशेषता बताने वाले शब्दों को विशेषण कहते हैं।
- उदाहरण के लिए—<mark>काला, मो</mark>टा, छो<mark>टा,</mark> इत्यादि।

विशेषण के प्रकार

- गुणवाचक विशेषण
- संख्यावाचक विशेषण
- व्यक्तिवाचक विशेषण
- सर्वनामिक विशेषण
- परिमाणवाचक विशेषण

विशेषण—जो शब्द संज्ञा या सर्वनाम शब्दों की विशेषता बताते हैं।

विशेषण के मुख्यत: आठ भेद हैं-

गुणवाचक विशेषण वे शब्द जो संज्ञा या सर्वनाम के गुण, धर्म, स्वाभाव आदि का बोध कराये। बलशाली, पुराना, नया, तीक्ष्ण, कमजोर, मोटा, दुर्बल, पठारी आदि।

संख्यावाचक विशेषण ऐसे शब्द जो संज्ञा या सर्वनाम की संख्या का बोध कराते हैं। दो, तीनों, चार गुना, प्रत्येक आदि।

परिमाणवाचक विशेषण ऐसे शब्द जो संज्ञा या सर्वनाम की मात्रा का बोध कराते हैं। चार किलो, एक मीटर, दो लीटर, थोड़ा, बहुत आदि।

सार्वनामिक विशेषण वे सर्वनाम शब्द जो संज्ञा से पहले आयें और विशेषण की तरह उस संज्ञा शब्द की विशेषता बताएँ। यह लड़की वही है जिसने मेरा पेन लिया था।

व्यक्तिवाचक विशेषण ऐसे शब्द जो संज्ञा के भेद व्यक्तिवाचक संज्ञा से बने होते हैं एवं विशेषण शब्दों की रचना करते हैं। जैसे - भारत - भारतीय, बनारस - बनारसी, इलाहबाद -इलाहाबादी आदि। प्रश्नवाचक विशेषण ऐसे शब्द जिनका संज्ञा या सर्वनाम में जानने के लिए प्रयोग होता है। यह व्यक्ति कौन है ?

तुलनाबोधक विशेषण जब वस्तुओं के गुण – दोष की तुलना आपस में की जाये। वह राधा से भी ज्यादा सुरीला गाती है।

सम्बन्धवाचक विशेषण विशेषण शब्दों का प्रयोग करके किसी एक वस्तु या व्यक्ति का सम्बन्ध दूसरी वस्तु या व्यक्ति के साथ दर्शाया जाये। घर की बाहरी दीवार खराब हो रही ह

135. विकल्प (3) सही है।

व्याख्या—पेड़-पौधों की रक्षा में ही हमारी रक्षा है, क्योंकि हम अपनी सभी आवश्यकताओं के लिए प्रत्यक्ष। अप्रत्यक्ष रूप से पेड़-पौधों पर निर्भर हैं।

मनुष्य और प्रकृति के बीच प्राचीनकाल से ही गहरा सम्बन्ध रहा है। प्रकृति की गोद में जन्म लेकर मानव ने सभ्यता का विकास किया है। प्रकृति की देन पेड़-पौधे और वनस्पतियाँ हमेशा से हमारे जीवन के लिए आवश्यक रहे हैं।

आज प्रदूषण युग में पेड़-पौधों की उपयोगिता और भी बढ़ गई है। कई वृक्षों की छाल और जड़ें अनेक प्रकार की दवाइयाँ बनाने के काम आती हैं। जब वृक्ष हमें फल, फूल, छाया, गोंद, लकड़ी इत्यादि अनेक पदार्थ देते हैं तो हमें भी उनकी रक्षा में तत्पर रहना चाहिए।

पेड़-पौधे में द्वन्द्व समास है।

दो या अधिक शब्दों (पदों) का परस्पर संबद्ध बतानेवाले शब्दों अथवा प्रत्ययों का लोप होने पर उन दो या अधिक शब्दों से जो एक स्वतन्त्र शब्द बनता है, उस शब्द को सामासिक शब्द कहते है और उन दो या अधिक शब्दों का जो संयोग होता है, वह समास कहलाता है।

द्वन्द समास—जिस समस्त-पद के दोनों पद प्रधान हो तथा विग्रह करने पर 'और', 'अथवा', 'या', 'एवं' लगता हो वह द्वन्द्व समास कहलाता है। दोनों पदों के बीच प्राय: योजक चि□ (-) का प्रयोग होता है।

द्वन्द्व समास में सभी पद प्रधान होते है। द्वन्द्व और तत्पुरुष से बने पदों का लिंग अन्तिम शब्द के अनुसार होता है।

द्वन्द्व समास के भेद—द्वन्द्व समास के तीन भेद है-इतरेतर द्वन्द्व

समाहार द्वन्द्व

वैकल्पिक द्वन्द्व

136. विकल्प (2) सही है।

व्याख्या—इनमें से भाषा की एक विशेषता नहीं है कि भाषा स्थिर है।

भाषा की विशेषताएँ

- भाषा सांस्कृतिक अनुभावों पर आधारित है।
- भाषा एक अर्जित और सीखा हुआ व्यवहार है।
- भाषा यादृ च्छिक है।
- भाषा अभव्यक्ति का माध्यम है।
- भाषा बोलने वाले की सामाजिक पहचान को प्रकट करती है।

भाषा अर्जित संपत्ति है।

भाषा पैतृक सम्पत्ति है। भाषा अनुकरणीय होती है। भाषा सामाजिक वस्तु है। भाषा परिवर्तन शील होती है। एक समृद्ध भाषा कई भाषाओं के शब्दों को स्वयं

एक समृद्ध भाषा कई भाषाओं के शब्दों को स्वयं में निहित रखती है।

भाषा का जितना अधिक प्रयोग किया जाएगा, उतना ही भाषा पर पकड़ मजबूत होती जाएगी। भाषाएँ एक-दूसरे के सानिध्य में फलती-फूलती है।

भाषा नियमबद्ध व्यवस्था होती है। भाषा संज्ञानात्मक लचीलेपन एवं सामाजिक सहिष्णुता को भी जन्म देती है।

137. विकल्प (2) सही है।

व्याख्या—मॉनिटर परिकल्पना में यह सुनिश्चित किया गया है कि विद्यार्थी व्याकरण के कारण नियमों को जानें और उन्हें प्रचेतन भाव से याद करें। चॉम्सकी और स्टीफन क्रैशेन दुनिया के दो सबसे प्रसिद्ध भाषाविद् हैं। क्रैशेन का मानना है कि भाषा अधिग्रहण के लिए लक्षित भाषा के साथ सार्थक बातचीत की आवश्यकता होती है।

मॉनिटर परिकल्पना

- भाषा की शुद्धता पर अधिक ध्यान केन्द्रित करता है।
- मॉनिटर परिकल्पना का ठीक से उपयोग करने के लिए, तीन मानकों के पूरा किया जाना चाहिए—
 - अधिग्रहणकर्ता को भाषा के नियमों का ज्ञान होना चाहिए।
 - परिचित को भाषा के सटीक रूप पर ध्यान केन्द्रित करना चाहिए।
 - बातचीत में भाषा नियमों की समीक्षा करने और उन्हें लागू करने के लिए अधिग्रहणकर्ता को कुछ समय अलग रखना चाहिए।

भाषा मनुष्यों के लिए संचार का प्राथमिक साधन है और दूसरी भाषा सीखना विभिन्न कारणों से महत्वपूर्ण है, जिसमें विभिन्न संस्कृतियों को समझना, विभिन्न पृष्ठभूमि के लोगों के साथ बेहतर संचार और यहां तक कि नौकरी प्राप्त करना भी शामिल है।

स्टीफन क्रैशन भाषा विज्ञान के क्षेत्र में एक विशेषज्ञ हैं, जो भाषा अधिग्रहण और विकास के सिद्धांतों में विशेषज्ञता रखते हैं। उन्होंने द्वितीय भाषा अधिग्रहण का सिद्धांत दिया जो व्यापक रूप से जाना जाता है और अच्छी तरह से स्वीकार किया जाता है।

..... दूसरी भाषा अधिग्रहण के क्रैशन के सिद्धांत में पांच मुख्य परिकल्पनाएं शामिल हैं— अधिग्रहण–सीखने की परिकल्पना

मॉनिटर परिकल्पना

इनपुट परिकल्पना

प्रभावी निस्पंदन परिकल्पना

प्राकृतिक आदेश परिकल्पना **मॉनिटर परिकल्पना**-मॉनिटर परिकल्पना का
दावा है कि एक शिक्षार्थी की सीखी हुई प्रणाली
एक मॉनिटर के रूप में कार्य करती है कि वे

क्या उत्पादन कर रहे हैं। दूसरे शब्दों में, जबिक केवल अधिग्रहीत प्रणाली ही सहज भाषण उत्पन्न करने में सक्षम है, सीखी हुई प्रणाली का उपयोग यह जांचने के लिए किया जाता है कि क्या बोला जा रहा है।

इससे पहले कि शिक्षार्थी कोई उच्चारण करे, वह त्रुटियों के लिए आंतरिक रूप से उसे स्कैन करता है, और सुधार करने के लिए सीखी गई प्रणाली का उपयोग करता है। स्व-सुधार तब होता है जब शिक्षार्थी किसी वाक्य के उच्चारण के बाद उसे सही करने के लिए मॉनीटर का उपयोग करता है। परिकल्पना के अनुसार, इस तरह की आत्म-निगरानी और आत्म-सुधार केवल सचेत भाषा सीखने के कार्य हैं।

इसके अंतर्गत विद्यार्थी व्याकरण के नियमों को जानने का प्रयत्न करता है और उन्हें सचेतन भाव से याद करता है।

मॉनिटर मॉडल तब बच्चों की तुलना में वयस्कों द्वारा तेजी से प्रारंभिक प्रगति की भविष्यवाणी करता है, क्योंकि वयस्क इस 'मॉनिटर' का उपयोग प्राकृतिक प्रदर्शन की क्षमता हासिल करने से पहले L2 (लक्षित भाषा) उच्चारण का निर्माण करते समय करते हैं, और वयस्क शिक्षार्थी बच्चों की तुलना में पहले बातचीत में अधिक इनपुट करेंगे।

138. विकल्प (2) सही है।

व्याख्या—समग्र भाषा पद्धति का विचार बॉटम-अप पठन सिद्धान्त के सम्बन्ध में प्रतिक्रिया स्वपरूप सामने आया है।

बॉटम-अप सिद्धान्त

- बालक अर्थों या व्याकरण सम्बन्धी विशेषताओं को देखकर भाषा को समझने का प्रयास करता है।
- ध्वनियों और वाक्यांशों पर ध्यान केन्द्रित करता है।
- यह सूचना प्रसंस्करण है।

सुनने की कई रणनीति या प्रक्रिया है जो सुनने और अन्य गतिविधियों को रोचक बनाती है जो अधोमुखी (टॉप-डाउन) श्रवण प्रक्रिया तथा बॉटम-अप श्रवण प्रक्रिया है—

बॉटम-अप श्रवण युक्तियाँ—यह प्रक्रिया एक हिस्से से दूसरे हिस्से तक जाती है। यह ध्वनियों से शब्दों, वाक्यांशों, खंडों और अन्य व्याकरिण क तत्वों तक जाने वाले पाठ की व्याख्या करने पर केंद्रित है।

बॉटम-अप श्रवण युक्तियाँ एक प्रकार की सूचना प्रसंस्करण है जो एक धारणा बनाने के लिए पर्यावरण से आने वाले डेटा पर आधारित है। सुनने में बॉटम-अप प्रोसेसिंग, विशिष्ट बारीकियों जैसे—ध्वनियों से शब्दों, वाक्यांशों, खंडों और अन्य व्याकरणिक तत्वों से वाक्यों में जाने वाले संदेशों को सुनने की प्रक्रिया है।

यह समग्र रूप से पाठ के अर्थ के बजाय व्यक्तिगत ध्वनियों, शब्दों और वाक्यांशों पर ध्यान केंद्रित करता है।

बॉटम-अप प्रोसेसिंग तब होती है जब कोई व्यक्ति वाक्य की सबसे बुनियादी इकाइयों के अलग-अलग अर्थों या व्याकरण संबंधी विशेषताओं को देखकर भाषा को समझने की कोशिश करता है, (जैसे सुनने के लिए ध्विन या पढ़ने के लिए शब्द), और इनसे आगे बढ़कर संपूर्ण को समझने की कोशिश करता है। बॉटम-अप श्रवण युक्तियों के अंतर्गत किसी

बॉटम-अप श्रवण युक्तियों के अंतर्गत किसी विषय को सुनते समय उस पर स्कीमा सुजित करने के लिए मुख्य बिन्दुओं का इस्तेमाल किया जाता है और निष्कर्ष निकाला जाता है।

139. विकल्प (4) सही है।

व्याख्या—कक्षा VII की शिक्षिका शिक्षार्थियों को भाषा के कुछ वाक्यांश देती है जैसी कि "में ठीक हूँ।", "मेरे अनुसार" "क्या मामला है।", इत्यादि। वह कक्षा में कोश विषयक उपागम अपनाती है।

कोश विषयक उपागम

- माइकल लेविस द्वारा इस उपागम को प्रतिपादित किया गया।
- यह सम्प्रेषणीय और अभिव्यंजक शिक्त
 प्रदान करती है।
- व्याकरणीय नियमों पर जोर दिया जाता है। भाषा सीखना भाषा सीखने के मूलभूत कौशल की बेहतर समझ के लिए जानबूझकर और सचेत प्रयास का परिणाम है। यह व्याकरणिक नियमों और संचार में उनके उपयोग का एक बुनियादी जान है।

कोश विषयक उपागम (lexical approach) माइकल लेविस (1993) द्वारा प्रस्तावित, कोश विषयक उपागम दूसरी भाषा शिक्षण के व्याकरण-आधारित उपागम के विकल्प के रूप में उभरा है। इसका केंद्र शिक्षार्थियों की दक्षता का विकास है। यह उपागम शब्दकोष पर विशेष ध्यान देता है जो व्यक्तियों को किसी विशेष संदर्भ में प्रभावी ढंग से संवाद करने में मदद करता है। कोश विषयक उपागम, शब्द और शब्द संयोजन के साथ शिक्षार्थी की दक्षता विकसित करने पर केंद्रित है।

कोश विषयक उपागम में न केवल एक शब्द बल्कि शब्द संयोजन भी शामिल हैं जिन्हें लोग अपने मानसिक शब्दकोष में संग्रहीत करते हैं। यह उपागम देशी वक्ताओं की भाषा में बहु-शब्द इकाइयों या शाब्दिक विखंडो की व्यापक घटना है।

इस विधि में शब्दों के समूह के प्रति समझ का निर्माण किया जाता है।

किसी भी भाषा में कोश विषयक वाक्यांश व्याकरणिक संरचनाओं की तुलना में अधिक संप्रेषणीय और अभिव्यंजक शक्ति प्रदान करते हैं।

140. विकल्प (3) सही है।

व्याख्या—वह प्रश्न जो शिक्षार्थियों को पठन सामग्री को पढ़ने जैसे दिए गए निवेश से आगे जाने में समर्थ बनाते हैं, उसे दूसरे के स्थान पर स्वयं को रखने से जुड़े प्रश्न कहते हैं।

मुख्य बिन्दु

इसमें रचनात्मक लेखन को बढ़ावा दिया जाता
 है।

- इसके द्वारा बालक के वास्तविक ज्ञान में वृद्धि होती है।
- इससे पठन कौशल विकसित होता है। भाषा सीखने के सन्दर्भ में प्रामाणिक गतिविधि ग्याँ वास्तविक जीवन की स्थितियों से संबंधित होती हैं। यह कक्षा सीखने को छात्र के दैनिक जीवन से जोड़ता है और रचनात्मक लेखन को बढ़ावा देता है।

शिक्षार्थियों से श्गायश पर एक पैराग्राफ लिखने के लिए कहना भाषा सीखने के लिए एक प्रामाणिक गतिविधि नहीं है क्योंकि यह रचनात्मक लेखन को बढ़ावा नहीं देगा और मौजूदा ज्ञान के आधार पर आसानी से लिखा जा सकता है।

बाकी विकल्प प्रामाणिक सामग्री के माध्यम से होने वाली प्रामाणिक गतिविधियों के उदाहरण हैं। ये सामग्री शिक्षार्थियों की आवश्यकताओं से अधि कि निकटता से संबंधित हैं और उन्हें सीखने के लिए प्रासंगिक सामग्री का स्रोत प्रदान करती हैं। ये गतिविधियाँ शिक्षार्थियों को उच्च स्तरीय सोच कौशल का उपयोग करने के लिए प्रेरित करेंगी। ये कार्य छात्रों को सिक्रय रूप से सोचने, संबंध बनाने और निष्कर्ष निकालने की भी अनुमति हेंगे।

141. विकल्प (3) सही है।

व्याख्या—अ और ब दोनों सही हैं।

- अ अकादिमिक भाषा विशेषताओं की विशेषता है जो अकादिमिक विषयों के लिए विशिष्ट है।
- अकादिमक भाषा के क्षेत्र में व्याकरण,
 शब्दावली और भाषा के सभी विषय क्षेत्रों
 के विमर्श हैं।

अकादिमक भाषा औपचारिक भाषा है। अकादिमक भाषा विशेषताओं की विशेषता है जो अकादिमक विषयों के लिए विशिष्ट है। अकादिमक भाषा का परिचय कक्षा शिक्षण के दौरान होता है।

अकादिमिक भाषा के क्षेत्र में व्याकरण, शब्दावली और भाषा के सभी विषय क्षेत्रों के विमर्श हैं। अकादिमिक भाषा को लेखन, प्रकाशन और शिक्षण के माध्यम से स्थापित करते है। अकादिमिक भाषा का प्रयोग कक्षा के कार्य, गृहकार्य में करते है।

शिक्षार्थी अकादिमक भाषा विषय की पुस्तकों, शिक्षकों से ग्रहण करते है।

142. विकल्प (3) सही है।

व्याख्या—चित्र बोध पढ़ने के कौशल को बढ़ावा देने के लिए प्रभावशाली है।

मुख्य बिन्दु

- इसके द्वारा अनुमिनक कौशल को विकसित किया जाता है।
- मौन पठन पर बल दिया जाता है।
- विषयवस्तु को समझने की समझ को विकसित किया जाता है।

बालकों को पढ़ने के लिए निम्न प्रकार प्रशिक्षित करने की आवश्यकता होती है-

 गित के साथ पढ़ने की क्षमता का विकास करने के लिए, यह सुनिश्चित करना आवश्यक है कि किसी अनुच्छेद को पढ़ने में कितना समय लगेगा।

- इसके लिए शिक्षक को यह स्पष्ट करना होगा
 िक मौन पठन करते हुए शब्दों को फुसफुसाना
 या बुदबुदाना नहीं है।
- ओष्ठ-संचालन बिल्कुल नहीं होना है।
- आँखों को एक शब्द समृह से दूसरे शब्द समृह तक संचलन का प्रशिक्षण देना चाहिए।
- पाठक का प्रत्येक शब्द पर ध्यान केंद्रित करना अथवा अक्षर जोड़कर पढ़ना अनिवार्य नहीं है।
- पठन क्रिया इतनी गति के साथ होती है कि बालक विषय वस्तु का अनुमान लगाते हुए पढ़ता है।

143. विकल्प (1) सही है।

ट्याख्या—िकसी एक भाषा की कक्षा के लिए लक्ष्य भाषा की आकृतियों और अर्थों के बीच सम्बन्ध स्थापित करना सबसे अधिक उपयुक्त है।

एक भाषा की कक्षा

- कुछ निश्चित परिस्थितियाँ देकर, कुछ प्रश्न प्रस्तुत करना।
- अपने अनुभवों को साझा करना।
- अध्यापक को शिक्षार्थियों के पूर्व ज्ञान एवं अनुभव का उचित आंकलन कर उसका समुचित प्रयोग शिक्षण अधिगम प्रक्रिया में करना चाहिए।

निम्नलिखित विधियाँ बच्चे को पठन कौशल प्राप्त करने में मदद करती हैं—

शब्द विधि—यह विधि पूरे शब्दों को पहले ध विनयों में तोड़े बिना उनके अर्थों से जोड़ती है। यह विधि बहुत से ऐसे शब्दों के लिए बहुत उपयोगी है जिनकी वर्तनी उनकी ध्विनयों से मेल नहीं खाती, जैसे कि अंग्रेजी में 'द', 'सेद' या 'व्हेन'।

बच्चा शब्दों को अलग-अलग अक्षरों या अक्षरों के समूह में तोड़ने के बजाय शब्दों को पूरी इकाइयों के रूप में पहता है।

वर्णमाला विधि—इस पद्धति में, चित्रों और मॉडलों की सहायता से अक्षरों का परिचय कराया जाता है और फिर छात्रों को इन अक्षरों की ध्वनि से परिचित कराया जाता है।

अक्षरों की ध्विन को समझने के बाद छात्र अक्षर को उसकी ध्विन से आसानी से पहचान सकते हैं। ध्वन्यात्मक विधि—इस विधि में अक्षरों की ध्विन की सहायता से हम शब्दों का उच्चारण करते हैं।

जैसे—ध्वन्यात्मक पद्धित में हम केवल 'आ' और 'म' की ध्वनियाँ ही बोलेंगे और इन दोनों ध्वनियों को मिलाकर हम शब्द 'आम' बनाएंगे।

वाक्य विधि—इस पद्धति में, पहले वाक्यांशों और वाक्यों पर ध्यान दिया जाता है, फिर उनके मौखिक और वर्णानुक्रमिक घटक चित्र में आते हैं।

इस प्रकार यह स्पष्ट है कि लक्ष्य भाषा की आकृतियों और अर्थों के बीच संबंध स्थापित करना एक भाषा की कक्षा के लिए सबसे अधिक उपयुक्त है।

144. विकल्प (1) सही है।

व्याख्या—प्रभावशाली सम्प्रेषण के लिए प्रेषक को सुनने वाली की सामाजिक-आर्थिक स्थिति पर ध्यान नहीं देना चाहिए था।

प्रभावशाली सम्प्रेषण

- सुनने वाले का ज्ञान।
- सुनने वाले की रुचि।
- सुनने वाली की संस्कृति और सामाजिक रीतियाँ।
- विचारों व सूचनाओं का आदान-प्रदान करना।
- प्रेषित सन्देश का प्राप्तकर्ता द्वारा अर्थापन किया जाता है।

सामाजिक जगत से हम अपने समाज को समझते हैं, एक दूसरे की भावनाओं के आदान प्रदान का माध्यम भाषा तथा सम्प्रेषण है।

सम्प्रेषण की भाषा में यादृच्छिक जगत, ईश्वरीय जगत तथा अपवित्र जगत शामिल नहीं किये जा सकतें क्योंकि इनमें भाषा के आदान प्रदान की मुख्य भूमिका नहीं होती है।

सम्प्रेषण दो या दो से अधिक व्यक्तियों के बीच मौखिक, लिखित, सांकेतिक या प्रतीकात्मक माध्यम से विचार एवं सूचनाओं के प्रेषण की प्रक्रिया है। सम्प्रेषण हेतु सन्देश का होना आवश्यक है।

सम्प्रेषण में आवश्यक तत्व

- प्रेषक (सन्देश भेजने वाला)
- प्रेषणी (सन्देश प्राप्तकर्ता)
- सन्देश

145. विकल्प (4) सही है।

व्याख्या—एक भाषा से दूसरी भाषा में जाना (ट्रान्सलेंग्वेज) के बारे में यह सही नहीं है कि यह विद्यार्थियों को एक भाषा के प्रयोग तक सीमित करता है।

टान्सलैंग्वेज

- भाषाओं के बीच अनुवाद।
- एक ही बोली जाने वाली या लिखित अभिव्यक्ति में विभिन्न भाषाओं के शब्दों का मिश्रण।
- यह बहुभाषावाद को समुन्नत करता है।
- शिक्षक कुछ शब्दों या ध्वनियों की जटिलता को हल करने के लिए भाषा की समानता और भिन्नता की तुलना और विपरीत करने के लिए भाषा अनुवाद का भी उपयोग कर सकते हैं।
- द्विभाषी ग्रन्थों से पठन कौशल विकसित होता है।

'ट्रान्सलेंग्युजिंग' करना लचीला बहुभाषावाद है। चाहे इसमें अलग-अलग भाषाओं के तत्वों को एक ही उच्चारण 'कोडस्विचिंग' में शामिल करना हो या किसी कार्य के विभिन्न हिस्सों में भाषाओं के बीच बारी-बारी से शामिल होना हो, यह किसी के भाषाई संसाधनों को उनके अधिक प्रभावी ढंग से नियोजित करने का एक प्राकृतिक साधन है।

यह सभी भाषाओं को सम्मान देता है। यह सभी भाषाओं में बात करने की अनुमति देता है।

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बहुभाषिक जागरूकता को बढ़ावा देता है।

146. विकल्प (3) सही है।

व्याख्या—बिन्दु (b), (c) व (d) सही है। छठी कक्षा के कुछ विद्यार्थी सीखने की अक्षमता से पीड़ित हैं। उस कक्षा के शिक्षक होने के नाते हम कक्षा को इस प्रकार समावेशी बनाएँगे—

- विषय-वस्तु को सामग्री की सहायता से प्रस्तुत करके।
- उन्हें कक्षा के अन्य सभी विद्यार्थियों के साथ मिलाकर।
- उन्हें कक्षा की जिम्मेदारियों में शामिल करके।

147. विकल्प (1) सही है।

व्याख्या—एक कक्षा में एक विद्यार्थी अपने साथियों से हिन्दी में बात कर रही थी। जब उसके शिक्षक ने बुलाया तो तुरन्त उन्हें अंग्रेजी में अपनी प्रतिक्रिया व्यक्त की। यह कोड स्विचिंग का उदाहरण है—

कोड स्विचिंग

 इसे भाषा परिवर्तन के नाम से भी जाना जाता है।

- इसमें एक वक्ता एक वार्तालाप या स्थिति के सन्दर्भ में दो या उससे अधिक भाषाओं के बीच वैकल्पिक प्रयोग करता है।
- यह बहुभाषावाद से अलग है। इसमें कई भाषाओं का उपयोग करने का कार्य किया जाता है।
- एक सामाजिक समूह के साथ एकजुटता व्यक्त करने के साधन के रूप में अल्पसंख्यक भाषा पर स्विच करना बहुत आम है।

148. विकल्प (2) सही है।

च्याख्या—व्यक्तिनिष्ठ परीक्षण स्वभाविक रूप से भाषा कौशनों को मापता है और जिसमें पूर्ण तार्किक स्पष्टीकरण की आवश्यकता होती है। प्रश्नावली, साक्षात्कार इत्यादि विधि व्यक्तिनिष्ठ परीक्षण के उपकरण हैं उत्तरदाताओं के पूर्वाग्रह को समाप्त करने में सहायक परीक्षण है।

149. विकल्प (1) सही है।

व्याख्या—कक्षा VIII की शिक्षिका अपनी कक्षा को पाँच-पाँच के समूह में बाँटकर उनकी रुचि के अनुसार विषय-वस्तु का विस्तार करने वाली अलग-अलग थीम देती है। समृहों को उससे सम्बन्धित विचारों तथा सूचना को एकन्नित करने, लोगों का साक्षात्कार लेने तथा उसे समझकर रिपोर्ट लिखने के लिए कहा गया है। विद्यार्थियों को संलग्ल करने वाली इस गतिविधि को परियोजना कार्य कहेंगे।

150. विकल्प (2) सही है।

व्याख्या—भारत की 'शिक्षा में भाषा नीति' त्रिभाषा सूत्र के रूप में जानी जाती है।

त्रिभाषा सुत्र

- यह तीन भाषाओं हिन्दी, अंग्रेजी और सम्बन्धित राज्यों की क्षेत्रीय भाषा से सम्बन्धि ात है।
- पहली भाषा मातृ-भाषा।
- दूसरी भाषा अन्य आधुनिक भारतीय भाषा (हिन्दी या अंग्रेजी)।
- तीसरी भाषा अंग्रेजी या एक आधुनिक भारतीय भाषा।