# CENTRE FOR EDUCATIONAL DEVELOPMENT OF MINORITIES Osmania University <br> Minorities Welfare Department, Government of Telangana <br> Nizam College Campus, Gunfoundry, Hyderabad - 500001. 

## TET - 2023 <br> Free Coaching Programme

Model Test
Paper - II (EM)
Maths and Science

Time: 2 hours 30 minutes
Max. Marks: 150
Part - I : Child Development and Pedagogy

1. Developmental psychology is the intra-individual changes during
(1) Adolescence
(2) Adulthood
(3) Childhood
(4) Lifespan
2. STD is the abbreviation of
(1) Subscribers Trunk Dialing
(2) Severely Treated Disease
(3) Sexually Transmitted Disease
(4) Supreme Tree Disorder
3. Perceptual process includes
(1) Sensation
(2) Attention
(3) Interpretation
(4) All the above
4. In motivation cycle the ultimate state is
(1) Drive state
(2) Goal
(3) Obstacles
(4) Frustration
5. Which of the following statement is not in accordance with the components of learning?
(1) Learning is a change in potential behaviour
(2) Learning is a sudden and desired change in behaviour
(3) Learning is a sum total of changes which are relatively
(4) Learning has no link with behavioral change
6. Which of the following is not the principle of development?
(1) there are individual differences in development
(2) Development is the result of coincidences
(3) It is continuous process
(4) It is predictable
7. In which stage of life the physical growth is rapid?
(1) Early childhood
(2) Adolescence
(3) Infancy
(4) School age
8. 

(1) Pre-gang age
(2) Imitative age
(3) Questioning age
(4) Play age
9. Which of the following statement is/are correct regarding emotional/social development in a child?
i) Between ages 2 and 6 months infants express feelings such as anger, sadness, surprise and fear
ii) Babies cannot express themselves in any way until the age of 1 year.
iii) Toddlers usually enter another emotionally rocky time between the ages of 15 to 18 months
(1) II and III
(2) I and II
(3) I, II and III
(4) I and III
10. According to Jean Piaget the second stage of cognitive development is
(1) Sensory motor stage
(2) Formal operational stage
(3) Pre-operational stage
(4) Concrete operational stage
11. Pre-operational stage in Jean Piaget's Theory of cognitive development characterizes
(1) Centration in thought
(2) Hypothetic deductive thinking
(3) Ability to conserve and seriate objects
(4) Development of abstract thinking
12. Sunita asks her son to complete a chore around the house, he asks sunita, what the benefit would be to him. As per Kowberg the son is lying at which stage of development?
(1) Obedience and punishment
(2) Maintaining the social orientation order
(3) Individualism and exchange
(4) Social contract and individual rights
13. The linguist, Noam Chomsky maintains that every child has an innate Language Acquisition Device (LAD) that he/she uses for:
(1) Semantic
(2) Phonemes
(3) Universal Grammar
(4) Complex words
14. Becoming a fully functioning person is the concept put forward by
(1) Carl roger
(2) Carl Jung
(3) Abraham Maslow (4) Allport
15.
(1) Autonomy Vs Shame and Doubt
(4) Generativity Vs Stagnation
16. Which of the following statement is wrong in the context of personality?
(1) Personality is unique and specific
(2) Personality is a joint product of heredity and environment
(3) Personality spreads over the sub-conscious and unconscious behaviour of the person
(4) Personality is limited only to the appearance of a person
17. Changes in Raju that brings qualitative changes in function or character are
(1) Physiological
(2) Developmental
(3) Physical
(4) Cultural
18. According to skinner theory, the 'S' type of conditioning applies to:
(1) Respondent behaviour
(2) Operant behaviour
(3) Modified behaviour
(4) None of the above
19. The theory which is also known as theory of reinforcement?
(1) Classical conditioning theory
(2) Operant conditioning theory
(3) Stimulus response theory
(4) Theory of insight
20. Who proposed the insightful theory of learning?
(1) Thorndike
(2) Gardener
(3) Kohler
(4) Skinner
21. The father of Modern Learning Theory is:
(1) E.L. Thorndike
(2) B.F. Skinner
(3) Lev Vygotsky
(4) Ivan Petrovich Pavlov
22. Albert Bandura is associated with which of the following?
(1) Social learning theory
(2) Behavioural theory
(3) Cognitive theory of development
(4) Psycho-social theory of development
23. Which of the following Psychologist define the moral development?
(1) Ivan P. Pavlav
(2) Mc. Dougall
(3) Jean Piaget
(4) None of the above
24. Good health and well-being is part of which stage of the hierarchy of needs?
(1) Esteem needs
(2) Safety needs
(3) Social needs
(4) Self actualization
25. Why should teachers acquire themselves with Abraham Maslow's Hierarchy of needs? (1) the stages in students development might determine their ability to be successful in certain subjects
(2) Social and emotional growth can impact students in their ability to co-operate with their peers.
(3) Deficiencies in students lives can impact their ability to succeed academically.
(4) Parenting styles determine whether children get success academically or not
26. "The behaviour which is rewarded tend to be repeated". This shows.
(1) Law of readiness
(2) Law of exercise
(3) Law of multiple response
(4) Law of effect
27. The best method to study the behaviour of children, animals and birds?
(1) Participant observation
(2) Controlled observation
(3) Natural observation
(4) Non-participant observation
28. Identify the right order of steps in unit method.
(1) Exploration $\rightarrow$ Subject explanation $\rightarrow$ Assimilation $\rightarrow$ Recitation $\rightarrow$ Organization
(2) Exploration $\rightarrow$ Subject explanation $\rightarrow$ Assimilation $\rightarrow$ Organization $\rightarrow$ Recitation
(3) Subject explanation $\rightarrow$ Assimilation $\rightarrow$ Exploration $\rightarrow$ Recitation $\rightarrow$ Organization
(4) Recitation $\rightarrow$ Exploration $\rightarrow$ Subject explanation $\rightarrow$ Assimilation $\rightarrow$ Organization
29. Identify "?" in the Ven diagram related to knowledge, skill, desire and habits?
(1) Knowledge
(2) Skill
(3) Habits
(4) Desire

30. The IQ of 16 year old boy whose mental age is 12 year will be $\qquad$
(1) 60
(2) 64
(3) 70
(4) 75

## Part II :Hindi (Language - I)

## 31-35 निम्न लिखित गद्यांश पढ़िए और पूछे गये प्रश्नों के सही उत्तर पहचानिए।

संत कबीर हिंदी साहित्य के श्रेष्ठ कवि थे। वे निरक्षर थे पर उनका ज्ञान किसी विद्वाल से कम नहीं था। वे मस्मौला, फक्कड़ और लापरवाह फ़कीर थे। उन्हें न तो तत्कालीन शासकों का कोई भय था और न ही धार्मिक सम्प्रदायों का।

कबीर की प्रामाणिक रचना ‘बीजक’है, जिसमेंतीनभागसाखी, सबदऔररमैनी।इनमेंकुछरचनाएँगुरुग्रंथ साहबमेंभीसकलितहै।

कबीरनिर्गुणीथे।उनकामाननाथाकिईश्वरविश्वकेकण-
कणमेंविद्यमानहै।उसेकहींबाहरढूंढ़नेकीआवश्यकतानहींहैक्यों कि वह सदाहमारेसाथहै। कबीरनेगुरुकोपरमात्मासेभीअधिकमहत्वदिय़ाहै।वेहिंदू-मुसलमानोंमेंएकतास्थापितकरनाचाहतेथे।इन्होंनेजाति-पातिऔरवर्ग-भेदकाविरोधकिया।

कबीरकीभाषामेंअवधी, ब्रज, खड़ीबोली, फ़ारसी, अरबीपंजाबीआदिभाषाओंकेशब्दमिलतैहैंइसलिएइनकीभाषाकोखिचड़ीभाशा भी कहतेहैं।
31. कबीरइनसेनहींडरतेथे।
(1) विद्वान
(2) शासक
(3) फ़कीर
(4) कवि
32. कबीरकीकुछरचनाएँइसग्रंथमेंहैं -
(1) बीजक
(2) साखी
(3) रमैनी
(4) गुरुग्रंथसाहब
33. कबीरकेअनुसारईश्वरयहाँरहताहै
(1) मंदिरमें
(2) बाहर
(3) हरजगह
(4) कहींनहीं
34. कबीरकीभाषाकोखिचड़ीक्योंकहतेहैं?
(1) भाषाबहुतकठिनथी
(2) इनकीभाषामेंअनेकभाषाओंकेशब्दहै।
(3) इनकीभाषाहिंदीहै
(4)वे श्रेष्ठ कविथे।
35. निम्नलिखितमेंसेएकविशेषतासे कबीरसेसंबंधितनहींहै।
(1) कबीरनेपरमात्माकोगुरुमहानमाना।
(2) धार्मिकसम्प्रदायोंसेनहींडरतेथे।
(3) जाति-पातिकाविरोधकिया।
(4) हिंदू-मुसलमानोंमेंएकताचाहतेथे।

36-40- निम्नलिखितपद्यांश पढ़िएऔरपूछेगयेप्रश्नोंकेसहीउत्तरपहचानिए|
'माँ' धरतीकासौरभ, इसजगतीकीगौरवगाथा, "माँ" जिसकेआगेझुकजाये, देवोंकातककामाथा जिसकेमनमेंसदास्नेहकामहासिन्धुलहराता, सूखेजलधि, स्रोतजिसकीममताकासूखनपाता; सब से पहला'शब्द' आदमीजिससेसीखेबोली किसीतराजूपरभी'माँ' कीमहिमाजायेनतोलि। जीवनकावरदानमिलाहै, माँसेहरप्राणीको। इससेमीठाशब्दनअबतकमिलाकिसीवाणीको। त्यागऔरतपकीमूरत "माँ"इसपरबलिबलिजाओ, नितउठचरणपखारोमाँके, नितइसकेगुणगाओ।
36. पद्यांशकिसकेसंबंधमेंहै?
(1) माँ
(3) धरती
(3) सौरभ
(4) जगह
37. कविकेअनुसारक्यानहींसूखताहै?
(1) स्रेहकामाहासिन्धु
(2) जलधि
(5) ममताकास्रोत
(4) मन
38. कविनेसब सेमीठा शब्द किसेमानाहै?
(1) देव
(2) ममता
(3) महिमा
(4) माँ
39. माँ के बारेमेंकविकाकथनहै
(1) माँकीतबस्याकरो
(2) माँकेचरण धो
(3) माकीसेवाकरो
(4) माँकोमतभूलो
40. माँ कोजगतका $\qquad$ कहागयाहै।
(1) सौरभ
(2) ममता
(3) गौरव
(4) गाथा
41. इसरास्तेपरलोगआते-जातेरहतेहैं। (इसवाक्यमेंयहक्रियाहै।
(1) पूर्वकालिक
(2) प्रेरणार्थक
(3) सकर्मक
(4) संयुक्त
42. लड़कोंसेलिखानहींजाता। (वाक्यमेंयहवाच्यहै।
(1) भाव वाच्या
(2) कर्म वाच्या
(3) कर्तृ वाच्या
(4) कर्मऔरभाव
43. यदिपरिश्रमकरतेतोपरीक्षामेंउत्तीर्णहोते। (अर्थकीदृष्टिसेयहवाक्यहै)
(1) संदेहार्थक
(2) संकेतार्थक
(3) इच्छार्थक
(4) विधानार्थक
44. देशभरमेंस्वतन्त्रतादिवसधूम-धामसे
(1) मनायीगयी
(2) मनायेगये
(3) मनायागया
(4) मनानीचाहिए
45. गलतमेलपहुंचालिए।
(1) संजा-मित्रता
(2) सर्वनाम-कौन
(3) विशेषण-बहुत
(4) क्रिया-गीत
46. दिनमेंकामऔररातमेंआरामकरनाचाहिए।यहस्तीलिंगशब्द है।
(1) दिन
(2) काम
(3) रात
(4) आराम
47. मैंकभी-कभीपुरानेदोस्तोंसेमिलताहूँ।
(रेखांकितशब्दमेंयहचिह्लहै)
(1) कोष्ठक
(2) अलूपविराम
(3) योजकचिह्न
(4) उपविराम
48. मैंफोनकेद्वारासंदेशभेजदूंगा।

रेखांकितशब्दमेंयहकारकहै।)
(1) करण
(2) सम्प्रदान
(3) कर्म
(4) कर्ता
49. 'फूठीआँखोंनदेखसकना" मुहावरेकाभावहै
(1) द्रष्टिकमहोना
(2) ईर्ष्याकरना
(3) वैर-भावरखना
(4) स्नेहरखना
50. यहरामनरेशत्रिपाठीकीरचनाहै।
(1) सुंदरभारत
(2)बरसतेबादल
(3) कन्यादान
(4) अन्वेषण
51. येमहाप्राणव्यंजनहैं।
(1) श, ष, स, ह
(2) क, च, ट, त
(3) गजदब
(4) अ ज नम
52. घरमेंमेहमानआयेहैं। (कालपहचानिए)
(1) पूर्णवर्तमानकाल
(2) आसत्नभूतकाल
(3) सामान्यवर्तमानकाल
(4) सामान्यभविष्यकाल
53. 'दुस्साहस' कासहीसंधिकच्छेधपहचानिए।
(1) दुस + साइत
(2) दु + साइस
(3) दु: + साइत
(4) साहस +दुस
54. निम्नलिखितमेंदून्दूसमाप्तकाउदाहरणपहचानिए
(1)सप्ताह
(2) सुख-दुख
(3) लोकसभा
(4) विद्यार्थी
55. त्रिभाषासूत्रकोभारतसरकारनेकबस्वीकारा।
(1) 1957
(2) 1967
(3) 1977
(4) 1987
56. पढ़नेकेप्रतिरूचिजागृतकरना’- सस्वरवाचनकाकौनसाक्रम है।
(1) प्रथम
(2) द्वितीय
(3) तृतीय
(4) चतुर्थ
57. बालकोंकोजानेन्द्रयोंद्वारासमझानाभाषाशिक्षणकेइससूत्नकामुख्यउद्देश्यहै।
(1) सरलसेकठिन कीओर
(2) ज्ञात से अज्ञात कीओर
(3) विश्लेषण से सश्लेषण कीओर
(4) स्थूलसेसू कीओर
58. $\qquad$ सेछात्रोंकेव्यक्तित्वकाविकाससभी दिशाओंमेंहोताहै।
(1) भाषण
(2) सहगामीक्रियाओं
(3) विद्यालयपत्रिका
(4) नाद-विवादप्रतियोगिता
59. इसमेंसम्पूर्णशिक्षणप्रक्रियाकाएकस्पष्टचित्रहै।
(1) गृहकाल
(2) पुस्तकालय
(3) इकाईपाठ योजना
(4) मूल्यांकन भोजना
60. जबविद्यार्थीकामूल्यांकननिरंतरपूरेवर्षजारीरहताहैतोउसेयहकहतेहैं।
(1) सततसमग्रमूल्यांकन
(2) उपलब्धिपरीक्षा
(3) वस्तुनिष्ठपरीक्षा
(4) सापकएवंमूल्यांकन

## Part III : English (Language II)

## Passage : Read the passage and answer the questions.

Marketing refers to any activities that a company uses to promote its products and services and improve its marketshare. In order to be successful, marketing requires a combination of advertising savvy, sales, and the ability to deliver goods to end-users. This is normally undertaken by specific professionals or marketers who can work internally (for companies) or externally with other marketing firms.

Traditionally, corporations focused on marketing through print, television, and radio. Although these options still exist today, the rise of the internet led to a shift in the way companies reached consumers. That's where digital marketing came into play. This form of marketing involves the use of websites, social media, searchengines, apps-anything that incorporates marketing with customer feedback or a two-way interaction between the company and customer.

Increased technology and newer trends forced companies to change the way they marketed themselves. Email was a popular marketing tool in the early days of digital marketing. That focus shifted to search engines like Netscape, which allowed businesses to tag and keyword stuff to get themselves noticed. The development of sharing sites like Facebook made it possible for companies to track data to cater to consumer trends.

Smartphones and other digital devices are now making it easier for companies to market themselves along with their products and services to consumers. Studies show that people prefer using their phones to $\log$ on to the internet. So it should come as no surprise that $70 \%$ of
individuals make buying decisions (usually on their phones) before they actually hit the purchase button.
61. What made the companies change their marketing strategies ?
(1) increased population and newer requirements
(2) decreased technology and older trends
(3) increased technology and newer trends
(4) stable technology and traditional trends
62. What is the meaning of the word 'savvy' as per the passage?
(1) disinterest for information
(2) less knowledge
(3) Interest to know
(4) no need of knowing the information
63. What allowed businesses to tag to get noticed, as per the passage?
(1) emails allowed to businesses to tag
(2) smartphones used to be the source of business
(3) newspapers were another source for business
(4) search engines like Netscape
64. What made it possible for companies to track data to cater to consumer trends
(1) the decrease in the production of crude oil
(2) the increase in the production of unnecessary products
(3) the fall in the demand for the electronics
(4)The development of sharing sites like Facebook
65. What requires marketing to be successful, as per the passage?
(1) big investment, big number of stake holders
(2) a combination of advertising savvy, sales, and the ability to deliver goods to endusers
(3) a large space for the establishment of the company
(4) a large network of customers

6-10 The following passage contains numbered blanks. Identify the correct option for each of the blanks from those given against each other.

A few years later war $\qquad$ between the potter's country and a much $\qquad$ neighbor. The king immediately gathered a large army. But he $\qquad$ that it was not enough to save his country from defeat. He needed a hero to lead his army. Where $\qquad$ he find such a brave man?The king hurriedly called his ministers $\qquad$ and asked their advice.
66.
(1)called
(2) announced
(3) broke out
(4) stepped
67.
(1)stronger
(2) enemy
(3) stranger
(4) cordial
68.
(1) ordered
(2) borrowed
(3) defeated
(4) realized
69. (1)may
(2) could
(3) should
(4) need
70.
(1)single
(2) separately
(3) responsibly
(4) together
71. He said to aspirants, "You need to spend some time for practice". The correct reported speech for the given statement is
(1) He asked them to spend time
(2) He ordered them all to think of some time
(3) He suggested aspirants to practice with time frame
(4) He told the aspirants to spend some time for practice.
72. pick out the correct sentence among the following.
(1) He had applied for the transfer before others decided
(2) They have went for the vacation
(3) we did not replied to the letter
(4) she have not taken the notes
73. Identify the finite clause from the given
(1) Born in a poor family
(2) being a politician
(3) she acted in a short film
(4) hailing from a aristocrat family
74. I wish to change the vehicle this monsoon.

This sentence can mean
(1) he wanted to change the vehicle in the past
(2) he was told to change the vehicle
(3) he is planning to change his vehicle
(4) he had already changed the vehicle
75. identify correct question tag for the sentence.

That young boy is an international motivational speaker, $\qquad$ ?
(1) didn't he
(2) does he
(3) couldn't he
(4) doesn't he
76. A person above 100 years of age is given special incentives by the government, has a one word substitute
(1) septuagenarian
(2) senior citizen
(3) centenarian
(4) zero aged
77. The people of the nation have 'voted out' the century old party, the meaning of the given phrasal verb
(1) gave second chance
(2) defeated
(3) did not participate in voting
(4) sold their votes
78. Teaching in the private school is the 'bread and butter'means
(1) hobby
(2) main livelihood
(3) vocation
(4) last option
79. The Chief Minister is the ex-officio chairman of the many offices,the meaning of the foreign phrase is
(1) elected by the MLCs
(2) nominated by the President of the country
(3) promoted by the Governor
(4) by virtue of his/her office
80. In the word 'honorary'
(1) o is silent
(2) h is pronounced
(3) h is silent
(4) h is stressed
81. I want to start my own recording studio. Select the correct phrasal verb for the underlined.
(1) see up
(2) show up
(3) set in
(4) set up
82. Identify the relative clause from the given.
(1) copiers will be punished
(2) those who copy will be punished
(3) coping must be avoided
(4) write the exam honestly
83. Reading comprehension is an example of
(1) developing writing skill
(2) only for vocabulary
(3) purely to test grammar
(4) skimming
84. They (i) /have (ii) /never help (iii) / a single person (iv) / in their life (v) Identify the part that has error. Mentioning subject in this kind of letters is must
(1) personal
(2) official
(3) letters to siblings
(4) letter to editor
i) only b
ii) only d
iii) a and b
iv) $b$ and d
85. Dictionary skills is an example of this
(1) speaking skills
(2) study skills
(3) listening skills
(4) writing skills
86. Phonetic transcription is an example of
(1) note taking
(2) note making
(3) handwriting
(4) oral skills
87. A good test must distinguish between
(1) a good and poor students
(2) only good students
(3) average students
(4) extraordinary students
88. Syllabus designing is categorized into content-based,method based and
(1) material based
(2) skill- based
(3) location based
(4) person based
89. Group discussion is a part of this method
(1) grammar translation
(2) reading
(3) structural
(4) communicative
90. Listening is a
(1) productive skill
(2) simpler skill
(3) receptive skill
(4) oral skill

## Part IV(1) : Mathematics Content

91. In $\frac{2}{3}, \frac{3}{5}, \frac{5}{8}$ the difference between the largest $\&$ the smallest fraction is
(1) $\frac{1}{15}$
(2) $\frac{1}{24}$
(3) $\frac{1}{40}$
(4) None
92. If the weight of 18 sheets of paper is 50 gm , how many sheets of the same paper will weigh $3 \frac{3}{4} \mathrm{~kg}$ ?
(1) 1386
(2) 1836
(3) 1350
(4) 1314
93. The value of $y$ for which the 4 -digit number 51 y 3 is divisible by 9
(1) 2 or 3
(2)0 or 9
(3) 0 or 3
(4) 3 or 9
94. The ratio of two numbers is $5: 6 \&$ their HCF is 12 . Their LCM is
(1) 60
(2) 72
(3) 180
(4) 360
95. Three friends divide Rs. 624 among themselves in the ratio $\frac{1}{2}, \frac{1}{3} \frac{1}{4}$. The share of the third friend is
(1) 156
(2) 144
(3) 192
(4) 288
96. A distance of $1 / 2 \mathrm{~cm}$ on a map represents 200 km on ground. If two cities are 1800 km apart on the ground, then distance on the map will be
(1) 6 cm
(2) 9 cm
(3) $3 \& 1 / 2 \mathrm{~cm}$
(4) $4 \& 1 / 2 \mathrm{~cm}$
97. A T.V was bought at a price of Rs. 21,000. After 1 year the value of the TV was depreciated by $5 \%$. Then the value of the T.V after 1 year is
(1) 10,500
(2) 19,950
(3) 1050
(4) 1995
98. If A's salary is $20 \%$ more than that of B , then how much percent is B 's salary is less than that of A
(1) $20 \%$
(2) $25 \%$
(3) $17 \%$
(4) $15 \%$
99. If $(\sqrt{3})^{5} \times 9^{2}=3^{n} \times 3 \sqrt{3}$, then the value of $n$ is
(1) 3
(2) 2
(3) 5
(4) 6
100. Find the least number that is to be subtracted from 4000 to make it a perfect square
(1) 3969
(2) 31
(3) 63
(4) 6
101. In the product of $\left(9 x^{2}+15-x\right)$ and $\left(-1-x+x^{2}\right)$, if $\mathrm{A}, \mathrm{B}$ and C are the coefficients of $x^{3}, x^{2} \& x$ respectively, then the value of $(\mathrm{A}+\mathrm{B}-\mathrm{C})$ is
(1) -3
(2) 14
(3) -17
(4) 11
102. If $x^{2}+\frac{1}{x^{2}}=66$, then find the value of $x-\frac{1}{x}$
(1) 8
(2) 16
(3) 33
(4) 64
103. One factor of $2 x^{2}-9 x-26$ is
(1) $x+1$
(2) $x+2$
(3) $x+3$
(4) $x+4$
104. The father's age is 6 times his son's age. 4 years later, the age of the father will be four times his son's age. The present ages in years of the son $\&$ father are respectively
(1) $4 \& 24$
(2) $5 \& 30$
(3) $6 \& 36$
(4) $3 \& 24$
105. In the figure if $l \| m$ then the value of $x$ is

(1) $60^{\circ}$
(2) $40^{\circ}$
(3) $80^{\circ}$
(4) $140^{\circ}$
106. The sum of all interior angles of a pentagon is
(1) $540^{\circ}$
(2) $360^{\circ}$
(3) $180^{\circ}$
(4) $720^{\circ}$
107. Number of triangles in the given figure are

(1) 3
(2) 4
(3) 5
(4) 6
108. Figure formed by joining the mid points of a rhombus is
(1) Square
(2) Rectangle
(3) Parallelogram
(4) Quadrilateral
109. A rectangular park is 45 m long \& 30 m wide. A path 2.5 m wide is constructed outside
around the park. The area of the path is
(1) $200 \mathrm{~m}^{2}$
(2) $300 \mathrm{~m}^{2}$
(3) $400 \mathrm{~m}^{2}$
(4) $375 \mathrm{~m}^{2}$
110. The perimeter of a trapezium is $58 \mathrm{~cm} \& ~ s u m$ of its non-parallel sides is 20 cm . If its area is $152 \mathrm{~cm}^{2}$, then the distance between the parallel sides (in cm ) is
(1) 6 cm
(2) 7 cm
(3) 8 cm
(4) 70 cm
111. In the given figure, O is the center $\&\left\lfloor A C B=40^{\circ}\right.$, then $\lfloor A O B$ is equal to

(1) $20^{\circ}$
(2) $40^{\circ}$
(3) $80^{\circ}$
(4) $30^{\circ}$
112. The ration of volumes of two cubes is $27: 64$. What will be the ratio of the area of surfaces
(1) $3: 8$
(2) $3: 4$
(3) $9: 16$
(4) $27: 64$
113. A Polyhedron has 6 faces \& 8 vertices. How many edges does it have?
(1) 14
(2) 15
(3) 10
(4) 12
114. Given Pie-graph shows the cost of construction of a house. If total cost of construction is Rs. $1,50,000$, then the amount spent on labour is

(1) Rs. 90000
(2) Rs. 250000
(3) Rs. 360000
(4) 375000

## Part IV(2): Methodology

115. In a mathematics classroom, emphasis is placed on
(1) Mathematical content, process and reasoning
(2) Problem solving strategies
(3) Mathematical algorithms and process
(4) Mathematical content
116. Which of the following is not a problemsolving strategy in mathematics?
(1) Drawing
(2) Solving backwards
(3) Role learning
(4) trial and error
117. The word GAINT stands for
(1) Growing ability in numerical involvement and training
(2) Growing aptitude in numerical innovative and technique
(3) Growing ability in numerical innovation and technique
(4) Growing aptitude in numerical innovative and training
118. "Write a pair of integers whose sum gives a negative integer" the above question refers to
(1) reflective question
(2) multi-disciplinary question
(3) open-ended question
(4) closed ended question
119. "Let no one are ignorant of geometry enter my door" said by
(1) Aristotle
(2) Socrates
(3) Plato
(4) Euclid
120. The role of proportional reasoning in understanding the concept related to ration and proportion was profoundly elaborated by
(1) ZaltanDiewes
(2) Jean Piagent
(3) Van Hiele
(4) Leu Vygetsley

## Science-Content

121. Oxygen released in Photosynthesis comes from
(1) Water
(2) $\mathrm{CO}_{2}$
(3) $\mathrm{O}_{2}$
(4) All above
122. Powerhouse of cell
(1) Chloroplast
(2) Mitochondria
(3) Golgi
(4) EPR
123. Dental formula of man
(1) $\frac{2321}{2321}$
(2) $\frac{2321}{2012}$
(3) $\frac{2123}{2123}$
(4) $\frac{1232}{2123}$
124. Dog breads is example for. $\qquad$ Biodiversity
(1) Genetic
(2) Species
(3) Ecosystem
(4) All
125. Bacteria in intestines
(1) Bacillus
(2) Yeast
(3) E. Coli
(4) Yeast.
126. First aid for dog bite
(1) Dettol wash
(2) Water wash
(3) Soap wash
(4) Injection
127. Penicillin discovered by
(1) Louise pasture
(2) Waxman
(3) Alexander Fleming
(4) Subbarao
128. single cell protein algae
(1) Spirogyra
(2) Chara
(3) Ulva
(4) Chlorella
129. Excretory organ in insects
(1) Malphigian tubes
(2) Nephridia
(3) Kidney
(4) Cox glands
130. Pseudocoelomate
(1) Hydra
(2) Ascaris
(3) Teania
(4) Nereis
131. Highest number of species are present in...... Phylum
(1) Arthropoda
(2) Fishes
(3) Birds
(4) Mammals
132. Ribozyme type in bacteria
(1) 60 S
(2) 70 S
(3) 80 S
(4) 100 S
133. The SI Unit of Pressure
(1) Pascal
(2) dyne $/ \mathrm{cm}^{2}$
(3) N/M
(4) Newton
134. The relation among the coefficient of friction is
(1) $\mu_{l}=\mu_{k}=\mu_{r}$
(2) $\mu_{l}<\mu_{k}<\mu_{r}$
(3) $\mu_{r}>\mu_{l}>\mu_{k}$
(4) $\mu_{l}>\mu_{k}>\mu_{r}$
135. The ration of height, when a stone is thrown into air with initial velocities of $10 \mathrm{~m} / \mathrm{s}, 20$ $\mathrm{m} / \mathrm{s} \& 30 \mathrm{~m} / \mathrm{s}$
(1) $1: 8: 27$
(2) $1: 4: 9$
(3) $1: 2: 3$
(4) $2: 4: 6$
136. Which year was Halley's comet last seen
(1) 1976
(2) 1966
(3) 1986
(4) 1956
137. Rainfall is measured with
(1) Polvanometer
(2) Udometer
(3) Anthrometer
(4) All the above
138. The world water day every year is on
(1) Feb-24
(2) April-12
(3) March-22
(4) December-30
139. Bhuj \& Kashmir earthquakes had magnitudes of
(1) $>7.5$
(2) $<8$
(3) $<7$
$(4)=7$
140. The angle between F \& S when positive work is said to be done is
(1) $0^{\circ}$
(2) $90^{\circ}$
(3) $180^{\circ}$
(4) $-180^{\circ}$
141. The SI unit of electromotive force is
(1) Ampere
(2) Ohm
(3) Volt
(4) Ohm-meter
142. Which compound react with $\mathrm{Cl}_{2}$ gas then form Chloroform.
(1) NaCl .
(2) AgCl .
(3) $\mathrm{Ca}(\mathrm{OH})_{2}$
(4) $\mathrm{CaCO}_{3}$
143. Which device work on the principle of chemical energy converted into electric energy
(1) resistance.
(2) battery.
(3) galvanometer.
(4) fuse
144. If methyl orange indicator is added to a solution then it's turn's in to yellow colour what is the solution.
(1) Salt.
(2) Acid.
(3) base.
(4) indicator.
145. Father of immunology
(1) Edward Jenner
(2) Louise Pasture
(3) Waksman
(4) Coch
146. Suggest best teaching method for CCA curriculum
(1) Lecture \&Demonstration
(2) Experimental
(3) Student seminar
(4) All above
147. In Blooms taxonomy knowledge is
(1) Cognitive
(2) Affective
(3) Psychomotor
(4) All
148. Major time given for lesson plan is
(1) Introduction
(2) Presentation
(3) Comparison
(4) Recapulation
149. Teaching method preferable in present situation
(1) E-learning
(2) Blended
(3) Offline
(4) Experimental
150. Continuous assessment
(1) Objective
(2) Short answer
(3) Formative
(4) Year end exam.
