## CENTRE FOR EDUCATIONAL DEVELOPMENT OF MINORITIES

## Nizam College Campus, Hyderabad - 500001.

Time:2hrs MODEL TEST - TS TET-Paper-II - MATHS \& SCIENCE Marks:150

## Part I. CHILD DEVELOPMENT AND PEDAGOGY (Marks: 30)

1. Development is:
1) Qualitative and contineous
2) Internal in nature
3) Observation and measurement is difficult.
4) All the above.
2. Which of the following is not the principle of growth and development.
1) Rate of growth and development is not constant.
2) Physical growth influences behavioral development
3) Development proceeds from general to specific responses
4) Uniformity pattern.
3. Child development occur under the influence of
1) Environment
2) Heridity
3) Both
4) None.
4. Adolescence
1) Starts with Biological maturation.
2) Lot of curiosity in it
3) Some children become more sensitive.
4) All the above.
5. Which of the following is not the factor which influences development.
1) Cognitive
2) Psychological
3) Social
4) Biological
6. The human body shows an orderly series of changes in size, proportion and functioning from cradle to the grave. This is explained by which of the following factor.
1) Social factor.
2) Psychological factor3) Biological factor.
3) None.
7. By the age of two and half year of teeth comes inside a child which are called milk tooth. By the age of 5-6 years milk tooth goes off and permanent teeth appears
1) 20
2) 24
3) 28
4) 32
8. The work of which of the following were named as "Generic Epistemology" which is actually study of knowledge development.
1) Lawrence Kohlberg
2) Jean Piaget
3) Noam Chomsky
4) Carl Roger.
9. In which of the following stage of Jean Piaget: cognitive development, the child can concentrate on more than one dimention.
1) Sensory motor stage
2) Pre-operational stage
3) Concrete Operational stage
4) Formal Operational stage
10. In which of the following Jean Piaget Cognitive Devolopment and Kohlberg Moral Development overlap with each other
1) Sensory motor
2) Pre-operational
3) Concrete Operational
4) Adolescence.
11. "The children are obedient under the influence of high authorities of elders" is expressed in which of the following stage of development.
1) Punishment and obedience
2) Individualism / Instrumental purpose and exchange.
3) Inter personal expectations relationship and confirmity
4) Social conscience orientation, law and order orientation.
12. According to Chomsky "Linguistic" is the branch of:
1) Cognitive Psychology.
2) Developmental psychology
3) Psycho Linguistics.
4) Synctactic structure.
13. Who is the father of Client Centered Therapy.
1) Erik Erikson
2) Jean Piaget.
3) Kohlberge
4) Carl Roger
14. According to whome there are three elements of personality i.e Id, Ego and Super Ego.
1) Carl Roger
2) Werthmayer.
3) Segment Fried
4) B.F. Skinner.
15. According to Carl Roger an individual can reach the position of self-actualization when he/ she is in the state of
1) Integrity
2) Self defence
3) Self pity
4) Congruence.
16. Implicit attitude is:
1) Concious believes.
2) Unconcious believes.
3) Behavioral believes.
4) Emotional believes
17. Who did the experiment of "Prison study".
1) Philip Zimbardo
2) B.F. Skinner.
3) Max Werthmer
4) Kohler \& Kofka.
18. An innate inborn ability or capacity to learn to do a certain kind of work, is
1) Interest
2) Attitude
3) Aptitude
4) Innate potential.
19. Which of the following is not one of the characteristics of adolescent interests:
1) They have instability.
2) Interests in adolescent expanded.
3) All interests remain unchanged at the adolescent stage.
4) Interests in adolescent shift in Values
20. Agressiveness, destructiveness, disobedience, noncoopration etc.; are characteristics of a ....
1) Physical disorder
2) Behavioral disorder
3) Neurological disorder
4) Conceptual disorder.
21. The scientist who developed the Radical behaviorism is:
1) J.B. Watson
2) Ivan Pavlav
3) E.L. Thorn Dike
4) B.F. Skinner.
22. Operant conditioning operations deals with the modification of $\qquad$
1) Motor behaviour
2) Psychomotor behaviour
3) Voluntary behaviour
4) Involuntary behaviour.
23. Which of the following is the correct match
A) Trial and Error
B) Classical Conditioning
i. Albert Bandura.
C) Insightful Learning
ii. B.F. Skinner.
D) Operant Conditioning
iii. E.L. Thorndike.
E) Social Learning
iv. Kohler \& Kofka
v. Ivan Pavlav.

|  | A | B | C | D | E |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. | iii | v | iv | ii | i |
| 2. | iii | v | ii | iv | i |
| 3. | v | iii | iv | ii | i |
| 4. | i | ii | iii | iv | v |

24. Which of the following is a right statement for constructivism.
1) Acquisition of learning is important
2) Creating knowledge has fore most importance.
3) Not the teacher, but only the learner takes key important place
4) All the above.
25. One of the following qualities is not expected of a good teacher.
1) Acquiring knowledge about the student as background.
2) Using the usual method, of instructions for all students.
3) Communicating freely with students.
4) Sharing warmth, enthusiasm and caring.
26. Students who are different from ordinary students and positive or negative towards practise are:
1) Students with more intelligence
2) Students with less intelligence
3) Students with special needs
4) Ordinary students.
27. The traits developed in students when a teacher teaches in Heuristic Method?
1) Disciple
2) Speaking fluently3) Observation
3) Scientific attitude.
28. The teaching method related to individual teaching is :
1) Micro teaching
2) Project method
3) Programmed learning
4) All the above.
29. Which method is the best teaching method.
1) Having best teaching aids.
2) Making students to remember easily.
3) That can be taught easily by teacher.
4) Making students understand better.
30. Identify the correct among the following.
1) Curriculum is more extensive than syllabus.
2) Curriculum is syllabus.
3) Lesson plan is syllabus.
4) Syllabus is extensive than any other.

## Part II. LANGUAGE - Urdu (Marks: 30)





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B-4 'A-3 'D-2 'C-1
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(3) حرونترى

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تيزو

(3) تِيلي

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(3) ;بيتاخلات
(2)
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## Part III. LANGUAGE - II (ENGLISH) (Marks: 30)

61. The boy laughed at the beggar. The passive form of it is:
(1) The beggar was laughed at by the boy
(2) The beggar was laughed by the boy
(3) The beggar was being laughed at by the boy
(4) The beggar was being laughed by the boy
62. It interests me. This sentence can be rewritten as:
(1) I am interested in it
(2) I have been interested in it
(3) I will be interested in it
(4) I was interested in it
63. I said to him, "Why are you working so hard"?

It can be reported as
(1) I asked him way he had been working so hard
(2) I asked him why he was working so hard
(3) I asked him why was he working so hard
(4) I asked him why had he been working so hard

In his autobiography, he remembers his wife as an everyday heroine who epitomised selflessness and stood for the victory of mind over matter. He honoured this character of Indian women and dedicated a book, titled "Religion and Society" to them.
A dutiful teacher, a deeply spiritual thinker, an able policymaker, Radhakrishnan was every bit the visionary India needed. Nobel laureate C.V. Raman beautifully summed up his glorious life, "The frail body of Radhakrishnan enshrined a great spirit-a great spirit which we have learnt to revere and admire, even to worship"
64. How do great men affect the integration of mind, body and soul?
(1) Through freedom
(2) Through their wise words
(3) Through their message of peace and love
(4) Through their integration of body and mind
65. Mahatma Gandhi called himself the $\qquad$ of Radhakrishnan.
(1) Teacher
(2) Lord Krishna
(3) Arjun
( 4 ) Friend
66. Radhakrishnan remembers his wife as $\qquad$ in his autobiography.
(1) a mother
(2) his inspiration
(3) an everyday heroine
(4) Indian woman
67. Name of the book written by Radhakrishnan that was dedicated to the selflessness of Indian women:
(1) Indian Women
(2) An Everyday Heroine
(3) Autobiography
(4) Religion and Society
68. According to Gandhiji, what made his and the people admire Radhakrishnan ?
(1) his policies
(2) frail body
(3) a great spirit
(4) his vision
69. Identify the complex sentence from the following
(1) We read books but they watch T.V.
(2) If you search for it in the school, you will get it.
(3) You go there or they will not give you.
(4) She is not only good in English but also good at Maths
70. He woke up to hear the sound of bells....... in the distance.

Choose the right option to fil in the blank.
(1) clanging
(2) banging
(3) buzzing
(4) whistling
71. Identify the phrase containing Noun + Noun.
(1) strong light
(2) shed light
(3) a light source
(4) a ray of light
72. John hates women. He is a
(1) Misogynist
(2) Polyglot
(3) Prodigy
(4) mercenary
73. There's Use in complaining. They won't do anything about it.

Choose the correct answer:
(1) a little
(2) little
(3) a few
(4) few
74. Ramesh has two brothers, but he doesn't speak to of them.

Choose the correct answer:
(1) either
(2) neither
(3) both
(4) any
75. What was in the box?

Choose the correct answer to complete the sentence:
(1) you did think
(2) you had thought (3) did you think that
(4) did you think
76. I am annoyed $\qquad$ him $\qquad$ what he has done to us.
Choose the correct answer to complete the sentence:
(1) with, for
(2) for, with
(3) with, from
(4) for, from
77. The expression 'to turn over a new leaf means:
(1) To change one's behaviour for the better
(2) To take a decision
(3) To read something carefully
(4) To be cautious
78. He eats $\qquad$ banana every morning.
(1) a
(2) the
(3) any
(4) an
79. Tomorrow, there is a meeting in our school. Come early, $\qquad$ ?
(1) do you
(2) don't you
(3) will you
(4) won't you
80. Identify the correct question. grammatically
(1) What height is Mount Everest?
(2) How tail is Mount Everest?
(3) How much height is Mount Everest"
(4) How high is Mount Everest?
81. Choose the correct word to fill in the blank in the sentence.

Copper is $\qquad$ useful metal.
(1) a
(2) an
(3) the
(4) any
82. I like singing. In the above sentence, 'singing' is:
(1) a present participle
(2) a gerund
(3) a past participle
(4) a model verb
83. Sindhu said to Ganesh, "Are you fine?"

The conjunction that can be used to change this sentence into indirect speech is:
(1) whether
(2) that
(3) who
(4) when
84. Choose the correct 'Yes / No' question.
(1) Does he reads novels?
(2) Are you read novels?
(3) Won't you come here?
(4) Do you are a student?
85. It's time you $\qquad$ to bed. go Choose the correct verb that fits the context.
(1) went
(2)will
(3)go
(4) had gone
86. The General Service List of English words (GSL) is associated with:
(1) Bilingual method
(2) Grammar translation method
(3) Dr. West's new method
(4) Direct method
87. The process of determining the changes in behaviour through instruction is :
(1) Test
(2) Evaluation
(3) Measurement
(4) Assessment
88. Remedial teaching is
(1) nothing but re-teaching.
(2) something where achievement is expected to be very low.
(3) need not be highly specific and need based.
(4) more like a crash course.
89. Listening to public speeches belongs to
(1) Focussed listening
(2) Gist listening
(3) Appreciative listening
(4) Casual listening
90. One of the following helps us to get a bird's eye view of the book. Identify it.
(1) Jacket
(2) Front page
(3) Blurb
(4) The preface

Part IV (a). MATHEMATICS AND SCIENCE (Marks: 30)
91. There are two pairs of twin Prime numbers in three prime numbers. The product of those three is.

1) 2145
2) 105
3) 30
4) 693
92. If $\mathrm{A}, \mathrm{B}$ are sets $n(\mathrm{~A})=4$ and $n(\mathrm{~A} \cup \mathrm{~B})=7$, then $n(\mathrm{~B})$ is equal to
1) 10
2) 11
3) 3
4) 28
93. A Vendor bought 180 oranges for 2160 . Number of oanges that he can sell for 2160 so to get $20 \%$ profit is
1) 160
2) 120
3) 110
4) 150
94. If $a: b=3: 7, b: c=$ is the inverse ratio of $7: 5$ then $a: c$
1) $9: 7$
2) $35: 49$
3) $15: 49$
4) $3: 7$
95. If a length of chord of 10 cm is makingan angle of $60^{\circ}$ at centre of a circle, then the radius of the circle is in cm .
1) 20
2) 10
3) 5
4) 100
96. The fourth vestex 'D' of a parallelogram ABCD whose three vertices are $\mathrm{A}(-2,3), \mathrm{B}(6,7)$ and C $(8,3)$ is
1) $(0,-1)$
2) $(-1,0)$
3) $(1,0)$
4) $(0,1)$
97. A right angled triangle's hypotenuse is 13 and other two sides $3 x$ and $x+1$. If $x=4$ then Area of this triangle is in square units
1) 60
2) 65
3) 30
4) 90
98. Two dice are rolled down randomly. The probability of getting the sum of of number on their faces as ' 10 ' is
1) $\frac{1}{12}$
2) $\frac{1}{18}$
3) $\frac{5}{18}$
4) $\frac{5}{36}$
99. If $\sin \theta=\frac{1}{2}$ ( $\theta$ is acute) then the value of $\tan 2 \theta$.
1) 1
2) $\sqrt{3}$
3) $\frac{1}{\sqrt{3}}$
4) $\propto$
100. A cone, a cylinder and a sphere have the same radii and same heights. Then the ratio of their volumes
1) $1: 3: 4$
2) $1: 2: 3$
3) $4: 4: \sqrt{2}$
4) $4: \sqrt{5}: 4$
101. The product of two numbers is 3276 . If their H.C.F is 6 then L.C.M
1) 645
2) 546
3) 640
4) 540
102. A ladder 25 m long reaches a window of building 20 m above the ground, then the distance of the foot of the ladder form the ladder to the building (in metres).
1) 25
2) 20
3) 12
4) 15
103. If $x=5$ and $y=3$ then the value of $x y x^{y}-y^{x}$ is
1) 118
2) -118
3) 368
4) -368
104. If tangents PA and PB are drawn form an outer point P to a circle with centre ' O ' of the angle between these tangents is is $80^{\circ}$, then $\angle \mathrm{POA}$ is equal to
1) $60^{0}$
2) $70^{\circ}$
3) $80^{\circ}$
4) $50^{0}$
105. If the mean of $10,12,18,13, \mathrm{P} 17$ is 15 , Then the value of P is
1) 20
2) 24
3) 28
4) 26
106. If the surface of a cube is $2400 \mathrm{~cm}^{2}$ then its side (in cm ).
1) 10
2) 15
3) 20
4) 400
107. The discriminant of quadratic equation $2 x^{2}+3 x+5=0$ is
1) 31
2) -31
3) 49
4) -49
108. The line $2 x+5 y+6=0$ cuts $Y$-ax's at the point.
1) $(6 / 5,0)$
2) $(-5 / 6,0)$
3) $(0,-6 / 5)$
4) $(0,0)$
109. $\triangle \mathrm{ABC}$ and $\triangle \mathrm{DEF}$ are similar and the ratio of its area is $169: 196$ then the ratio of $\mathrm{AC}: \mathrm{DF}$ is
1) $11: 12$
2) $12: 13$
3) $14: 13$
4) $13: 14$
110. If $10,7,4, \ldots \ldots$. are in Arithmetic progression then $10^{\text {ih }}$ term is
1) 17
2) -17
3) -15
4) 27
111. If sum of 2500 is borrowed at a rate of $12 \%$ per annum for 3 years then Simple interest is (in rupees).
1) 800
2) 900
3) 700
4) 600
112. In a School the ratio of the number of boys to girls is $7: 4$. If there are 140 girls, the total number of students in the school is
1) 385
2) . 345
3) 285
4) 245
113. A and B together can complete a piece of work in 4 days. If A alone can complete the same work in 12 days, then the days required by $B$ only to complete the same work are
1) 12
2) 10
3) 8
4) 6
114. If the diagonals of a rhombus are 6 cm and 8 cm , then it's side (in cms )
1) 7
2) 7.5
3) 5
4) 2
115. The approach adopted in the curriculum of mathematics at secondary level in Telangana State is
1) Topical
2) Concentric
3) spiral
4) Concentric and spiral.
116. Learning by doing and learning by living are the main principles of
1) Heuristic method
2) Laboratory Method
3) Project Method
4) Analytical Melliod.
117. The teaching programme in which student participates actively for self learning at his own pace is
1) Projects
2) Programmed learning
3) Laboratory work
4). Micro teaching.

118 Which one is a Ramanujam's number,

1) 1729
2) 2917
3) 2719
4) 1927 .
119). "Characteristic of simplicity" relates to the following.
5) Moral value
6) Practical value
3). Cultural Value
4). Disciplinary value
120. The advantage of objective type tests is
1) They require more time to prepare.
2) They caver the total course content
3) They require special skills for scoring
4) They can be easily constructed

## SCIENCE CONTENT

121. Detritous food chain is $\qquad$
1) Plankton $\rightarrow$ Insects $\rightarrow$ Rahu $\rightarrow$ Shark.
2) Organic matter $\rightarrow$ Micro organism $\rightarrow$ Fish
3) Grass $\rightarrow$ Grass Hopper $\rightarrow$ Bird $\rightarrow$ Hawk.
4) Grass $\rightarrow$ Deer $\rightarrow$ Hyna $\rightarrow$ Tiger
122. Recent trends in Biology is $\qquad$
1) Tissue Culture
2) Cell Biology
3) Virology
4) None
123. Starch is tested with $\qquad$
1) Chlorine
2) Iodine
3) Bromine
4) Benedict Test
124. Virus is a $\qquad$
1) Uni Cellular
2) Microscopic
3) Multi Cellular
4) Acellular
125. Dental formula of a Camel is
1) $\frac{2}{2}, \frac{1}{2}, \frac{2}{2}, \frac{3}{3}$
2) $\frac{1}{3}, \frac{1}{1}, \frac{2}{1}, \frac{3}{3}$
3) $\frac{2}{3}, \frac{1}{1}, \frac{1}{2}, \frac{3}{3}$
4) $\frac{3}{2}, \frac{2}{1}, \frac{1}{2}, \frac{3}{3}$
126. $\qquad$ is not a Cell.
1) Rhizopus
2) Lysosome
3) Coryne bacterium
4) E. Coli
127. Coold blooded animal example is $\qquad$
1) Fish
2) Frog
3) Man
4) Monkey
128. Banana reproduces by $\qquad$
1) Seed
2) Sucker
3) Stem Cutting
4) spores.
129. Living Tissue of a plant is $\qquad$
1) Sclerids
2) Sclerem chyma
3) Chloren chyma
4) Corck Tissue
130. Pisciculture is not related to
1) Crab
2) Fish
3) Frog
4) Crocodile
131. Yellow Colour latex seen in $\qquad$
1) Mani kara Zapota
2) Argemone mexicana
3) Hevea brasiliensis
4) Euphorbia
132. Adrenalin released by $\qquad$
1) Pancreas
2) Pituitory
3) Kidney
4) Thyroid
133. Water exhibits Anomulus behaviour
1) $\mathrm{At} 4^{\circ} \mathrm{C}$
2) above $4^{\circ} \mathrm{C}$
3) below $4^{\circ} \mathrm{C}$
4) At any temparature
134. Which of the following is not an example of Lunar eclipse
1) Total eclipse
2) Hybrid eclipse
3) Partial eclipse
4) Pernumbral eclips
135. Which of the following is not a charectaristic of image formed by an object placed at Centre of Curvature of Concave Mirror.
1) Inverted
2) Real
3) Foun at Centre of Curvature
4) Diminished
136. Which of the following is an example of field face
1) Tension
2) Electrostate face
3) Normal face
4) Friction
137. Two resistances $3 \Omega$ and $4 \Omega$ are connected in parallel and one resistance $2 \Omega$ is in Series with these two resistance. Then find resultant resistance in the circuit
1) $12.0 \Omega$
2) $1.1 \Omega$
3) $4.5 \Omega$
4) $5.0 \Omega$
138. The property of metals by which there are converted into thin wires
1) Conduction
2) Menlability
3) Sorority
4) Ductility
139. Zinc on reaction Hydrochloric acid gives Zinc chloride and Hydrogen gas. Type of this
reaction is
1) Combination
2) Decomposition
3) Displacement
4) double decomposition
140. Out of which given Subshells electron enters first.
1) 4 s
2) B) 3 d
3) 2 d
4)) $4 p$
141. Which of the following is not an element of doberienes triads.
1) Oxygen
2) Sulphur
3) Selenium
4) Telorium
142. In a group from top to bottoms which of the following property does not decrase.
1) Electro negativity
2) Cornisation energy
3) Atomic radius
4) Election gain enthalphy.
143. In the formation of cation which of the following property does not effect positively.
1) Bigger Atomic radius
2) High conisation energy
3) Less charge on Cation
4) Lesses mieless charge.
144. which is not an ore of ion
1) Magnite
2) Hematite
3) Grnalyte
4) Lemonite

## Methodology

145. Which is more effective method of teaching Circulatory system in Biological Sciences is
1) Demonstration Method
2) Historic Method
3) Project Method
4) Discussion Method

146 Most Effective T.L.M used Science Teacher is $\qquad$

1) Digital T.V
2) Black Board
3) Chart
4) None
147. All the Mammals have Muscular heart Whales are Mammals. Therefore all the whales have Muscular heart. The Teaching method used here is known as.
1) Deductive Method
2) Inductive Method
3) Activity Based
4) Problem Solving
148. Which is not a tool of formative Assesment
1) Project work
2) Writing work
3) Unit test
4) Lab activity
149. In which approach Rejection of irrelevent solution is been done.
1) Inductive
2) Deductive
3) Heuristic
4) Problem solving
150. As per NCERT Guidlins 2001, which statement is true for upper primary (VI to VIII) stage.
1) Science must be taught as Environmental Studies
2) Scientific Principles and Laws must be used in Technology in simple way.
3) Science must be taught as Science and Technology
4) Decision making and problem solving skills must be developed.
