

CENTRE FOR EDUCATIONAL DEVELOPMENT OF MINORITIES

Nizam College Campus, Hyderabad - 500 001.

Time:150 Min. TGTET- JAN 2026 -Paper - II - MATHS & SCIENCE Marks:150

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

1. One of the following method helps to study children with special needs
 - 1) Experimental method
 - 2) Interview method
 - 3) Introspection method
 - 4) Case study method
2. The term "developmental tasks" is given by
 - 1) Havighurst
 - 2) Piaget
 - 3) Vygotsky
 - 4) Kohlberg
3. The domain which is concerned with the learning of emotional expression and management of feelings is the...
 - 1) Semantic domain
 - 2) Affective domain
 - 3) Psychomotor domain
 - 4) Cognitive domain.
4. "Mind has a quality to organize Things". This basic thought is related to....
 - 1) Constructivism
 - 2) Classical conditioning
 - 3) Behaviorism
 - 4) Connectivism.
5. The main characteristic feature of an adolescent's social development is...
 - 1) Identity
 - 2) Puberty
 - 3) Abstract thinking
 - 4) Guilt
6. Kohlberg believes that...
 - 1) The movement from one level of moral judgment to another is dependent advances in cognitive maturity.
 - 2) Levels of moral development unfold in a random order.
 - 3) The final level of moral judgment reached depends on the socio-economic status.
 - 4) Moral judgment is not dependent on environmental input.
7. Gestalt learning occurs through....
 - 1) Expectancy
 - 2) Perceptual organization
 - 3) Imitation
 - 4) Intuition.
8. Self-paced learning is possible in....
 - 1) Teaching in small groups
 - 2) Activity based learning
 - 3) Programmed instruction
 - 4) Whole class teaching
9. Aptitude could be defined as an....
 - (1) Innate ability to carryout abstract thinking
 - (2) Innate ability to adjust with the environment.
 - 3) Innate ability to acquire proficiency in any special field;
 - 4) Innate ability to develop something novel.

10. A student who has trouble remembering the location of the African countries, Ghana and Guinea, after learning about the South American country of Guyana has fallen prey to the following type of inhibition.
 - 1) Proactive 2) Retroactive 3) Interference 4) Discrimination.
11. Before taking up teaching there is a need to take up
 - 1) Assessment of interest 2) Assessment for learning
 - 3) Continuous and comprehensive evaluation 4) Assessment of learning
12. A student of class VII got habituated to study only to gain reward. This is example for ...
 - (1) Both S___R and R___S conditioning theories.
 - 2) Operant conditioning theory
 - 3) S-R conditioning theory
 - 4) R-S conditioning theory.
13. A student of class X scored 20% marks in annual examination, which is less than his abilities. It is an example for
 - 1) Under achievement 2) Both poor and low achievement
 - 3) Poor achievement. 4) Low achievement.
14. Non-verbal intelligence test can be used for
 - 1) Literates and illiterates 2) All irrespective of ages.
 - 3) Illiterates only 4) Children only.
15. Traditional way of teaching grammar was opposed by
 - 1) Chomsky 2) Thorndike 3) Pavlov 4) Skinner.
16. The following concept is the product of maturation and learning.
 - 1) Growth 2) Development 3) Personality 4) knowledge
17. A fundamental function which is phylogenetic among the following:
 - 1) Swimming 2) Bowling 3) Writing 4) Crawling
18. Which of the following does not come under cognitive development?
 - 1) Perception 2) Language development.
 - 3) Maturity 4) Conceptual development.
19. According to chomsky linguistics is branch of a
 - 1) Constructive Psychology 2) Cognitive Psychology
 - 3) Normative Psychology 4) Para-Psychology.
20. The foremost condition for attaining self actualization is....
 - 1) The increasing drift between the actual self and the ideal self.
 - 2) The power of ideal self
 - 3) The power of actual self
 - 4) The proximity of the ideal self and actual self

Part II. LANGUAGE - Urdu (Marks: 30)

(31-35) ذیل کا پیرا گراف پڑھ کر دیئے گئے سوالات سے صحیح جواب کا انتخاب کیجئے۔

ایلو را کے غار بنانے والوں کو اجنتا کے غاروں جیسا دل کش منظر تو نہ مل سکا، تاہم قدرتی مناظر کے لحاظ سے یہ مقام بھی اچھا ہے۔ ایلو را میں کل ملا کر 34 غار ہیں۔ ایسا معلوم ہوتا ہے کہ ایلو را کے غار بنانے والوں کے ہاتھوں میں پتھر بھی موم ہو گیا تھا۔ پتھروں کو انہوں نے جس طرح چاہا تراشاہ بنادیا، سنوار دیا اور اپنے جد بے کی آنچ اس میں شامل کر دی۔ کیلاش کا مندر ایلو را کے غاروں کی جان ہے۔ یہ مندر راشٹر کوٹ کے راجا کرشنا کی سرپرستی میں بناتھا۔ اس کے پرکھوں نے یہاں ایک مندر بنایا تھا۔ راجا کرشنا کو یہ بہت پسند آیا۔ اس نے حکم دیا کہ ایسا ہی مندر ایلو را میں پتھر تراش کر بنایا جائے۔ چنانچہ ایک بہت بڑی چٹان کاٹ کر اس میں کیلاش کے مندر بنانے میں کوئی دولاکھ ٹن پتھر باہر نکالنا پڑا۔

31. یہ متن ان غاروں سے متعلق ہے۔

(1) اجنتا کے غار (2) ایلغنتا کے غار (3) ایلو را کے غار (4) بوڑا کے غار

32. کن لوگوں کے ہاتھوں میں پتھر بھی موم ہو گیا تھا۔

(1) راجا مہاراجاؤں کے (2) مصوروں کے (3) شاعروں کے (4) سنگ تراشوں کے

33. ایلو را کے غاروں کی جان ہے۔

(1) کیلاش کا مندر (2) راشٹر کوٹ کا مندر (3) راجا کرشنا کا مندر (4) بدھا کا مندر

34. ایلو را میں کل ملا کر غار ہیں۔

(1) چوالیس (2) چونتیس (3) چوبیس (4) تریالیس

35. دولاکھ ٹن پتھر باہر نکالنا پڑا۔

(1) محل بنانے کے لیے (2) دربار بنانے کے لیے (3) مندر بنانے کے لیے (4) کمان بنانے کے لیے

(36-40) ذیل میں ان دیکھا متن (نظم) دیا گیا ہے۔ اس کو غور سے پڑھئے۔ پڑھنے کے بعد نیچے دیئے گئے سوالات سے صحیح جواب کا انتخاب کیجئے۔

منزل کوئی نہ جادہ، منزل نظر میں ہے لیکن حیات ہے کہ مسلسل سفر میں ہے

وہ اک تڑپ کہ جس سے عبارت ہے زندگی کچھ سنگ در میں کچھ مرے سودائے سر میں ہے

بچتے نہیں بہشت کے منظر نگاہ میں جس دن سے اک بہشت خراساں نظر میں ہے

جائیں کہاں نکل کے تری رہ گزر سے ہم ہر منزل حیات تری رہ گزر میں ہے

میری یہی خطا ہے بس اے اہل بت کدہ شمع حرم کا نور بھی میری نظر میں ہے

36. شاعر کے نزدیک زندگی کس سے عبارت ہے۔

(1) اک غم سے (2) اک تڑپ سے (3) اک جنون سے (4) اک درد سے

37. شاعر کی نظر میں کون سے منظر نہیں بچتے۔

(1) پہاڑوں کے منظر (2) وادیوں کے منظر (3) باغوں کے منظر (4) بہشت کے منظر

38. شاعر نے منزل حیات کس کو بتایا ہے۔
 (1) اپنے محبوب کے حسن کو
 (2) اپنے محبوب کے سراپا کو
 (3) اپنے محبوب کی رہ گزر کو
 (4) اپنے محبوب کی آنکھوں کو
39. شمع حرم کا نور بھی میری میں ہے۔
 ذیل میں دیئے گئے لفظوں میں سے خانہ پری کیجیے۔
 (1) فطرت (2) نظر (3) نگاہ (4) قدر
40. لفظ ”زندگی“ کا مترادف ہے۔
 (1) ممات (2) موت (3) حیات (4) وفات
41. محمود نے مٹھائی کی ٹوکری لائی۔
 خط کشیدہ لفظ تذکیر و تانیث کے لحاظ سے کہلاتا ہے۔
 (1) جنس حقیقی مذکر (2) جنس حقیقی مونث (3) جنس غیر حقیقی مذکر (4) جنس غیر حقیقی مونث
42. قطب شاہی بادشاہوں نے دکن پر عرصہ دراز تک حکومت کی۔
 خط کشیدہ لفظ کے معنی ہیں۔
 (1) تھوڑا عرصہ (2) درمیانی عرصہ (3) لمبا عرصہ (4) کچھ عرصہ
43. ”ماجد راستہ سے گزر رہا تھا“
 کسی کام کا گزشتہ زمانے میں جاری رہنا کہلاتا ہے۔
 (1) ماضی مطلق (2) ماضی قریب (3) ماضی استمراری (4) ماضی تمنائی
44. اختر شیرانی کا اصل نام تھا۔
 (1) محمد داؤد خان (2) اسد اللہ خان (3) اختر الایمان (4) سید احمد شاہ
45. ایسے حروف جو دو جملوں یا اسموں کو ملانے کے لیے استعمال ہوتے ہیں۔ کہلاتے ہیں۔
 (1) حروف ربط (2) حروف عطف (3) حروف فجائیہ (4) حروف تخیص
46. موازنہ انیس ددیر، علم الکلام، سیرۃ النبی صلی اللہ علیہ وسلم ان کے تصانیف ہیں۔
 (1) حفیظ جالندھری (2) اسرار الحق مجاز (3) علی سردار جعفری (4) شبلی نعمانی
47. تراشیدہ کس کا شعری مجموعہ ہے۔
 (1) جوش ملیح آبادی (2) مخدوم محی الدین (3) شاذ تمکنت (4) فانی بدایونی
48. ذرہ ہے یا نمایاں سورج کے پیراہن میں“
 دیئے گئے مصرعے میں خط کشیدہ لفظ کے معنی ہیں۔
 (1) لباس (2) پیر (3) پنہا (4) انجمن

49. ابن مریم ہوا کرے کوئی
میرے دکھ کی دوا کرے کوئی
اس شعر میں یہ صنعت استعمال کی گئی۔
- (1) استعارہ (2) تشبیہ (3) کنایہ (4) تلمیح
50. وتد + سبب = فعلون کی مثال ہے۔
(1) دل ربا (2) دل لگی (3) مسافر (4) زندگی
51. خطوط..... بھی ایک فن ہے۔
خالی جگہوں کو موزوں لاحقہ سے پر کیجیے۔
- (1) سازی (2) نویسی (3) داری (4) نواز
52. انجام ہے اس خرام کا حسن آغاز ہے عشق انتہا حسن
کلام میں خط کشیدہ الفاظ کے استعمال سے کونسی صنعت ظاہر ہوتی ہے۔
- (1) صنعت تضاد (2) صنعت کنایہ (3) تشبیہ (4) استعارہ
53. درج ذیل میں ”افسانہ“ کا اجزائے ترکیبی نہیں ہے۔
(1) پلاٹ (2) کردار (3) مکالمہ (4) گریز
54. علامہ اقبال کی پیدائش کس مقام پر ہوئی۔
(1) لاہور (2) لکھنؤ (3) سیالکوٹ (4) دہلی

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55. لنگوائفون ہے۔
(1) مشاعروں کی سی ڈیز بتلانے والا آلہ
(2) تلفظ درست کرنے کا آلہ
(3) عکس کو پردے پر بڑا کر کے دکھانے والا آلہ
(4) پروگرام کو راست نشر کرنے والا آلہ
56. اس طریقہ تدریس میں پہلے تعریفیں رٹوائی جاتی ہیں پھر ان کا اطلاق مثالوں پر کیا جاتا ہے
(1) توضیحی طریقہ (2) غنائی کا طریقہ (3) استخراجی طریقہ (4) استقرائی طریقہ
57. توضیحی مہارت کا تعلق ہے
(1) مائیکرو ٹیچنگ سے (2) سبق سے (3) طلبہ سے (4) اسکول سے
58. کون سے تدریسی طریقہ میں کسی حل طلب مسئلہ کو طلباء کی گروپ کی کوششوں اور معلم کی رہنمائی میں عملی طور پر حل کرنے کی کوشش کی جاتی ہے۔
(1) اداکاری کا طریقہ (2) منصوبائی طریقہ (3) ڈالٹن طریقہ (4) غنائیہ طریقہ
59. ادبی ماحول کے جذبے کی تسکین کے لئے طلبہ کو ضرورت ہے۔
(1) سائنس فیر (2) لینگویج لیبارٹری (3) پی۔ ٹی اے میٹنگ (4) تعلیمی تفریح
60. ”معلومات کا باب الداخلہ“ کہتے ہیں۔
(1) حواس (2) ذہن (3) کمپیوٹر (4) کتاب

Part III. LANGUAGE - II (ENGLISH) (Marks: 30)

(61-65) Read the following passage and choose the correct option for each question.

The specific uses of the terms "insurance" and "assurance" are sometimes confused. In general, in jurisdictions where both terms are used, "insurance" refers to providing coverage for an event that might happen (fire, theft, flood, etc.), while "assurance" is the provision of coverage for an event that is certain to happen. In the United States, both forms of coverage are called "insurance" for reasons of simplicity in companies selling both products. By some definitions, "insurance" is any coverage that determines benefits based on actual losses whereas "assurance" is coverage with predetermined benefits irrespective of the losses incurred.

Life insurance may be divided into two basic classes: temporary and permanent; or the following subclasses: term, universal, whole life, and endowment life insurance.

Term assurance provides life insurance coverage for a specified term (usually 10-30 years). Term life insurance policies do not accumulate cash value, but are significantly less expensive than permanent life insurance policies with equivalent face amounts. Policyholders can save to provide for increased term premiums or decrease insurance needs (by paying off debts or saving to provide for survivor needs).

Mortgage life insurance insures a loan secured by real property and usually features a level premium amount for a declining policy face value because what is insured is the principal and interest outstanding on a mortgage that is constantly being reduced by mortgage payments. The face amount of the policy is always the amount of the principal and interest outstanding that are paid should the applicant die before the final instalment is paid.

Group life insurance (also known as wholesale life insurance or institutional life insurance) is term insurance covering a group of people, usually employees of a company, members of a union or association, or members of a pension or superannuation fund. Individual proof of insurability is not normally a consideration in its underwriting. Rather, the underwriter considers the size, turnover, and financial strength of the group. Contract provisions will attempt to exclude the possibility of adverse selection. Group life insurance often allows members exiting the group to maintain their coverage by buying individual coverage. The underwriting is carried out for the whole group instead of individuals.

Permanent life insurance is life insurance that covers the remaining lifetime of the insured. A permanent insurance policy accumulates a cash value up to its date of maturation. The owner can access the money in the cash value by withdrawing money, borrowing the cash value, or surrendering the policy and receiving the surrender value.

61. Institutional life insurance is term insurance covering
- (1) a group of staff of insurance company, members of a union or association, or superannuation fund
 - (2) a group of employees ,a union or association, or fund
 - (3) a group of employees of a company, members of a union or association, or superannuation fund.
 - (4) a group of company, a union or association, or superannuation fund
62. Assurance according to the passage,means,
- (1) .is the provision of coverage for an event that is due to happen
 - (2) is the provision to the group for an event that is supposed to happen
 - (3) is the provision a person for an event that is not certain to happen
 - (4) the provision of coverage for an event that is certain to happen
63. Term life insurance policies do not accumulate cash value, but are significantly less expensive than
- (1) whole life insurance
 - (2) group insurance
 - (3) general insurance
 - (4) permanent life insurance
64. Group life insurance often allows members exiting the group
- (1) to maintain their coverage by selling individual coverage
 - (2) to maintain their coverage by buying individual coverage
 - (3) to maintain their coverage by buying accidental coverage
 - (4) to merge their coverage by buying individual coverage
65. One of the below given is correct as per the passage
- (1) Mortgage life insurance insures a loan secured by real property
 - (2) Permanent life insurance is life insurance that covers the service period
 - (3) Term assurance provides life insurance coverage for life term
 - (4) "insurance" is any coverage that determines losses based on actual benefits
66. Choose the option that correctly sequences the following sentences.
- a) to help the island nation recover from the devastating impact of cyclone Ditwah
 - b) and displaced scores of people
 - c) which claimed at least 643 lives
 - d) India on Tuesday announced a package to Srilanka.
- (1) d,a,b,c
 - (2) d,a,c,b
 - (3) a,c,d,b
 - (4) c,d,b,a

67. Choose the correct option with regard to correctness of the following sentences.
 A: They reached the exam center half an hour early.
 B: Some have apply for the award because of the family pressure
 (1) only the sentence A is correct
 (2) only the sentence B is correct
 (3) Both the sentences A and B are correct
 (4) Both the sentences A and B are incorrect
68. This teacher _____ winning awards_____ his innovative teaching methods.
 Identify the suitable option to complete the sentence.
 (1) isbeen, for (2) were, to (3) was, of (4) hasbeen, for
69. The Chief Minister ordered for the special committee to_____ the long pending issues of the government school teachers.
 (1) look off (2) look into (3) looking into (4) looked in
70. Identify the silent consonant sound in the word 'honest man'.
 (1) o (2) t (3) h (4) m
71. Choose the meaningful sentence.
 (1) no one knows how it was design to be so good.
 (2) know one knows how it was designed to so good.
 (3) no one knows how was it designed to be so good.
 (4) no one knows how it was designed to be so good.
72. Identify the part with an error in the given sentence.
 He wasselect for the national bravery award from Hyderabad.
 A B C D
 (1) D (2) C (3) B (4) A
73. She asked him, "Will you understand working women? ".
 Choose the correct Reported sentence.
 (1) She asked him, if he willhave understand working women .
 (2) She asked him, if he understands working women.
 (3) She asked him,if you understand working women.
 (4) She asks him, whether he understood working women
74. Highly educated people will often become very sensitive,_____?
 Choose the correct option to complete the sentence.
 (1) will they (2)were they (3) have they (4).won't they

75. Choose the correct plural form of the word "alumnus".
 (1) alumni (2) alumna (3) alumne (4) alumnus
76. Identify the grammatically INCORRECT sentence.
 (1) I has always liked the biographies of great personalities.
 (2) She would always preferential spending time with family.
 (3) Grandparents love the present of kids.
 (4) Children enjoy stories told by their grandparents.
77. They said someone should 'bell the cat' ,when they were talking about the issue in the colony.
 Choose the meaning of the expression 'bell the cat'
 (1) to free the cat (2) to keep cat as the keeper
 (3) to take cat to the street (4) to take the initiative about the issue
78. The master said,one should learn to call spade a spade.
 Choose the meaning of the expression to call spade a spade.
 (1) to cover the reality (2) acknowledge the correct/right as correct
 (3) to learn telling lies (4) to identify a wrong only
79. The government announced 90% rebate on interest of property tax.
 Identify the correct passive voice for the above given sentence.
 (1) Property tax rebate upto 90% was been announced.
 (2) Property tax rebate of 90 % had announced.
 (3) 90% rebate on interest of property tax was announced by the Government.
 (4) rebateupto 90 % tax interest were announced by the Government.
80. The rich lady from India was wearing a locally made artificial necklace, which looked so simple.
 Identify the correct parts of speech of the underlined words
 (1) verb,adjective (2) adverb, verb
 (3) adjective, noun (4) adjective,adjective
81. Wests new method focused on using controlled vocabulary while developing this skill
 (1) writing (2) .reading (3) speaking (4) listening
82. Errors to be avoided or corrected while learning a II or foreign language, is a condition of this
 (1) Behaviorism (2) structuralapproach
 (3) cognitivest (4) multilingualism

83. Psycho linguistic theory, says Left hemisphere of the brain plays important role in
(1) learning science (2) speaking fluently
(3) playing musical instruments (4) learning a language

84. Walking daily for few minutes will be a big help for one's health.
This sentence is a best example of
(1) simile (2) antithesis (3) metaphor (4) irony

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85. Role plays are the examples for sub skills of
(1) appreciative listening (2) comprehension
(3) Speaking (4) casual listening
86. Making the students practice handwriting for improvement, with a focus on spellings and vocabulary, is a
(1) sub skill of vocabulary (2) sub skill of grammar
(3) sub skill of writing (4) sub skill of speaking
87. The language disability that can affect reading fluency, decoding, reading comprehension, writing and spelling is called
(1) Dyspepsia (2) dislocation,displacement
(3) Dyslexia (4) Dyspepsia,displacement
88. A scholastic achievement Test is so designed to know if the learner has benefited from the classroom teaching, this is
(1) a teacher made test
(2) a teacher made test and secretary made test
(3) a teacher made test and a student made test
(4) a student made testand a teacher made test
89. Poorrhandwriting ,poorspelling,difficulty in organizing ideas is related to this
(1) dexterous (2) dysgraphia (3) sinister (4) dipsomania.
90. Identify the correct order of the evaluation process from the given
(1) evaluation, test, measurement, assessment
(2) measurement, test, assessment, evaluation
(3) assessment, test, measurement, evaluation
(4) test, measurement, assessment, evaluation

Part IV (a). MATHEMATICS (Marks: 30)

91. The length of the diagonal of a rhombus are $2a$ and $4a$ cm respectively each side of a rhombus the length of
- (1) $\sqrt{5}a$ (2) $5\sqrt{a}$ (3) $\sqrt{5a}$ (4) $5a$
92. If $\frac{1}{3+3^{-1}} + \frac{1}{1+3^2} = 4a$ then the value of a is
- (1) 10 (2) 1 (3) $3/10$ (4) $1/10$
93. In a class, two-tenths of the students play cricket-only and three-fifths play carrom only. If 5 students play none of these games and 15 play both. Then the total number of students in a class is
- (1) 150 (2) 200 (3) 100 (4) 120
94. Rahmat goes to school on a cycle at a speed of 10 km/hr. The time taken by him to reach the school is _____
- (1) 2 minutes 42 seconds (2) 5 minutes 24 seconds
(3) 3 minutes 24 seconds (4) 1 minutes 30 seconds
95. If $a^3 + b^3 = 91$ and $a + b = 7$ then value of ab is _____
- (1) 27 (2) 21 (3) 12 (4) 49
96. An angle which is 15° more than four times of Supplement is _____
- (1) 145° (2) 137° (3) 147° (4) 135°
97. If ABCD is a parallelogram, then $\angle a - \angle c$ in degrees is _____
- (1) 180 (2) 360 (3) 90 (4) 0
98. Areeb paid Rs 3,290 towards a bill after obtaining 6% discount. The amount of the original bill in rupees was
- (1) 3,635 (2) 3, 600 (3) 3,450 (4) 3,500
99. If the Area of the largest triangle inscribed in a semicircle is $12\frac{1}{2}$ sq.cms. then the radius of circles in cms is _____
- (1) $5\sqrt{2}$ (2) 5 (3) $2\sqrt{5}$ (4) $\frac{5}{\sqrt{2}}$
100. The advantage of objective type tests is _____
- (1) They require more time to prepare (2) They cover the total course content
(3) They require special skills for scorin. (3) The can be easily constructed

101. One of the advantages of the Heuristic method is _____

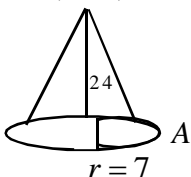
- (1) It is teachers centered
- (2) It places the pupil in the place of an investigator
- (3) It involves more blackboard work
- (4) It is easy to complete the given lesson in less time.

102. The distance of the point (3, 4) from the origin in first quadrant

- (1) -5
- (2) 5
- (3) 7
- (4) -7

103. Centroid of the triangle having (-5,12) (-2,3) (9,-10) as vertices is

- (1) $\left(\frac{1}{3}, \frac{2}{3}\right)$
- (2) $\left(\frac{2}{3}, \frac{-1}{3}\right)$
- (3) $\left(\frac{1}{3}, \frac{4}{3}\right)$
- (4) $\left(\frac{2}{3}, \frac{4}{3}\right)$

104.  then slant height is _____

- (1) 31
- (2) 15.5
- (3) 25
- (4) 26

105. The median 30, 5, 21, 42, 13, 10, 27, 35, 17, 8 is _____

- (1) 15
- (2) 17
- (3) 19
- (4) 21

106. If $\tan A = \frac{4}{3}$ find the value of $\frac{2\sin A - 3\cos A}{2\sin A + 3\cos A} =$ _____

- (1) -17
- (2) $-\frac{1}{17}$
- (3) $\frac{1}{17}$
- (4) 0

107. If $\tan A = \cos B$, then value of $A + B =$ _____

- (1) 90°
- (2) 180°
- (3) 120°
- (4) 100°

108. The angles in a quadrilateral are in the ratio 1:2:3:4. What is its greatest and smallest angles

- (1) $10^\circ, 40^\circ$
- (2) $35^\circ, 145^\circ$
- (3) $100^\circ, 200^\circ$
- (4) $36^\circ, 144^\circ$

109. The Area of rhombus is 108sq.cms one of its diagonals is 18cms. Find the length of the other diagonal _____

- (1) 10 cms
- (2) 12 cms
- (3) 15cms
- (4) 20cms

110. If $2x + 3y - 5 = 0$ and $8x + 12y = 22$ are equations of two straight lines then they are

- (1) parallel
- (2) perpendicular
- (3) intercepts
- (4) inclined

111.  $\triangle ABC$ is an equilateral triangle inscribed in a circle.

Then $\angle BOC =$ _____

- (1) 180°
- (2) 60°
- (3) 120°
- (4) 360°

112. The degree of a quadratic polynomial is _____
 (1) 0 (2) 1 (3) 3 (4) 2
113. π is a _____ number
 (1) rational (2) irrational (3) national (4) irtergen
114. Find the greatest number that divides 2149 and 1535 exactly
 (1) 704 (2) 37 (3) 714 (4) 307

MATHEMATICS METHODOLOGY

115. What number should be added to 5, 11, 14 and 29 to make it proportionate
 (1) 1 (2) 2 (3) 3 (4) 4
116. Six years ago a man was three times as old as his son, six years hence, he will be twice as old as his son, then willbe. Find. present age of father.
 (1) 24 (2) 42 (3) 48 (4) 84
117. In mathematics drill supports
 (1) The theory of utrilisation (2) Unusual theory method
 (3) Practice method (4) Work orientation method
118. Entire curriculum is divided into units, subunits, lessons/topics is known as
 (1) process approach (2) conceptual approach
 (3) Integrated (4) Unitary approach
119. If a student is in the habit of stealing things in the class. The teacher should.
 (1) report the matter to the police
 (2) get him expelled from the school
 (3) panish him in the presence of older Students
 (4) try to reform him though sympathy and understanding
120. A good text book in Mathematics must have following quantities
 (1) It Should be written by competent authors
 (2) It should have useful content and properly organised
 (3) All the exercises should be properly graded
 (4) All the above

Part IV (b). SCIENCE CONTENT (Marks: 30)

121. During the night time
 (1) The winds flow from ocean towards the land.
 (2) The winds flow from land towards the ocean.
 (3) The winds flow upward from the ocean
 (4) The winds stops flowing.

122. Which of the following planets does not have its own natural satellite
 (1) Earth (2) Uranus (3) Mercury (4) Mars.
123. The focal length of a double Convex lens in water Compare to air
 (1) Increases (2) decreases (3) remains unchanged (4) None of the above
124. Read the following statements related to sound waves.
 A: Sound waves are mechanical waves.
 B: Sound can travel in Vacuum.
 Now Choose the Correct answer.
 (1) Both statements A and B are correct
 (2) Both statements A and B are incorrect.
 (3) Statement A is correct and statement B is incorrect.
 (4) Statement A is incorrect and Statement B is correct.
125. Raju holding a piece of coal tell his friend that coal is a metal as it is solid, his friend throws it down and say it is the piece of a non-metal. By throwing the piece of coal which property of metal did Raju's friend probably showing to Raju.
 (1) Ductility (2) Sonority (3) Malleability (4) Lustrous.
126. Which among the following will you express with a balanced chemical equation to make it more informative.
 (1) Physical State (2) Heat changes (3) Gas evolved (4) all of the above.
127. If the smoothness of the surfaces between two bodies in contact increases then the change in friction is
 (1) Increases (2) decreases
 (3) remains unchanged (4) None of the above.
128. To measure the potential difference across two points in a circuit, the voltmeter is connected
 (1) Series only (2) parallel only
 (3) Neither series nor parallel (4) either series or parallel
129. The directions show always by a freely suspended bar magnet
 (1) South-East (2) North-South (3) East-West (4) North-East
130. The maximum number of electrons in a shell of an atom is
 (1) $(2l+1)$ (2) $2(2l+1)$ (3) $2n^2$ (4) n^2
131. Which of the following elements of a periodic table has the highest Electronegativity
 (1) H (2) K (3) F (4) Cs.
132. The Froth-Floatation method is mainly useful for
 (1) Oxides ores (2) Sulphide ores (3) Chloride ores (4) Corbates ores

133. Urine formation mechanism have the following 4 stpes
Arrange them systematically.
- | | |
|-----------------------------|---------------------------|
| i. Tubular reabsorption. | ii. Glomerular filtration |
| iii. Concentration of Urine | iv. Tubular secretion. |
| (1) i, ii, iii, iv | (2) iv, iii, ii, i |
| (3) iii, ii, i, iv | (4) ii, i, iv, iii |
134. Leaves are the organ of Transpiration said by _____
- | | |
|--------------------|-----------------------|
| (1) Priestley | (2) Mendal |
| (3) Stephens haies | (4) Leonardo de Vinci |
135. Knee Jerk were first obseved in
- | | | | |
|----------|----------|----------|----------|
| (1) 1950 | (2) 1875 | (3) 1873 | (4) 1865 |
|----------|----------|----------|----------|
136. Which of the following is the largest group of animals?
- | | | | |
|----------------|--------------|-------------------|-----------------|
| (1) Vertebrata | (2) Annelida | (3) Echinodermata | (4) Arthropodea |
|----------------|--------------|-------------------|-----------------|
137. Among the following is not an unicellular organism
- | | | | |
|-----------|------------|-------------|---------------|
| (1) Hydra | (2) Amoeba | (3) Eqglena | (4) Parameium |
|-----------|------------|-------------|---------------|
138. The alkaloid used as medicine for snake bite is
- | | | | |
|---------------|-------------|-------------|-----------------|
| (1) Reserpine | (2) Quinine | (3) Coffine | (4) Scopolamine |
|---------------|-------------|-------------|-----------------|
139. The rods are able to see in dimlight because
- | |
|---|
| (1) They concentrates in Retina |
| (2) They contain light sensitive pigmet rladospin |
| (3) They present in darksport of eye |
| (4) None of these |
140. This Nutrient is present in high quintity in Mushroom
- | | | | |
|-------------|---------|----------|-------------|
| (1) Protine | (2) Fat | (3) Iron | (4) Calcium |
|-------------|---------|----------|-------------|
141. The harmone released druing hunger is
- | | | | |
|---------------|--------------|------------|-------------|
| (1) Adrenalin | (2) Thyroxin | (3) Leptin | (4) Ghrelin |
|---------------|--------------|------------|-------------|
142. The energy currency of our body.
- | | | | |
|----------|---------|----------|---------|
| (1) NADP | (2) ADP | (3) NADH | (4) ATP |
|----------|---------|----------|---------|
143. First tropic level of a ecological pyramid includes.
- | | |
|----------------------|-------------------------|
| (1) Primary comsumer | (2) Secondary consumers |
| (3) Producers | (4) Decomposers |
144. Ecological pyramids of Biomal are always
- | | | | |
|---------------|--------------|--------------|-------------|
| (1) Horizotal | (2) Inverted | (3) Verticle | (4) Upright |
|---------------|--------------|--------------|-------------|

SCIENCE METHODOLOGY

145. The lecture method can be made more effective by
- (1) Increasing the lecture time
 - (2) Avoiding visual teaching aids
 - (3) Relying solely on textbooks
 - (4) Incorporating group discussions and activities
146. Which of the following is NOT a purpose of the formative evaluation.
- (1) To decide the rank of the students in a class
 - (2) To make necessary changes in teaching strategies
 - (3) To get feedback about learning students at different stages of teaching.
 - (4) To improve the quality of teaching learning process.
147. This is not a suitable role for teacher
- (1) Facilitator
 - (2) Financer
 - (3) Manager
 - (4) Councillor
148. A teacher is giving the assignment to her students to draw the diagram of respiratory organs and asked them to explain it. This method is called
- (1) Formative assessment
 - (2) Summative assessment
 - (3) Problem solving method
 - (4) Learning by doing method
149. Who is among the following is often referred to as the father of Modern Education in India.
- (1) Lord Macaulay
 - (2) Charles Grant
 - (3) Maduliar
 - (4) Radhakrishnan.
150. According to the following structure of Science which of the following does not come under the syntactic structure of science .
- (1) Enquires
 - (2) Facts
 - (3) Methods
 - (4) Process
