

## B.Ed(Technical) SCIENCE

- The knowledge of Educational Psychology mostly helps the teacher
  - To decide General aims of education.
  - To write specific Instructional objectives.
  - To make the process of student's guidance complete.
  - To make good Evaluation method.
- According to behavioural thought of Psychology, the teacher is
  - Store house of knowledge.
  - Creator of appropriate learning conditions.
  - A friend, philosopher and guide.
  - Supervisor of student's learning activities.
- Which method has made Educational Science ?
  - Experimental Method
  - Survey Method
  - Clinical Method
  - Observation Method
- In the definition of Psychology behaviour
  - Internal, covert processes
  - Mental process
  - Outwards or overt actions and reactions
  - Only human behaviour
- „Assimilation“ and Accommodation“ are principles of development, characterizing the theory of development as propounded by
  - B.F. Skinner
  - Kohlberg
  - B.S. Bruner
  - Jean Piaget
- Bruner identified three major stages of cognitive growth. Identify the correct order of the stages.
  - Symbolic, Iconic, Enactive.
  - Enactive, Iconic, Symbolic.
  - Iconic, Symbolic, Enactive.
  - Symbolic, Enactive, Iconic.
- Piaget used the term to describe „Cognitive Structure“ :
  - Super-ego
  - Ego centric
  - Symbolic
  - Schema
- According to Piaget “Child is ignorant about objects in front of him”. That stage is known as
  - Sensory motor stage
  - Formal operational stage
  - Pre-operational stage
  - Concrete operational stage
- Spearman's two factor theory consisted of
  - Group and specific factor
  - General and specific factor
  - General and special factor
  - Group and special factor
- Exponent of Multifactor theory of intelligence
  - Spearman
  - Guilford
  - Thorndike
  - Thomson

11. „Primary Mental Abilities“ is written by  
 (a) Thorndike (b) Binet (c) Thurstone (d) Spearman
12. Initial Spearman theory of intelligence has the following two main components :  
 (a) „g“ and „a“ (b) „Gc“ and „Gsr“ (c) „g“ and „s“ (d) None of the above
13. The Rorschach Ink Blot Test consists of  
 (a) Five black and five coloured cards.  
 (b) Five black and white and five multi-coloured cards.  
 (c) Ten multi-coloured cards.  
 (d) Ten black and ten white cards.
14. Thematic Apperception Test was initially planned by Morgan and later on developed by  
 (a) Murray (b) Clark Hull (c) Binet (d) Kurt Lewis
15. In view of emerging circumstances of present decade, the Indian education should focus, so that  
 (a) It helps in making the people politically conscious.  
 (b) It helps in eradicating the unemployment of educated.  
 (c) It helps in raising the level of morality of the people.  
 (d) It helps in the spiritual development of the people.
16. Function of schools is generally accepted by the Government of India  
 (a) Conservative function (b) Liberal function  
 (c) Only Progressive function (d) Revolutionary function
17. The aims of education fulfilled by making the new members of society with traditions, customs and norms of the society is called  
 (a) Social aim (b) Individual aim  
 (c) Social and Emotional aim (d) Individual and Social aim
18. Which of the following statements regarding the relationship of society and education is not correct ?  
 (a) Society determines the model and structure of education.  
 (b) Education changes the ideas of the society.  
 (c) Education can reduce regional disparities.  
 (d) The best school reflects the worst society.
19. Socialism as a constitutional value incorporates education for :  
 (a) Social justice (b) Social equality  
 (c) Social innovation (d) Social equity
20. Society is not democratic if it  
 (a) Follows laissez-fair policies  
 (b) Follows the principle of freedom and justice.  
 (c) Believes in equality.

21. The Constitution has given provision for equal opportunities for women in education under article  
 (a) Article 15(3) (b) Article 16(1) and (2)  
 (c) Article 45 (d) None of the above
22. Article 45 of Indian Constitution uses the term :  
 (a) In Primary education (b) In Vocational education  
 (c) In Basic education (d) In Compulsory education
23. According to UGC Act 1956, under which category Gurukul Kangri Vishwavidyalaya Haridwar comes ?  
 (a) Private University (b) Deemed University  
 (c) State University (d) Central University
24. When the students leaves the school in mid session, the problem is called  
 (a) Stagnation (b) Eradication (c) Wastage (d) All of the above
25. The attention of the problem of wastage and stagnation firstly was given by  
 (a) Hartog Committee 1929 (b) Gokhale Committee 1913  
 (c) Hunter Commission 1882 (d) Wood Abbat Report 1937
26. „Upgradation of existing Autonomous Colleges to Universities“ this idea was given by  
 (a) University Grant Commission  
 (b) Rashtriya Uchhatar Shiksha Abhiyan  
 (c) National University of Education Administration and Planning  
 (d) Council of Scientific and Industrial Research
27. Under the provisions of RTE Act, 2009 the responsibilities to plan for the development of school are given to  
 (a) Teachers (b) Parents  
 (c) Village Pradhan (d) School Management Committee
28. The RTE Act, 2009 is enforced in  
 (a) Whole country  
 (b) Whole country excluding Jammu and Kashmir  
 (c) Only North India  
 (d) Only South India
29. Out of the following which is not under major heads of RMSA ?  
 (a) Qualitative improvement (b) ICT  
 (c) Access and Equity (d) Teacher Education
30. Right to Education was advocated by  
 (a) Mahatma Gandhi (b) Gopal Krishna Gokhale  
 (c) Raja Ram Mohan Roy (d) Dayanand Saraswati
31. The Act of Right of Education of Children to Free and Compulsory Education came on  
 (a) 15<sup>th</sup> August, 2011 (b) 10<sup>th</sup> April, 2010  
 (c) 1<sup>st</sup> April, 2010 (d) 1<sup>st</sup> August, 2011

32. One of the following is not a method of programming in Programmed Instruction :
- (a) Linear Programming (b) Curvilinear Programming  
(c) Branching Programming (d) Mathematics Programming
33. In the following, which statement is incorrect about micro teaching ?
- (a) It is a method of teaching.  
(b) It consists of core teaching skills.  
(c) Each skill is practised separately.  
(d) Questioning is one of the skill of micro teaching.
34. The main role of a teacher is
- (a) To facilitate learning and development.  
(b) To correct the behaviour of students.  
(c) To conduct the examinations and award the degrees.  
(d) To impart knowledge and skill.
35. Which one of the following is not an individualized instruction ?
- (a) Computer Assisted Instruction. (b) Programmed Instruction.  
(c) Micro-Teaching (d) Personalized System of Instruction.
36. Computer Assisted Instruction (CAI) can be used in the field of Education
- (a) For drill and practice. (b) For teaching and instruction.  
(c) For tutorial and dialogue. (d) All of the above.
37. Programmed learning material involves :
- (a) A graded series of audio tapes.  
(b) An ordered sequence of stimulus items (frames).  
(c) Well-planned learning material.  
(d) Collection of slides and film strips on the lesson.
38. Programmed Instruction is based on :
- (a) Maslow theory  
(b) Skinners theory of operant conditioning  
(c) Thorndike law of effect.  
(d) Pavlov's classical conditioning theory of learning.
39. A curriculum maker having interest in designing a functional curriculum would need an understanding of
- (a) Pedagogical procedures. (b) Psychological principles.  
(c) Educational philosophy. (d) All of the above.
40. The main purpose of co-curricular activities is
- (a) To provide a progressive school.  
(b) To meet the demands of community.  
(c) To facilitate pupil's adjustment based development in practical life.  
(d) None of the above.
41. Teaching skills was first introduced by
- (a) Allen and Rayan (b) B.K. Passi  
(c) Skinner (d) None of the above

42. The black-board can be utilized best by a teacher for
- (a) Making the students attentive.
  - (b) Highlighting the teacher himself.
  - (c) Writing the important and notable points.
  - (d) Putting the matter of teaching in black and white.
43. One of the following is a component of Reinforcement skill
- (a) Writing responses of the students on black-board.
  - (b) Revising the teaching points.
  - (c) Change in interaction.
  - (d) Clarity of voice.
44. Previous knowledge based questions are element of the following :
- (a) Probing questions skill
  - (b) Skill of lecturing
  - (c) Introduction
  - (d) Skill of discussion
45. A teacher endeavours to provide in the class-room
- (a) Experience to the students.
  - (b) Opportunity for students thinking.
  - (c) Congenial learning environment to the students.
  - (d) All of the above.
46. Teaching as a profession has a paradigm shift in 21<sup>st</sup> Century. Expectations from a teacher have changed now. Keeping professional values in mind pickup the odd one out.
- (a) Reflective skills and life-long learning.
  - (b) Complex use of skills.
  - (c) Bare knowledge giving process.
  - (d) Entry in profession with degree.
47. One of the following is an example of the software material :
- (a) Film strip
  - (b) Book
  - (c) Information inside the book
  - (d) Transparency
48. One of the following is not an approach of Educational Technology :
- (a) Method Approach
  - (b) Hardware Approach
  - (c) System Approach
  - (d) Software Approach
49. The number of domains in Taxonomy of Educational objectives are
- (a) Two (02)
  - (b) Five (05)
  - (c) Six (06)
  - (d) Three (03)
50. Taxonomy of Educational Objectives of Cognitive Domain is written by
- (a) Bloom
  - (b) Skinner
  - (c) Bruner
  - (d) B.O. Smith

51. Number of Action verbs or mental processes given by R.C.E.M. Approach for understanding objective of Science Teaching is  
 (a) 2 (b) 3 (c) 5 (d) 7
52. In Chemistry, we study  
 (a) Heat Transformation  
 (b) Matter and heat  
 (c) Structure of matter and its characteristics  
 (d) Living beings
53. The structure of Science includes  
 (a) Facts and concepts (b) Concepts and generalisations  
 (c) Generalisations and theories (d) All of the above
54. Organisation of content in a Science Text book should be according to  
 (a) According to Curriculum (b) Interest and needs of the students  
 (c) Needs of the teacher (d) Both (A) and (B)
55. „Science text-book should be aimed at shaping integrated modern scientific world outlook.“ This statement has been given by  
 (a) NCERT (b) UNICEF (c) UNESCO (d) SCERT
56. The device mostly used for analysis of a Science Text-Book is  
 (a) Vogel’s Spot Check Evaluation Scale  
 (b) Vogel’s Questionnaire  
 (c) Vogel’s Schedule  
 (d) Vogel’s Inventory
57. At which stage of teaching Science workbooks are helpful to the students ?  
 (a) Preparation (b) Presentation (c) Assimilation (d) Generalization
58. NCERT has recommended a laboratory for Secondary Stage  
 (a) Chemistry Laboratory (b) Physics Laboratory  
 (c) Multipurpose Science Laboratory (d) Biology Laboratory
59. An all purpose laboratory plan is fulfil the objective  
 (a) Practical (b) Theoretical  
 (c) Functional (d) Practical and Theoretical
60. To popularize science in villages NCERT has given the concept of  
 (a) Developing Laboratories in villages.  
 (b) Laboratory on wheels.  
 (c) Developing laboratory in every school.  
 (d) Developing Science kits.
61. Which skill reinforces the visual images that pertain to the essential concepts and learning outcomes in a Science Laboratory ?  
 (a) Observation skill (b) Calculation skill  
 (c) Drawing skill (d) Transfer skill

62. The method with which W.H. Kilpatrick is associated  
(a) Lecture Method (b) Demonstration Method  
(c) Observation Method (d) Project Method
63. Which one of the following is not connected with Inductive Method ?  
(a) Examples (b) Demonstration  
(c) Conclusions (d) Generalization
64. Which one of the following is not involved in Project Method ?  
(a) Purpose (b) Freedom  
(c) Utility (d) Confusion
65. In RCEM system, analysis, synthesis and evaluation are related to  
(a) Knowledge objectives (b) Application objectives  
(c) Creative objectives (d) Comprehensive objectives
66. Which one of the following is not an aim of Science Club ?  
(a) To develop scientific attitude  
(b) To develop interest in Science  
(c) To create relation between student and teacher  
(d) To spent time
67. Which one of the following is not an Audio-visual aid in Science Teaching ?  
(a) Sound film (b) Television  
(c) Film Projector (d) Text book
68. Science subject is related with other school subjects. This statement is  
(a) True (b) False  
(c) True and False (d) None of the above
69. Matrix Technique of content analysis has been propounded by  
(a) Davies (b) Glaser  
(c) Macus (d) Leme
70. Psychomotor Domain of Teaching objectives was developed by  
(a) Bloom (b) Robert Mager  
(c) Simpson (d) Drucker
71. News and informations are displayed on  
(a) Roller board (b) Black board  
(c) Bulletin board (d) None of the above
72. The teaching method which develops critical thinking, makes students self-reliant, prepares students for life and allows the student to work at his/her own pace is termed as  
(a) Lecture Method (b) Assignment Method  
(c) Inquiry Method (d) Demonstration Method

73. Demonstration method uses
- (a) Two dimensional aids (b) Three dimensional models  
(c) Bulletin Boards (d) All of the above
74. Which of the following method is based Learning by doing, Learning by observation, From concrete to abstract and From known to unknown ?
- (a) Demonstration Method (b) Lecture Method  
(c) Project Method (d) Laboratory Method
75. Demonstration method needs
- (a) Availability of resources.  
(b) Availability of apparatuses.  
(c) Knowledge of age, intelligence and interest of the students.  
(d) All of the above.
76. To provide consistence and reliable data, knowledge and information, are the objectives and functions of \_\_\_\_\_
- (a) Teaching Technology (b) Information Technology  
(c) Learning Technology (d) None of the above
77. Match the following :
- |                            |                       |
|----------------------------|-----------------------|
| A. Sound effects           | 1. Large group        |
| B. Scientific calculations | 2. Drawing conclusion |
| C. LCD Projector           | 3. Easy explanation   |
| D. OHP                     | 4. Audio-visual Aids  |
- Codes :**
- |     |   |   |   |   |
|-----|---|---|---|---|
|     | A | B | C | D |
| (a) | 1 | 2 | 3 | 4 |
| (b) | 2 | 3 | 4 | 1 |
| (c) | 3 | 2 | 4 | 1 |
| (d) | 4 | 2 | 3 | 1 |
78. Match the following :
- |                    |                 |
|--------------------|-----------------|
| 1. Internet        | A. Draw tables  |
| 2. Microsoft Excel | B. WWW          |
| 3. Store House     | C. Online tests |
| 4. Examination     | D. Computers    |
- Codes :**
- |     |   |   |   |   |
|-----|---|---|---|---|
|     | 1 | 2 | 3 | 4 |
| (a) | D | C | A | B |
| (b) | A | B | D | C |
| (c) | B | A | D | C |
| (d) | B | C | D | A |
79. Sample of the study is same as population of the study in
- (a) Fundamental Research (b) Historical Research  
(c) Action Research (d) Descriptive Research

80. Evaluation of Action Research in Science is done by  
(a) Science Teacher (b) Head of the Institution  
(c) Expert (d) Students
81. Study of the reasons of low achievement level in Science subject of Class IX students is done by using  
(a) Achievement Test (b) Diagnostic Test  
(c) Action Research (d) Fundamental Research
82. Electronic Numerical Integrator and Calculator (ENIAC) discovered by  
(a) John Von Neumann (b) John Eckert & John Mauchli  
(c) M.V. Wilkes (d) None of the above
83. Which research in Science Teaching does not need any specific training and remains limited to school only ?  
(a) Action research (b) Applied research  
(c) Historical research (d) Fundamental research
84. Continuous aspect of evaluation in Science teaching is related to  
(a) Continuous assessment of students' development  
(b) Frequent unit testing  
(c) Use of corrective measures  
(d) All of the above
85. Diagnosis of learning gaps in Science Teaching is done mainly by  
(a) Continuous and comprehensive evaluation.  
(b) Continuous evaluation.  
(c) Comprehensive evaluation.  
(d) None of the above.
86. Continuous and comprehensive evaluation has been introduced in India by  
(a) NCERT (b) NCTE  
(c) CBSE (d) None of the above
87. Norms of a good Science test are helpful to  
(a) Discriminate among the students. (b) Make the scores reliable.  
(c) Make the scores valid. (d) Interpret the scores.
88. Most important use of essay type tests in Science Teaching is  
(a) to measure knowledge effectively.  
(b) to measure understanding of the content.  
(c) to measure various skills used in Science.  
(d) to measure higher level objectives.
89. Reliability of a Science test means  
(a) Purposiveness of the test. (b) Consistency of scores.  
(c) Objectivity of the test. (d) Standardization of the test.
90. „Recall and Recognition“ types questions are related to  
(a) Essay type questions (b) Short answer type questions  
(c) Objective type questions (d) All of the above

91. Which type of tests have high diagnostic value ?  
 (a) Essay type tests (b) Short answer type tests  
 (c) Objective type tests (d) All of the above
92. Which type of questions are „Fill in the blanks“ ?  
 (a) Recall type (b) Recall and Recognition type  
 (c) Recognition type (d) None of the above
93. The highest class in the classification of teaching objectives of Psychomotor domain is  
 (a) Basic body movements (b) Percept activities  
 (c) Skillful body movement (d) Sign communication
94. In Psychomotor domain, the last category is  
 (a) Habit formation (b) Coordination  
 (c) Impulsion (d) Naturalization
95. One of the following is the classification of Educational objectives :  
 (a) Cognitive domain, Psychomotor domain  
 (b) Affective domain  
 (c) Cognitive, Affective, Psychomotor  
 (d) Comprehension and Psychomotor
96. Which are the communication tools ?  
 (a) Hearing sound and Visual sounds (b) Projective Communication  
 (c) Doing sounds (d) All of the above
97. **Fill in the blank :**  
 Virtual class-room have accelerated the process of imparting Education through \_\_\_\_\_  
 (a) Information (b) Computer (c) E-learning (d) Data
98. Teaching is a complex phenomenon. The reason is  
 (a) It is a tri polar interdependent process.  
 (b) It is a system.  
 (c) It is acquisition of habits and knowledge.  
 (d) All of the above.
99. Scientific Literacy is manifested through general behaviour of a person, if he cares for  
 (a) Population control (b) Conservation of energy  
 (c) (a) and (b) both (d) None of the above
100. Scientific Literacy is manifested in a person in many ways. The correct answer is  
 (a) Prevention of Communicable diseases.  
 (b) Preventing pollution.  
 (c) Giving importance to Science based issue of Civic importance.  
 (d) All of the above.