

**B.Ed. (2 years) (CBCS) Semester 2/3**

**Subject: Pedagogy of School Subjects Mathematics**

1. Mathematics is an example of the following typology.
  - a. Hard-pure
  - b. Hard-applied
  - c. Soft-pure
  - d. Soft-applied
2. Sub disciplines as Physics, Chemistry, Geosciences, Life Sciences are some examples of:
  - a. Natural Sciences
  - b. Social Sciences
  - c. Humanities
  - d. General Science
3. This subject is the study of trade and business activities such as the exchange of goods and services from producer to final consumer.
  - a. Commerce
  - b. Economics
  - c. Geography
  - d. Business studies
4. Development of number sense and skills of estimation and approximation should be a part of \_\_\_\_\_.
  - a. Primary school
  - b. Upper primary school
  - c. Secondary school
  - d. Higher secondary school
5. At the primary level mathematics should not focus on heavily on \_\_\_\_\_.
  - a. Development of language and symbolic notation
  - b. Helping children make simple comparisons and classifications
  - c. Enabling children to make connections of the subject with everyday understandings.
  - d. Standard algorithms of addition, subtraction, multiplication and division of whole numbers
6. Mathematics should not be taught
  - a. as an isolated subject
  - b. in relation to other subjects
  - c. to think and reason
  - d. to analyse and articulate logically
7. Who said, "Mathematic is a way to settle in mind a habit of reasoning"?
  - a) Locke
  - b) Higgins
  - c) Robbins
  - d) Galileo
8. Mathematics develops the abilities of \_\_\_\_\_

- a) communication
  - b) creativity
  - c) analysis
  - d) numerical
9. Which of this statement is not true for Mathematics?
- a. All objects, concepts, statements have clear and precise meaning.
  - b. Results in Mathematics are either right or wrong, accepted or rejected.
  - c. Most of the mathematical concepts are without concretization.
  - d. Definitions or a sentence stating a result, are ambiguous in Mathematics
10. Choose the correct form of this property 'the addition and multiplication of two real numbers is independent of the order in which they are combined'
- a.  $a + b = b + c$
  - b.  $a + b \times c = c + a \times b$
  - c.  $a \times c + b = a \times b + c$
  - d.  $a - b = b - c$
11. Mathematics is the subject which provides an opportunity for the Training of the mind to close thinking, stirring up a sleeping and uninstructed spirit. Identify the value of teaching mathematics.
- a) Cultural
  - b) Disciplinary
  - c) Intellectual
  - d) Moral
12. In mathematics right is right and wrong is wrong for ever. Which value of teaching mathematics do this statement corresponds to?
- a) Cultural
  - b) Moral
  - c) Intellectual
  - d) International
13. The settled principles, tenets, working rules or general truths through which teaching becomes interesting, easy and effective are called \_\_\_\_\_.
- a) pedagogy
  - b) maxims
  - c) correlation
  - d) rules
14. While teaching counting to the students we should first take the help of concrete objects like beads, stones etc and then proceed to digits and numbers.
- a) Known to unknown
  - b) Concrete to abstract
  - c) General to particular
  - d) Whole to Part
15. Students ability, creativity, capacity is directed only to a particular topic for longer span of time and these students get concrete and thorough knowledge of topic. This is one of the merits of \_\_\_\_\_ approach of curriculum construction.
- a) Concentric

- b) Topical
  - c) Spiral
  - d) Linear
16. \_\_\_\_\_ means the logical and systematic breaking up of the curriculum from the point of view of the pedagogue for the purpose of its effective transaction.
- a) Unit plan
  - b) Year plan
  - c) Pedagogical analysis
  - d) Academic discipline
17. An outline of the important points of a lesson arranged in order in which they are to be presented to students by teacher is termed as \_\_\_\_\_
- a. Year Plan
  - b. Unit Plan
  - c. Lesson Plan
  - d. Syllabus
18. Which of the following is not true about lesson plans?
- a. It helps in orderly delivery of the content
  - b. It saves from haphazard teaching
  - c. It is developed by the students
  - d. it makes the teacher more confident
19. The complementary written work is \_\_\_\_\_
- a) oral work
  - b) drill work
  - c) review
  - d) homework
20. The speed and accuracy of mathematics cannot be possible without \_\_\_\_\_
- a) drill work
  - b) written work
  - c) oral work
  - d) drawing work
21. Which of the following statement is true regarding purpose of review in mathematics:
- a) Stimulating interest in study
  - b) To fix new learning
  - c) To develop habit of precision
  - d) To develop social virtue
22. Problem solving method helps the pupils to:
- a) develop skill of measurement
  - b) develop mental and cognitive abilities
  - c) develop sense of counting
  - d) appreciate the beauty of mathematics
23. The Patron of the mathematics club is \_\_\_\_\_.
- a. Principal
  - b. Mathematics Teacher
  - c. Students

- d. Club members
24. Textbooks fail to do the following.
- a. Reconstructing answers when they forget the question
  - b. Supplementing classwork
  - c. Developing problem solving attitude among the pupils
  - d. Reaching accurate conclusion
25. Which of this is not a Virtual Manipulative?
- a. Algebra Tiles
  - b. Interactive Tangram
  - c. Animation
  - d. GeoGebra
26. This statement is not true for GeoGebra.
- a. Has an in-built support for animation.
  - b. Helps to understand the bond between Algebra and Geometry
  - c. Develops a good vocabulary for pupils
  - d. Helps to blend dynamic visualization and traditional Calculus class
27. Command over Mathematics, favourable attitude towards Mathematics and providing remedial teaching are the \_\_\_\_\_ qualities of the mathematics teacher.
- a. General
  - b. Specific
  - c. Professional
  - d. Individual
28. Attending seminars, workshops, conferences are avenues of \_\_\_\_\_.
- a. Cooperative Profession Programme
  - b. Continuous Promotion Programme
  - c. Continuous Professional Development
  - d. Collaborative Professional Programme
29. Which of these is not a contribution of Ramanujan?
- a. The magic square
  - b. Elliptic functions
  - c. The Theory of numbers
  - d. Solid Geometry
30. He was the first to give the world the value of  $\pi$ .
- a. Ramanujan
  - b. Euclid
  - c. Pythagoras
  - d. Aryabhatta