BACHELOR OF EDUCATION
THIRD SEMESTER
TEACHING OF MATHEMATICS
BED – 302A
[USE OMR SHEET FOR OBJECTIVE PART]

SET A

Duration: 3 hrs.

Full Marks: 70

Objective

Time: 30 mins.

Marks: 20

Choose the correct answer from the following: 1×20=20

1. Which value of Mathematics is related to the statement: Mathematics is a way to settle in the minds of children, a habit of reasoning ?
   a. Practical Value
   b. Disciplinary Value
   c. Aesthetic Value
   d. Cultural Value

2. Who said that "Mathematics is the gate way and key of all sciences"?
   a. Roger Bacon
   b. Hogben
   c. Jean Piaget
   d. Prof VOSS

3. Who is considered a pioneer in the field of Algebra?
   a. Srinivasa Ramanujan
   b. Brahumagupta
   c. Aryabhata
   d. Sridhar Acharya

4. A specific objective contains one
   a. Non behavioral verb
   b. Action verb
   c. Non action verb
   d. None of the above

5. The form of reasoning in which a general law is derive from a study of reasonably adequate number of cases is called ....
   a. Analysis
   b. Induction
   c. Deduction
   d. Synthesis

6. Which domain of behavior is related to interest objective?
   a. Cognitive domain
   b. Affective domain
   c. Psychomotor domain
   d. None of These.

7. A good lesson plan mainly consists of
   a. Objectives to be achieved
   b. Contents to be transferred
   c. Evaluation techniques to be used
   d. All the above

8. Correlation between two variables way be
   a. Positive
   b. Negative
   c. Both positive and Negative
   d. None of these

9. Existing Pattern of examination mainly measures objective of which aspect:
   a. Cognitive aspect
   b. Affective aspect
   c. Psychomotor aspect
   d. None of these

10. Achievement test is/are
    a. Teacher made test
    b. Standardized test
    c. Teacher made standardized test
    d. None of these

11. What is 20% of 10%?
    a. 0.1
    b. 0.2
    c. 0.01
    d. 0.02

12. What is the LCM of the smallest composite number and the smallest prime number?
    a. 0
    b. 1
    c. 2
    d. 4

13. The sum of two numbers is zero. One number is called to another:
    a. Additive inverse
    b. Additive identity
    c. Multiplicative identity
    d. Multiplicative inverse

14. Which one is an irrational number?
    a. 0.0101101110012......
    b. 0.112211221122......
    c. 0.11112211......
    d. None of these

15. A triangle Can have
    a. Two right angles
    b. Two obtuse angles
    c. All angles less than 60^0
    d. All angles equal to 60^0

16. How many cubes of ten cm. edge can be put in cubical box of one m. edge?
    a. 10
    b. 100
    c. 1000
    d. 1000

17. What is the measure of each angle of a regular hexagon?
    a. 100^0
    b. 110^0
    c. 120^0
    d. $1 30^0$

18. An angle is 20^0 less than its complement. What is its measure?
    a. 25^0
    b. 30^0
    c. 35^0
    d. 40^0

19. Who first discovered the value of "pi" (π)?
    a. Euclid
    b. William John
    c. Archimedes
    d. None of these

20. What is the name of the horizontal line between the numerator and denominator?
    a. Line of division
    b. Tangent
    c. Vinculum
    d. None of these

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(Descriptive)

[Answer question no.1 & any four (4) from the rest]

1. Discuss the main reasons at least *two* for making Mathematics as compulsory subject in school curriculum up to secondary levels.   5+5=10

2. Identify from the following: 2+8=10
   Which subject is highly correlated with the mathematics:
   a) Language
   b) History
   c) Physics
   Discus in details.

3. What do you mean by content categories in mathematics? Explain with example for each of them.   2.5×4=10

4. What do you mean by inductive deductive method for teaching mathematics? Discus with an example of learning activity how will use the inductive method to transact a particular topic of secondary level of mathematics?   4+6=10

5. What is an achievement test, define it. Represent diagrammatically the forms of achievement test in mathematics. Also cite appropriate examples for each of those.   2+8=10

6. What is the need of diagnostic test in mathematics? Write the main characteristics of diagnostic test in mathematics. Also, briefly write the steps for construction of diagnostic test.   2+3+5=10

7. Write a lesson plan on *any one* of the following indicating the class for which the lesson is suitable: 10
   a) Area of triangle.
   b) Volume of rectangle.
   c) Rational Number.

8. Write short notes on: (*any one*)   10
   a) Designing of learning experiences in mathematics.
   b) Analytic and synthetic method of teaching

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