

**BACHELOR OF EDUCATION
THIRD SEMESTER [SPECIAL REPEAT]
TEACHING OF MATHEMATICS
BED – 302A**

**SET
A**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

(Objective)

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° | d. All angles equal to 60° |
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° | b. 110° |
| c. 120° | d. 130° |
18. An angle is 20° less than its complement. What is its measure?
- | | |
|---------------|---------------|
| a. 25° | b. 30° |
| c. 35° | d. 40° |
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)

Time : 2 Hr. 30 Mins.

Marks : 50

[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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