230100017

Reg No : ....

Name : ....

B.Ed DEGREE REGULAR/REAPPEARANCE / MERCY CHANCE EXAMINATIONS, JANUARY 2023

First Semester

BACHELOR OF EDUCATION

PEDAGOGIC COURSE - EDU104.16 - UNDERSTANDING THE DISCIPLINE OF MATHEMATICS EDUCATION

2018 Admission Onwards

5172B5CA

Time: 2 Hours

Max. Marks : 50

Part A

Answer all questions

Each question carries 1 mark.

1. Where is the origin of New Math Movement?

2. Write any one situation where history of Mathematics is helpful in classroom teaching.

3. What do you mean by Mathematical Induction?

4. Mention any one situation where Mathematics is related to social science.

5. Cite any two situations where Mathematics is correlated with Malayalam.

6. Mathematics and music is correlated. Give any one example to prove this.

7. Write a situation where Utilitarian value of Mathematics is exemplified.

8. Write any two general objectives of teaching Mathematics at Higher secondary stage.

9. Illustrate difference between aims and objectives citing one example.

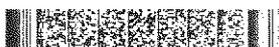10. Write any two objectives from cognitive domain.

$(10 \times 1 = 10)$

Part B

Answer any five questions in about half a page

Each question carries 2 marks.

11. Why is Mathematics abstract in nature?

12. How is Mathematics related to Biology?

13. Write any four vocational aims of teaching Mathematics.

Turn Over

14. Write any four general objectives of teaching Mathematics at primary stage.

15. List any four general objectives of teaching Mathematics at secondary stage.

16. Which are the competences that should be possessed by a mathematics student?

$(5 \times 2 = 10)$

Part C

*Answer any **five** questions in about **one or two pages***

*Each question carries **4 marks**.*

17. Write a short note on Pythagoras.

18. What is the role of Mathematics in 21st century?

19. Briefly explain the correlation of Mathematics with life.

20. Mathematics and arts are correlated. Do you agree with this? Why?

21. Briefly summarize the disciplinary values of learning Mathematics .

22. Briefly explain the Aesthetic aims of teaching Mathematics.

23. Illustrate the tripolar relation between competences, learning activities and evaluation.

$(5 \times 4 = 20)$

Part D

*Answer any **one** question in about **three or four pages**.*

*Each question carries **10** marks.*

24. Explain in detail the contributions of Aryabhata and Brahmagupta.

25. Write in detail Bloom's taxonomy of educational objectives under various domains.

$(1 \times 10 = 10)$