



Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University under Category A by MHRD, Estd. u/s 3 of UGC Act 1956)

Re-accredited with A+ Grade by NAAC. Recognised by UGC Under Section 12B

Coimbatore - 641 043, Tamil Nadu, India

Bachelor of Education Degree Examination – November 2019
I Semester

Class: I B.Ed. / I B.Ed. (Special Education)

Time: 3 Hours
Max. Marks: 100

18BEDM11/18BDSM11 School Subject I: Introduction to Mathematics Education

Course Outcomes:

- CO1: describe the nature and scope of mathematics
 - CO2: know how mathematics is correlated with other subjects
 - CO3: list the aims and objectives of teaching mathematics at various levels
 - CO4: realize the importance of history of mathematics
 - CO5: understand and appreciate the contributions of Mathematicians
- CO6** : acquire the qualities of a mathematics teacher

Part A

10 x 1 = 10

Choose the Correct Answer

1. The Nature of Mathematics is
a. ornamental
c. difficult
b. logical
d. aesthetic
CO1 K1
2. "Mathematics is the science which draws necessary conclusions" said by
a. Hogben
c. Locke
b. Benjamin Pierce
d. None of the above
CO1 K1
3. Mathematics is the science of
a. Intellectual
c. Numbers
b. Calculations
d. All the above
CO1 K1
4. "To appreciate the works of mathematician". This phrase represents value.
a. Intellectual
c. Aesthetic
b. Social
d. Cultural
CO3 K2
5. According to Hogben, "Mathematics is the mirror of civilization". This statement corresponds to -----value of mathematics.
a. Disciplinary
c. Aesthetic
b. Social
d. Cultural
CO3 K2
6. The most useful teaching aid in mathematics is
a. audio aid
c. visual aid
b. audio visual aid
d. digital aids
CO3 K2
7. Correlation between two variables may be
a. positive
c. both a and b
b. negative
d. partial positive and negative
CO2 K3
8. The organization of content in the text-book of mathematics should be according to the
a. teacher
c. curriculum
b. student
d. society
CO3 K3
9. The method based upon real thinking, experiments and inspection is
a. laboratory
c. synthesis
b. analysis
d. deduction
CO3 K3

10. A good objective should be
- a. specific
 - b. small
 - c. testable
 - d. attractive

CO3 K3

Part B

5 X 6 = 30

Answer the following questions

Answer should not exceed 400 words or two pages

- 11.a. Give the meaning and definition of mathematics. CO1 K1
(or)
- 11.b. Explain the role of symbols in mathematics. CO1 K3
- 12.a. Bring out the meaning and importance of correlation. CO2 K2
(or)
- 12.b. Enumerate the various types of correlation. CO2 K2
- 13.a. Write the need and significance of teaching mathematics. CO3 K2
(or)
- 13.b. What are the objectives of teaching mathematics at higher secondary level? CO3 K2
- 14.a. What are the contributions of Romans in the development of mathematics? CO5 K3
(or)
- 14.b. Discuss the contribution of the Chinese to mathematics. CO5 K2
- 15.a. "Mathematics teacher is a democratic teacher" –Discuss. CO6 K3
(or)
- 15.b. "Mathematics teacher occupies a prominent place in the school" – Justify. CO6 K5

Part C

5 X 12 = 60

Answer the following questions

Answer should not exceed 800 words or four pages

- 16.a. Describe the nature of mathematics with examples. CO1 K2
(or)
- 16.b. Explain the scope of mathematics with examples. CO1 K3
- 17.a. Discuss the correlation of mathematics with other aspects of life. CO2 K3
(or)
- 17.b. Bring out the relationship of mathematics with agriculture, geography and philosophy. CO2 K3
- 18.a. Explain the different values of teaching mathematics by giving suitable examples. CO3 K3
(or)
- 18.b. Explain Bloom's Taxonomy of educational objectives. CO3 K3
- 19.a. Mention the contributions of Indian mathematicians. CO5 K4
(or)
- 19.b. List out the contributions of Euler and Euclid to mathematics. CO5 K4
- 20.a. List the characteristics of a good mathematics teacher. CO6 K3
(or)
- 20.b. Professional ethics is must for a mathematics teacher – Justify. CO6 K5
