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 (Spl. Edn.)

Time : 3 Hours
Max. Marks: 100

18BEDP11/ 18BDSP11 School Subject I: Introduction to Physical Science Education

Course Outcomes:
CO1: list out the scope of learning physical science
CO2: identify the characteristics of a person with scientific attitude and scientific temper
CO3: compare the functioning of different scientific organistions
CO4: formulate the inter relationship of science and other subjects using illustrations
CO5: compose an essay on the biographies of scientists/dramatise the life history of scientists
CO6: demonstrate the qualities required for a science teacher

Part A **10X1=10**
Choose the Correct Answer

1. Which amongst the following statement is incorrect about science? CO1 K5
   a. Science is based on the formation of concept and theories
   b. Science is cumulative and endless series of empirical observations
   c. Science is the process of acquiring and defining knowledge
   d. Science is bringing all phenomenon in happening around

2. Which of the following cannot be the characteristics of science? CO2 K5
   a. Science is dynamic
   b. Science is a holistic approach to investigate facts
   c. Science believes in mass opinion
   d. Science avoids biases

3. Who is the first Chairman of ISRO? CO4 K1
   a. Mylswamy Annadurai b. B. N. Suresh
   c. Vikram Sarabhai d. Sivan

4. When did Pokharan II nuclear tests take place? CO4 K1
   a. 1974 b. 1978
   c. 1986 d. 1998

5. The main aim of remedial teaching in science teaching is to CO3 K1
   a. develop good habits in the students
   b. make corrections in the students
   c. rectify the learning difficulty of particular student
   d. team teaching

6. The scientific temperament enhances ---------- skills. CO1 K1
   a. observation b. experimental
   c. critical thinking d. motivational

7. Which one of the following is most suited to the development of scientific skills in students? CO5 K1

a. Conducting science quiz
b. Organising a field visit
c. Conducting science Olympiads
d. Performing laboratory work

8. Which one of the following cannot be the step of scientific methodology? CO3 K1

a. Open minded accumulation of data
b. Development of hypothesis to explain data
c. Testing the hypothesis by carrying out experiments
d. Making an opinion randomly

9. Which one among the following is the correct sequence of scientific process? CO1 K1

a. Observing the fact → making hypothesis → collecting data → drawing inference (law)
b. Making hypothesis → observing the fact → collecting data → drawing inference (law)
c. Observing the fact → making hypothesis → drawing inference (law) → collecting data
d. Collecting data → observing the fact → making hypothesis → drawing inference (law)

10. NCF-2005 states "Good science education is true to science", what does it mean? CO5 K1

a. Science education should teach only the science content and should not relate it to other subjects
b. Only true science should be taught and students should take it seriously and memorize everything that is being taught
c. Science education should convey its content at a suitable level and engage the child in learning the procedures of obtaining and validating scientific knowledge
d. Science education should be given properly, using the laboratory facilities

Part B **5 x 6 = 30**

Answer the following questions

Answer should not exceed 400 words or two pages

11.a. Distinguish products approach and process approach in science. CO1 K1

(or)

11.b. Enumerate the values of teaching Physical science. CO1 K1

12.a. What do you mean by correlation? CO2 K1

(or)

12.b. Indicate the need for correlational studies. CO2 K1

13.a. List the Aims of Teaching Physical Science. CO3 K1

(or)

13.b. Evaluate the Revised Bloom's Taxonomy. CO3 K1

14.a. Describe the development of science in India. CO4 K1

(or)

14.b. Discuss about DST. CO4 K1

15.a. Differentiate profession from job. CO5 K1

(or)

15.b. Explain the role of teacher in eradicating superstitions in society. CO5 K1

Part C **5 X 12 = 60**

Answer the following questions

Answer should not exceed 800 words or four pages

16. a. Explain the nature and scope of Physical Science. CO1 K1

(or)

16.b. As a Science Teacher how can you develop Scientific Temper among your students. CO1 K1

17.a. Explain the different types of correlation. CO2 K1

(or)

17.b. Estimate the correlation of science with other subjects. CO2 K1

18. a. Construct the Bloom's Taxonomy of Educational Objectives. CO3 K1

(or)

18. b. Describe the objectives of teaching Physical Science. CO3 K1

19. a. Discuss about the contributions of Western scientists in the field of science. CO4 K1

(or)

19. b. Examine the role of A.P.J. Abdul Kalam and C.V. Raman to the field of science. CO4 K1

20. a. Appraise the professional ethics of teachers. CO5 K1

(or)

20. b. How do the teachers cater the needs for individual differences among students? CO5 K1

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