Navajyothi College of Teacher Education for Women

EDU 05.12 THEORETICAL BASES OF TEACHING PHYSICAL SCIENCE

PART A

1) **Define Science.**
2) **What do you mean by the discipline science?**
3) **Write any four values inculcating from the teaching of Science.**
4) **Define Scientific Attitude.**
5) **Define Scientific Aptitude.**
6) **Define Scientific Literacy.**
7) **What are the qualities of a scientifically literate person?**
8) **Write any two inter disciplinary branches emerging from Science.**
9) **What are aims of Education?**
10) **What are objectives of Education?**
11) **What are objectives of Teaching Physical science?**
12) **Distinguish between aim and objective.**
13) **What is objective based instruction?**
14) **What is specific objective?**
15) **What are the components of Blooms taxonomy?**
16) **What are the components of affective domain of Blooms taxonomy?**
17) **What are the components of psycho motor domain of Blooms taxonomy?**
18) **What are the differences between Blooms taxonomy and Revised taxonomy?**
19) **What are the various domains in Mc Cormack & Yager taxonomy?**
20) **Write any four process skills in Science at secondary stage.**
21) **Define teaching.**
22) **What is the meaning of Teaching?**
23) **What are the functions of Teaching?**
24) **Write any four principles of Teaching.**
25) **What are the components of Microteaching skill Black board writing?**
26) **What are the components of the skill of stimulus variation?**
27) **Write any four Microteaching skills necessary for science teaching.**
28) **Define Microteaching.**
29) **What is Microteaching cycle?**
30) **What are the components of Microteaching cycle?**

31) **What is Link practice?**
32) **Distinguish between Microteaching and Link practice.**
33) **Define curriculum.**
34) **Distinguish between Curriculum and syllabus.**
35) **Distinguish between Curriculum, syllabus and textbook.**
36) **Write any four principles of curriculum construction.**
37) **Define Incidental correlation. Give example**
38) **Define systematic correlation. Give one example.**
39) **Distinguish between systematic and incidental correlation.**
40) **What is Topic approach?Suggest a suitable topic in secondary level science text book suitable for topic approach.**
41) **What is unit approach?. Suggest a topic in secondary school science textbook suitable for unit approach.**
42) **Distinguish between spiral approach and concentric approach.**
43) **What is Topic method? How it differ from Topical approach?**
44) **What is Type study?Suggest a topic in secondary school science textbook suitable for Type study.**
45) **Distinguish between Integrated, Disciplinary and Inter Disciplinary approaches.**
46) **What do you mean by Grass root Approach?**
47) **Expand the full form of PSSC. What are the advantages of PSSC?**
48) **What are the advantages of Lecture cum Demonstration method?**
49) **What are the qualities of a Good Project?**
50) **What are the advantages of problem solving method?**
51) **List out the merits of Individualized Laboratory method.**
52) **What are the main characteristics of Dalton plan?**
53) **What are the advantages of Supervised study?**
54) **Distinguish between Buzz session and Brainstorming techniques.**
55) **Distinguish between Debate and Seminar.**
56) **Distinguish between Symposium and Panel Discussion.**
57) **Distinguish between Concept map and Mind map.**
58) **Give examples for Analogies in Science Teaching.**
59) **What are the components in Blended learning?**
60) **Provide examples for any two Mnemonics used in science Teaching at Secondary level.**
61) **What are the merits and limitations of Graphic organizers?**

PART B

1) **Explain about any four values of Teaching Physical science.**
2) **Briefly explain about any two methods for measuring Scientific Attitude.**
3) **Briefly describe about various methods for enhancing scientific aptitude.**

4) **Explain about any four inter disciplinary branches of science.**
5) **Write a short note on Blooms taxonomy of Educational objectives.**
6) **Distinguish between Blooms taxonomy and Revised Blooms taxonomy.**
7) **Write a short note on McCormack and Yager taxonomy.**
8) **Explain about various process skills in science at secondary stage.**
9) **Explain about the various phases of Teaching.**
10) **Describe about any four principles of Teaching.**
11) **Explain about any four Maxims of Teaching.**
12) **Explain about the skill of Blackboard writing.**
13) **Explain about the skill of Stimulus variation.**
14) **Explain about the various phases of Microteaching.**
15) **Distinguish between Microteaching and Link practice.**
16) **Explain about Microteaching cycle.**
17) **Explain about Any four principles of curriculum construction.**
18) **Distinguish between Incidental and systematic correlation.**
19) **Explain about correlation of science within the subject.**
20) **Write short notes on Topical, spiral and unit approach.**
21) **Distinguish between concentric and spiral approaches.**
22) **Write short notes on Topic method and Type study.**
23) **Give a short note on Grassroot approach.**
24) **Explain about CHEM Study.**
25) **Explain about PSSC.**
26) **Explain about CBA.**
27) **Describe about Lecture cum Demonstration Method.**
28) **Give a short note on Project method.**
29) **Explain about Dalton method.**
30) **Explain about Individualised Laboratory method.**
31) **Explain about supervised study.**
32) **Distinguish between Brain storming and Buzz session.**
33) **Explain about Debate, symposium, Panel Discussion and Seminar.**
34) **How Analogy act as an Innovative Teaching Method?**
35) **Construct a Mind map based on any topic in Physics.**
36) **Construct a Concept Map on any topic in Chemistry.**
37) **Explain about various types of Mnemonics used in Physical science teaching.**
38) **Write a short note on Blended learning.**
39) **Write a short note on Problem based learning.**
40) **Write a short note on Graphic organizers.**

PART C

1) **Briefly explain the Significance of Physical science as a school subject.**
2) **Briefly describe about Digital taxonomy in Physical science.**

3) **What are process skills? How will you develop various process skills in students?**
4) **Describe about various Maxims of Teaching.**
5) **What is Microteaching? Explain about various phases and Microteaching cycle.**
6) **Explain about various approaches for organizing physical science curriculum.**
7) **Explain about various approaches to curriculum construction.**
8) **Explain about various methods of instruction in Physical science.**
9) **Explain about various techniques and strategies in Physical science teaching.**
10) **What is Mind Map? Explain about steps to construct a Mind Map. Construct a Mind Map on any topic in Physical science from Higher secondary level.**