

B.Ed. Examination 2018
Semester-II
Course : B.ED. 124
Pedagogical Knowledge of School Subject A : Physical Science

Time : 3 Hours

Full Marks : 70

Questions are of value as indicated in the margin.

Group -A

Answer **any two** questions:

15×2=30

1. Discuss the aims and objectives of teaching Physical Science in Secondary level. What behavioural change would you expect to see amongst your students as a result of realization of these aims? 10+5
2. Describe the problem solving method in the teaching of Physical Science and illustrate this method with reference to any topic from physics or chemistry. 5+10
3. What is meant by improvised apparatus? It has been given much importance now days for the improvement of science teaching in our secondary schools. Why? Describe the construction of an improvised science apparatus and mention its use in a classroom demonstration. 2+5+8
4. Write a lesson plan of 40 minutes duration on any one of the following topic mentioning the class for which it is intended. (a) current Electricity (b) Magnet (c) Acid, Based and Alkalies (d) Oxidation and Reduction.

Group-B

5. Attempt **any six** of the following :

5×6=30

- a) "Science has so developed that it can no longer be considered as a mere adjunct to a general education, but rather take its place at the centre of any educational scheme"- briefly justify the statement. 5
- b) How will you improve your class teaching with the help of teaching aids prepared by you? 5
- c) What is CAI? How far it can be used in teaching Physical Science? 1+4
- d) Briefly discuss Gurudeva's perspective for planning an effective lesson of Physical science. 5
- e) What is the Project method of teaching Physical Science? Can this method be effective for teaching of Physics or Chemistry in higher classes? 3+2
- f) Briefly explain Science-Technology-Society movement for Physical science education. 5
- g) Briefly discuss the simplest but most Convenient Science Laboratory that you would have in a Secondary School at the least expense. 5
- h) "Science is a body of knowledge and a self testing ongoing process of enquiry" – Discuss the statement. 5

P.T.O.

(2)

Group-C

6. Attempt all the questions : 2×5=10
- a) Mention two special qualifications required for Physical Science teacher. 2
 - b) Outline the activities of science club. 2
 - c) Mention two important relations between Physical Science and Geography. 2
 - d) Briefly discuss how educational excursion to chemical industry can help the teaching of chemistry to the school students. 2
 - e) Briefly discuss the role of calculator towards the fulfillment of objective of Physical Science. 2
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