



**Oriental Education Society's  
Oriental College of Education & Research, Andheri (W)  
Affiliated to University of Mumbai  
EC 1 – Pedagogy of school subject: Science**

**Q.1 Choose the correct option:**

- 1) " Science is the ..... of exploring the external world". - A.D. Ritchie.
  - a) function
  - b) Process
  - c) result
  - d) Experience
  
- 2) ..... is all about having the ability to control yourself and focus on your work.
  - a) Curriculum
  - b) Syllabus
  - c) Academic discipline
  - d) Methods
  
- 3) In ..... approach the topics will find a place in different classes of different years of a course in a progressive manner.
  - a) Topical
  - b) Concentric
  - c) Vertical
  - d) Horizontal
  
- 4) Natural sciences refer to disciplines that seek to offer a systematic interpretation of the phenomena in the universe.
  - a) Social sciences
  - b) Natural sciences

- c) Political sciences
- d) Real sciences

5) Caswell and Campbell (1935): " Curriculum is composed of all of the .....children have under the guidance of the teacher."

- a) functions
- b) Process
- c) results
- d) experiences

6) Science is a body of knowledge obtained by methods based upon observation.

- a) knowledge
- b) method
- c) facts
- d) causes

7) Science is a Particular way of ..... at Nature.

- a) manipulating
- b) looking
- c) liking
- d) thinking

8) Science is systematic knowledge of the physical or material world gained, through ..... and experimentation

- a) observation
- b) reasoning
- c) finding
- d) calculating

9) Science encompasses the systematic study of the structure and ..... of the physical and natural world through observation and experiment.

- a) attitude
- b) interest
- c) behavior
- d) reason

10) The word ' heuristic' is originated from Greek word 'Heurisco' which means ' ..... have found out'.

- a) We ourselves
- b) You yourself
- c) I myself
- d) They themselves

11) Empirical knowledge is verifiable whereas rationale is based on logic and principles.

- a) principles
- b) facts
- c) postulates
- d) maxims

12) It is always better to cite some specific examples before proceeding to general principles of a phenomenon- is the example of ..... maxim.

- a) Particular to general
- b) Known to unknown-
- c) Simple to complex
- d) Concrete to abstract

13) The NCF..... document draws its policy basis from earlier government reports on education as Learning Without Burden.

- a) 2003
- b) 1978
- c) 2005
- d) 1964

14) To teach types of forces, 1<sup>st</sup> teacher should explain about force and its applications and then teacher should explain their types- is the example of ..... maxim.

- a) Particular to general
- b) Known to unknown-

- c) Simple to complex
- d) Concrete to abstract

15) '..... secures first the learning of definitions of laws or rules, then carefully explains its meaning and lastly illustrates it fully by applying to facts.'

- a) Inductive Method
- b) Lecture Method
- c) Deductive Method
- d) Laboratory Method

16) The topic of “beekeeping or agriculture” the beginning should be made with the actual presentation of honey comb and then gradually the knowledge of the uses of honey and different kind of bees , functions of bees.- is the example of ..... maxim.

- a) Particular to general
- b) Known to unknown-
- c) Simple to complex
- d) Whole to part

17) To teach students about ‘human skeleton’ can be taught worth the help of the model- is the example of ..... maxim.

- a) Particular to general
- b) Known to unknown-
- c) concrete to abstract
- d) Whole to part

18) A ..... is when someone can think about a situation as it relates to the rest of the world

- a) natural perspective
- b) global perspective
- c) environmental perspective
- d) economical perspective

19) ..... proceeds from ‘simple to complex ‘and ‘whole to part’.

- a) Concrete approach
- b) Topical approach
- c) Vertical approach
- d) Horizontal approach

20) A teacher may give flower of hibiscus specimen to observe and learn. while learning the simple five whorls of the flower the students may learn initially only the simple structures or parts, its description and their immediate functions.- is the example of ..... maxim.

- a) Known to unknown
- b) Whole to part
- c) Concrete to abstract
- d) Particular to general

21) ..... destroys the continuity of subject matter.

- a) Concrete approach
- b) Topical approach
- c) Vertical approach
- d) Horizontal approach

22) ..... method psychological as the students are shown concrete things.  
Demonstration

- a) Inductive Method
- b) Lecture Method
- c) Demonstration Method
- d) Laboratory Method

23) ..... is the first step of project method

- a) Selection of the Project
- b) Providing a situation
- c) Planning
- d) Executing

24) When the plan is ready, pupils are to put it to practice- is the ..... step of Project Method.

- a) Planning
- b) Choosing the project
- c) Carrying out the project (Executing)
- d) Evaluating

25) In mathematics, teacher first present the idea of +, −, x and then division. ---is the example of..... maxim.

- a) Known to unknown
- b) Whole to part
- c) Concrete to abstract
- d) Simple to complex

26) ..... starts from observation and direct experience and ends in developing; a rule in abstract form.

- a) Inductive Method
- b) Lecture Method
- c) Demonstration Method
- d) Laboratory Method

27) ..... proceeds from the general to particular, the abstract to the concrete.

- a) Inductive Method
- b) Deductive Method
- c) Demonstration Method
- d) Laboratory Method

28) A..... is a visual organizer that can enrich students' understanding of a new concept

- a) Concept map
- b) Chart
- c) Audio-video clip
- d) Diagrams

29) In concept of PEOR 'R' stands for .....

- a) React
- b) Recall
- c) Reserve
- d) Remedy

- 30) Science club in our school helps the pupils.....
- a) to improve marks in science exam
  - b) to utilise their leisure time in proper way
  - c) to arrange the picnics
  - d) to help in science exam

**Answer key**

- |      |       |
|------|-------|
| 1- b | 21- b |
| 2-c  | 22-c  |
| 3-b  | 23-b  |
| 4-b  | 24-c  |
| 5-d  | 25-d  |
| 6-a  | 26-a  |
| 7-b  | 27-b  |
| 8-a  | 28-a  |
| 9-c  | 29-a  |
| 10-c | 30-b  |
| 11-a |       |
| 12-a |       |
| 13-c |       |
| 14-c |       |
| 15-c |       |
| 16-d |       |
| 17-c |       |
| 18-b |       |
| 19-a |       |
| 20-b |       |

**Short Answer Questions**

**Q.2 Write the short Answers**

- 1) Explain the relationship between Academic Disciplines and Science subject.
- 2) Explain the maxim with proper example – Particular to General.
- 3) Explain the correlation of science with history.
- 4) Explain Topical approach of Curriculum Organization.
- 5) Explain Merits of Lecture cum demonstration method.
- 6) Explain the characteristics of good Science textbook.
- 7) Write the Significance of Science Field Visit.
- 8) Explain the values of teaching science in socio-cultural context.

9) Explain the concept 'PEOR.'

10) Explain the importance of Diagnostic Testing in science.