

G 4701

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Reg. No.....

Name.....

**B.Ed. DEGREE (CREDIT AND SEMESTER) EXAMINATION, APRIL 2019**

**Second Semester**

**EDU 204.18—PEDAGOGICAL DIMENSIONS OF NATURAL SCIENCE**

(2018 Admissions—Regular)

Time : Two Hours

Maximum : 50 Marks

**Part A**

*Answer all questions in one or two sentences.*

*Each question carries 1 mark.*

1. What is meant by specifications ?
2. Mention the contribution of Howard Gardner.
3. What is meant by TPACK ?
4. Differentiate social constructivism and cognitive constructivism.
5. What is meant by year planning ?
6. 'Class tests are both formative as well as summative' Comment on.
7. Give two examples of free response type test items.
8. Differentiate supply type and selection type of objective type test items.
9. Give an example of how augmented reality can be used in a biology classroom.
10. List out any two facts in biology from standard-8 state-level textbook.

(10 × 1 = 10 marks)

**Part B**

*Answer any five questions in about half a page.*

*Each question carries 2 marks.*

11. In biology, the cell may be considered as a concept and similarly as a term. Comment on.
12. Differentiate assimilation and accommodation.
13. Differentiate terms and concepts with the suitable examples in biology.
14. Explain the steps to upload a video to YouTube.

Turn over

15. Explain the concept ZPD and scaffolding.
16. 'All completion type questions are not objective'. Evaluate the statement.

(5 × 2 = 10 marks)

### Part C

*Answer any five questions in about one page.*

*Each question carries 4 marks.*

17. Analyse the content given in the below paragraph of standard 10 textbook.

"Middle ear is a small chamber between the external ear and the internal ear. Tympanum, ear ossicles namely malleus, incus and stapes are the important parts seen inside the middle ear. Tympanum separates the middle ear from the external ear. A bony wall separates the middle ear from the internal ear. In this bony wall, there are two openings which are covered by membranes. The upper opening is called oval window and the lower one is called round window. The ear ossicles connect the tympanum to the internal ear through the oval window. The sound waves which pass through the external ear vibrate the tympanum. This vibration of the tympanum is transmitted to the ear ossicles which causes the vibration of the membrane in the oval window."

18. Write down the need and significance of planning for instruction.
19. Prepare a good matching type test item from any biology topic of your choice.
20. Explain the criteria for evaluating teaching competency.
21. List out the technological knowledge and pedagogic knowledge needed to transact the concept of evolution.
22. Explain the advantages of objective type test items.
23. List out any social issues addressed in the biology textbook and explain how it is Incorporated.

(5 × 4 = 20 marks)

### Part D

*Answer any one question in about four pages.*

*The question carries 10 marks.*

24. Explain the steps involved in the construction of an achievement test with a suitable example.
25. Prepare a lesson plan based on Herbatian steps for the topic 'Structure and function of heart'.

(1 × 10 = 10 marks)