

# KENDRIYA VIDYALAYA NDA PUNE

PERIODICAL TEST – II 2018-19

SUB – SCIENCE  
MM – 80

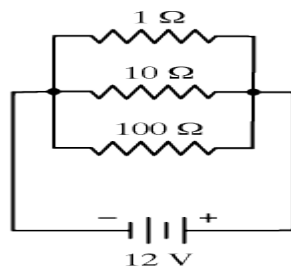
CLASS – X  
Times: 3 HOURS

## General instructions

1. All questions are compulsory.
2. Question paper comprises of two sections, A & B and both are compulsory.
3. Question number 1-2 are **one marks** questions. These are to be answered in one sentence.
4. Question number 3-5 are **two marks** questions.
5. Question number 6-15 are **three marks** questions.
6. Question number 16-21 are **five marks** questions.
7. Question number 22-27 are **two marks** questions. These are practical based questions.

## Section – A

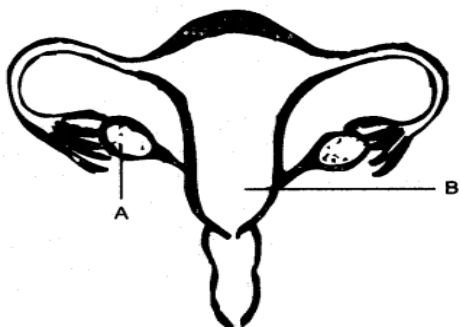
1. What do you mean by pH? [1]
2. What are the differences in binary fission in amoeba and leishmania? [1]
3. What is the cause of cramps after heavy exercise? How to get relief from it? [2]
4. In the circuit given below find, (i) total resistance, (ii) current flowing. [2]



5. Name the hormones controlling following functions – [2]
  - a. Body growth.
  - b. Stress management.
  - c. Growth and functioning of secondary sexual organs in male.
  - d. Controlled blood sugar level.
6. Give location and function of following parts - [3]
  - a. Villi.
  - b. Gastric glands.
  - c. Salivary gland.
7. A convex mirror used for rear view on an automobile has a radius of curvature of 3 m. If a bus is located at 5 m from this mirror. Find the position nature and size of the image. [3]
8. Answer the following questions – [3]
  - a. Why does bee sting causes pain & irritation? Rubbing of baking soda on the sting area gives relief. How?
  - b. An acid should be added to water but not water to acid, for dilution of acid. Why.
  - c. Name the substance added to cakes to make them floppy.
9. Answer the following – [2+1]
  - a. Why does the sun appears to be reddish in the morning?
  - b. Define the power of accommodation of eye.
10. Describe the structure of functional unit of nervous system. Also name the chemical which transfers nerve impulse through synaptic cleft. [2+1]

11. Write 3 differences between endocrine and exocrine glands. [3]
12. Give suitable reason for following statements – [1+1+1]
- Platinum, gold & silver are used as jewellery.
  - Sodium, potassium & lithium are stored under oil.
  - Aluminium is highly reactive even then it is used as utensils.

13. Answer the following – [1+2]
- Define amphoteric oxides, with examples.
  - Name the acid which metals do not give hydrogen gas normally. Also write the conditions in which hydrogen gas given by this metal with metals.
14. Identify the given parts in female reproductive system. Also describe both parts with their functions. [3]



15. Define the structure and function of placenta. [3]
16. Answer the following questions – [2+3]
- How photosynthesis occurs in desert plants.
  - Describe the structure of heart.
17. Answer the following – [3+2]
- Give the ray diagram for following positions of object along with properties of image –
    - Image by concave mirror when object is between F & P.
    - Image by convex mirror when object is at infinity.
    - Image by convex lens when the object is at centre of curvature.
  - Define power of a lens with SI unit. Find power of a convex lens of radius of curvature 20cm.
18. Describe the hypermetropia with causes, correction along with diagram. [5]
19. A. Define resistance. Describe the factors on which it depends. [3+2]
- C. Draw a schematic diagram of a circuit consisting of a battery of three cells of 2 V each, a 5 ohm resistor, an 8 ohm resistor & a 12 ohm resistor, and a plug key, all connected in series.
20. What do you mean by contraception? Describe four contraceptive methods. [5]
21. (a) An organic compound 'p' is a constituent of wine. 'p' on reacting with acidified  $K_2Cr_2O_7$  forms another compound 'q'. When a piece of sodium is added to 'q' then a gas 'r' evolves, which burns with pop sound. Identify P,Q and R, also write the reactions involved.
- (b) Define micelles with its structure. [3+2]

### Section – B

22. Give the precautions while burning magnesium ribbon. [2]
23. How would you prove that iron is more reactive than copper. Also write chemical reaction [2]
24. What is lateral displacement? Name two factors affecting it. [2]
25. Why does distilled water not conduct electricity but rain water conducts. [2]
26. Why colour of sky appears to be blue? [2]
27. How would you differentiate saturated and unsaturated hydrocarbons. [2]