

KCP SIDDHARTHA ADARSH RESIDENTIAL PUBLIC SCHOOL

Kanuru, Vijayawada – 520 007

FORMATIVE ASSESSMENT – I (PAPER PEN TEST) 2014-15

Class : X

Marks : 30

Sub : Science

Time : 1 Hr.

PART – A

1. Write the equation of Photosynthesis. 1M
2. Define resistivity of material. 1M
3. What is the power of torch bulb rated at 2.5V and 500mA? 1M
4. Why is series arrangement not used for connecting domestic electrical appliances in a circuit? 1M
5. Write an example of decomposition reaction. 1M
6. What is meant by thermal decomposition? 1M
7. Name the chemical reaction in which heat is absorbed. 1M

PART – B

8. Define "stomata". Mention any two functions. 2M
9. Draw a neat labelled diagram showing various stages in the nutrition of Amoeba. 2M
10. What is the role of the following chemicals in the Photosynthesis experiment? 2M
 - a) Ethyl Alcohol or Ethanol
 - b) Iodine
11. Name the type of chemical reactions taking place when: -
 - (i) Lime stone is heated.
 - (ii) Magnesium ribbon is burnt in air.
 - (iii) Iron nails are dipped in Copper Sulphate solution.
 - (iv) Burning of coal.
12. Draw the following symbols: 2M
 - (i) Battery (ii) Switch closed (iii) Resistor of resistance R (iv) Voltmeter
13. What is the difference between short circuiting and overloading? 2M
14. Translate the following statements into chemical equations and balance them :- 2M
 - (i) Sodium Chloride reacts with Silver Nitrate to give Sodium Nitrate and a precipitate of Silver Chloride.
 - (ii) Hydrogen gas combines with Nitrogen to form Ammonia.
 - (iii) Zinc Carbonate decomposes to give Zinc Oxide and Carbon Dioxide.
 - (iv) Ammonia gas reacts with water to give Ammonium Hydroxide.
 - (v) Copper (II) Oxide on heating with Hydrogen gas gives Copper and water

PART – C

15. How is opening and closing of stomata regulated? 3M
16. a) Draw diagram showing three resistors R1, R2 and R3 in series. 3M
- b) Two resistors of resistance 4W and 12W
- i) In parallel ii) In series
- Calculate the values of effective resistance in each case.

17.



Special Call for Proposals on Human Papillomavirus (HPV) under Biotechnology Industry Partnership Programme (BIPP)

Human Papillomavirus (HPV) infection is the leading cause of cervical cancer. India bears 30% of the burden of cervical cancer worldwide. The lack of awareness in rural areas and the lifestyle of women in urban areas worsen the situation of cervical cancer in the country. Low-cost, effective solutions are required for the prevention and treatment of HPV infections.

Academia and industries worldwide are actively involved in finding solutions to HPV infection in terms of new screening / diagnostic tests, vaccines and therapeutic options.

BIRAC invites proposals under its Biotechnology Industry Partnership Program (BIPP) on **HPV prevention and control**. The proposals with established POC and aspiring funding for validation and product development are encouraged under this call.

Following are some of the indicative priority areas for submitting proposals

- Simple, sensitive, accurate & affordable screening tests (standard self-screening methods that are independent of individual interpretation)
- Simple, sensitive, specific and acceptable diagnostic tests (cost-effective and applicable to low resource settings)
- Vaccines covering additional number of HPV types
- Process optimization for cost-effective vaccine production
- Development of vaccines with specified duration of protection
- Development of new therapeutic options including products of natural origin

This list is not exhaustive and any other priority area of importance could be considered.

- (a) What kind of infection is HPV. 1M
- (b) Why is BIRAC looking for cost effective measures while making proposals to control HPV. 2M