

ATOMIC ENERGY CENTRAL SCHOOL KAKRAPAR

ANNUAL EXAMINATION (2016)

Time:3Hrs.

Class:XI

Sub: BIOLOGY

MM:70 (60+10 OTBA)

GENERAL INSTRUCTIONS :

- A) Attempt all the questions .
- B) Answer any one ,wherever internal choic is given . .
- C) Draw neat &labelled figures wherever necessary.
- D) OTBA carries 5+5M.

SECTION-A(6x1=6)

1.Mention what do the symbols in the equation stand for?

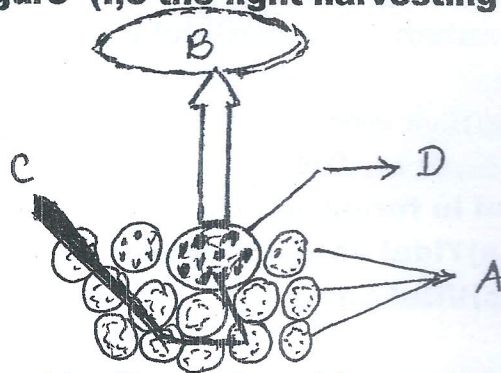
$$\Psi_w = \Psi_s + \Psi_p$$

2.Identify the polysaccharides from the following:

- i)Inulin ii)Glycogen iii)Haemoglobin iv) Insulin

3.Differentiate between Prosthetic groups and Co-enzymes.

4.Label the figure (I,e the light harvesting complex)



5Draw and label an idealised sigmoid growth curve typical of cells in culture and many of higher plants and plant organs.

6.What do we call to the condition of replacement of set of temporary milk or deciduous teeth by a set of permanent or adult teeth.

SECTION-B(7x2=14)

7.Mention the crietaria for essentiality of an element in the plant body.



**8. Show the diagrammatic representation of the mechanism Of Action of 'Steroid hormone'.
OR
'Protein hormone'**

9. Draw and label the reflex action. (showing knee jerk reflex).

10) What do you mean by ball and socket joint? .Give two examples.

11) Match the following :

COLUMN -I

COLUMN-II

- | | |
|--|------------------------------------|
| a) Sino-atrial node | i) Atrial Natriuretic factor (ANF) |
| b) Corpus callosum | ii) Universal donor |
| c) Blood group 'O' | iii) Myofibril |
| d) Check on the Renin- Angiotensin mechanism | iv) heart |
| e) Actin and Myosin | v) brain |

OR

Draw the steps involved in formation of a root nodule in legume plants.

**12. Define the terms : a) Tidal volume b) Residual volume
c) Vital capacity d) Total lung capacity.**

13..Write about the following diseases in one line for each.:

- a) Renal calculi
- b) Atherosclerosis
- c) Emphysema
- d) Jaundice.

