BIOLOGY

BOOKS - NCERT BIOLOGY (ENGLISH)

PLANT GROWTH AND DEVELOPMENT

Multiple Choice Question Mcqs

1. Ethylene is used for

(a)retarding ripening of tomatoes

(b)hastening of ripening of fruits

(c)slowing down ripening of apples

(d)Both b and c

Watch Video Solution

2. Coconut water contains

Watch Video Solution

3. The affect of apical dominance can be overcome by which of the following hormone

Watch Video Solution

4. Match the following

Columm I		Columm II	
A.	IAA	1.	Herring sperm DNA
B.	ABA	2.	Bolting
C.	Ethylene	3.	Stomatal closure
D.	GA	4.	Weed-free lawns
E.	Cytokinins	5.	Ripening of fruits

(a)

(b)

(c)

(d)

Watch Video Solution

5. The term synergistic action of hormones refers to

Watch Video Solution

6. Apples are generally wrapped in waxed paper to

Watch Video Solution

7. Growth can be measured in various ways. Which of these can be used as parameters to measure growth?

Watch Video Solution

8. Plasticity in plant growth means that

Watch Video Solution

9. To increase sugar production in sugarcanes, they are sprayed with

Watch Video Solution

10. ABA acts antagonistic to

Watch Video Solution

11. Monocarpic plants are those which

Watch Video Solution

12. The photoperiod in plants is perceived at

Watch Video Solution

Very Short Answer Type Question

1. Fill in the places with appropriate word/ words.

(a)A phase of growth which is maximum and fastest is .....

(b)Apical domince as expressed in dictyledonous plants is due to the presence of more..... In the apical buyd than in the lateral ones

(c)In additon to lauxin a..... Must be supplied to culture medium to obtain a good callus in plant tissue culture

(d).....of a vegetative plants are the sites of photperiodic perception.

 Watch Video Solution

2. Plant growth substances (PGS) have innumerable practical application name the PGS you should use to

(a)increase yields of sugarcane

(b)promote lateral shooot growth

(c)cause sprouting of potato tuber

(d)inhibit seed germination

Watch Video Solution

3. A primary root grows from 5 cm to 19 cm in a weak. Calculate the actual growth rate (AGR) and relative growth rate (RGR) over the period.

Watch Video Solution

4. Gibberellins were first discovered in japan when rice plants were suffering from bakeane (the foolish seedling disease) caused by a fungus Gibberella fujikuroi .

(a) Give two functions of this phytohormone

(b) which property of gibberellin caused foolish seedling disease in rice ?

Watch Video Solution

5. Gibberllins promote the formation of ..... Flowers on gnetically plants in cannabis whereas n ethylene promotes formationn of ... flowers on gentically...plants

Watch Video Solution

6. Classify the following plants in to Long day plants (LDP) short day plants (SDP) and day neutral polants (DNP) xanthium henbane (hyoscyamus niger) spinach , rich strawberry,bryophyllum sunflower tomato maize.

Watch Video Solution

7. A farmer grows cucumber plants in his field .He wants to increase the number of female

flowers in them. Which plant growth regulator can be applied to achieve this?

Watch Video Solution

8. Where are the following hormones synthesised in plants?

(a)IAA ,(b) Gibberellins,(c Cytokinins

Watch Video Solution

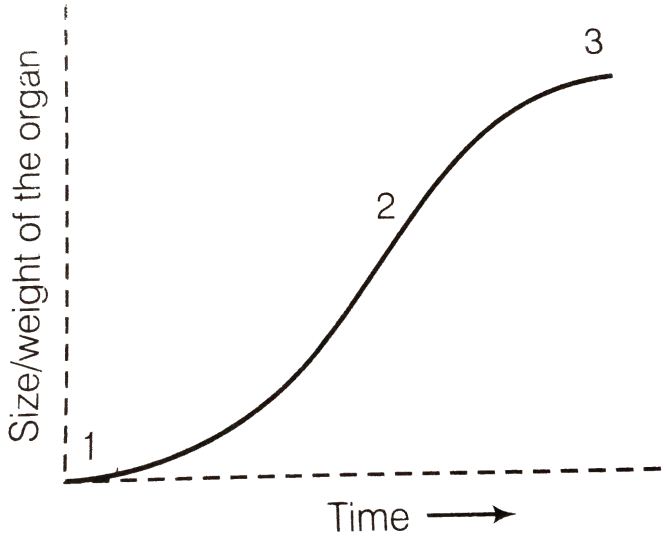
9. In botanical gardens and tea gardens , gardeners trim the plants regularty so that they remain bushy .Does this practic have any scientific explanation?

Watch Video Solution

10. Ligh plays an improtant role in the life of all organisms .Name any three Physiological porcesses in plants which are affected by light.

Watch Video Solution

11. In the figure of sigmoid growth cureve given below label segments 1,2 and3.



Watch Video Solution

12. Growth is one of the characteristeic of all living organism? Do unicellu,lar organism also grow? If so what are the paramater?

Watch Video Solution

13. The rice seedlings infected with fungus Gibberella fujikuroi is called follish seedling? What was the reason behind it?

Watch Video Solution

Short Answer Type Question

1. Nicotiana tobacum, a short day plant , when exposed toi more than critical period of light fails to flower .Explain.

Watch Video Solution

2. What are the structural characteristics of

(a) meristematic cells near root tip

(b) the cells in the eleongation zone of the root

Watch Video Solution

3. Does the growth pattern in plants differ from that in animals? Do all the parts of plant grow indefinitely ? If not, name the regions of plant, which can grow indefinitely

Watch Video Solution

4. Explain in 2-3 lines each of the following terms with the help of examples taken from

different plant tissues

? (a) Differentation,(b) De differenatiation ,(c) Re- differentiation

Watch Video Solution

5. Auxins are growth hormones caplable of promoting cell elongation. They have been used in horticulture to promote growth flowerin g and rooting wirte a line to explain the meaning of the following terms related to auxins

(a) Auxins precursors ,(b) Anti auxins, (c) Synthetic auxins

Watch Video Solution

6. The role of ethylene and abscissic acid is both positive and negative justify the statement

Watch Video Solution

7. While experimentation , why do you think it is difficultto assign any affect seen to any single hormone?

Watch Video Solution

8. What is the mechanism underlying the phenominon by which the terminal/ apical bud suppresses the growth of lateral buds? Suggest measured to overcome this phenomenon

Watch Video Solution

9. In animals , there are glands secreting hormones , formed ? How are the hormones translocated to the site of activity?

Watch Video Solution

10. Many discoveries in science have been accidental .This is true for plant hormones also .Can you jutify this stement by giving an

example? Also what terms is used for such accidental finding

 Watch Video Solution

11. To get a carpet like garas lawns are mowed regularly.Is there any scientific explanation for this?

 Watch Video Solution

12. In a slide showing different types of cells can you identify which type of the cell may be meristematic and the one which is incapable of dividing and how?

Watch Video Solution

13. A rubber band stretches and reverts back to its original position. Bubble gum stretches but it would not return to its original position. Is there anydifference between the two

processes ? Discuss it with respect to plant growth (hint elasticity (reversibel) plasticity (irresversible)

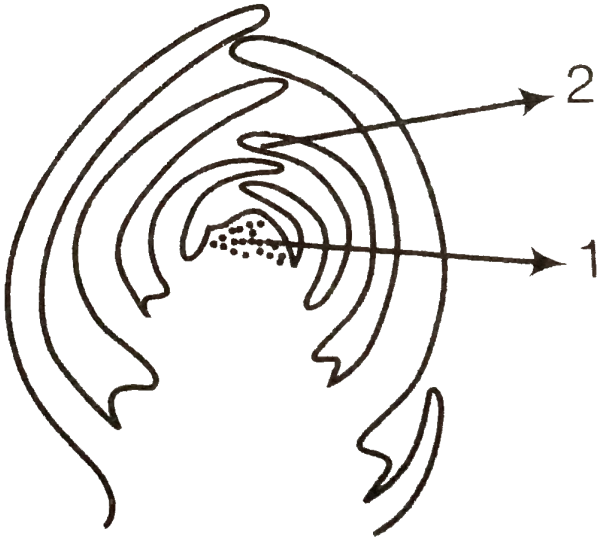
Watch Video Solution

14. Label the diagram

A.This is which part of a dicotyledonous plants?

B. If wer remove part 1 from the plant , what

will happen?



Watch Video Solution

15. Both animals and plants grow. Why do we say that growth and diffeentition in plants is

open and not so in animals? Does this statement hold true for sponges also?

View Text Solution

16. Define parthenocarpy . Name the plant hormone used to induce parthenocarpy.

Watch Video Solution

17. While eating watermelons, all of us wish it was seedless,. As a plkant physiologist can you

suggeste any method by which this can be achieved .

Watch Video Solution

18. A gardener finds some broad leaved dicotweeds growing in his lawns what can be done to get rigd of the weeds efficiently?

Watch Video Solution

19. On germination a speed first produces shoots with leaves , flowers apperar late

A. why do you thin this happens?

B.How is this advantageous to the plant?

Watch Video Solution

20. Fill in the blanks

A. Maximum growth is observed in .....phase.

B. Apical dominace is due to .....

C. .....inititate rooting

D. Pigment involved in photoperception in lfowering plants in .....

Watch Video Solution

Long Answer Type Question

1. Some varieties of wheat are known as spring wheat while others are called winter wheat. Former variety is sown and planted in spring and is harvested by the end of the same season. Hower winter varietis if planted in

spring fail to flower or produce mature grains within a span of a flowering season . Explain, why?

Watch Video Solution

2. It is known that some varieties of wheat are sown in autumn but are harvested around next mid summer.

A.what could be the probable reason for this ?

B. what term is used for this promotion of flowering under low temperature?

C. which palnt hormone can replace the cold treatment?

Watch Video Solution

3. Name a hormone which

A.is gaseous in nature

B. is responsible for phototropism

C. induces femaleness in flowers of cucumber

D. is used for killing weeds (dicots)

E. induces flowsering in long day plants

Watch Video Solution