CHAPTER – 12

Plant Growth & Development

1. Which hormone is primarily responsible forpromoting cell elongation in plants?

a) Auxin

b) Cytokinin

c) Gibberellin

d) Abscisic acid

2. The process by which a plant develops from a seedis called:

a) Germination

b) Photosynthesis

c) Fertilization

d) Pollination

3. Which type of growth occurs at the tips of rootsand shoots?

a) Primary growth

b) Secondary growth

c) Tertiary growth

d) Lateral growth

Which plant hormone is associated with fruitripening?

a) Ethylene

b) Auxin

c) Cytokinin

d) Gibberellin

5. What is the role of abscisic acid in plants?

a) Promotes seed dormancy

b) Stimulates flowering

c) Enhances root growth

d) Inhibits fruit ripening

6. Which of the following processes is a response toenvironmental stimuli in plants?

a) Tropism

b) Photosynthesis

c) Respiration

d) Germination

7. The growth of a plant towards light is known as:

a) Geotropism

b) Phototropism

c) Thigmotropism

d) Hydrotropism

8. Which hormone is known to delay senescence inplants?

a) Cytokinin

b) Ethylene

c) Abscisic acid

d) Auxin

9. The process of seed development from fertilizationto seed maturity is called:

a) Germination

b) Seedling growth

c) Seed maturation

d) Embryogenesis

10. Which part of the plant is responsible forproducing new cells during growth?

a) Apical meristem

b) Epidermis

c) Xylem

d) Phloem

11. What is the function of gibberellins in plants?

a) Stimulate seed germination

b) Promote fruit ripening

c) Inhibit root growth

d) Delay leaf senescence

12. Which type of growth is responsible for anincrease in the diameter of stems and roots?

a) Primary growth

b) Secondary growth

c) Tertiary growth

d) Apical growth

13. Which plant hormone helps in overcoming seeddormancy?

a) Gibberellin

b) Auxin

c) Cytokinin

d) Ethylene

14. The movement of plants in response to touch iscalled:

a) Hydrotropism

b) Thigmotropism

c) Phototropism

d) Geotropism

15. The process by which plants lose water throughevaporation is known as:

a) Transpiration

b) Respiration

c) Photosynthesis

d) Germination

16. Which hormone is known for promoting celldivision in plants?

a) Cytokinin

b) Auxin

c) Gibberellin

d) Abscisic acid

17. Which phase of plant development involves theformation of flowers?

a) Vegetative phase

b) Reproductive phase

c) Germination phase

d) Senescence phase

18. The plant hormone that helps in the elongation ofinternodes is:

a) Gibberellin

b) Auxin

c) Cytokinin

d) Abscisic acid

19. What is the role of auxins in apical dominance?

a) Inhibit lateral bud growth

b) Promote flowering

c) Stimulate root development

d) Delay leaf abscission

20. Which process involves the transition from ajuvenile to a mature phase in plants?

a) Senescence

b) Flowering

c) Germination

d) Dormancy

21. Which hormone is involved in regulating plantresponses to stress conditions?

a) Abscisic acid

b) Cytokinin

c) Ethylene

d) Gibberellin

22. The process by which plants adjust their growth and development in response to gravity is known as:

a) Geotropism

b) Phototropism

c) Hydrotropism

d) Thigmotropism

23. Which plant hormone is responsible for delayingthe aging of plant tissues?

a) Cytokinin

b) Auxin

c) Ethylene

d) Abscisic acid

24. In plants, which part of the seedling is responsiblefor photosynthesis immediately after germination?

a) Cotyledons

b) Roots

c) Stem

d) Seed coat

25. Which of the following hormones is known topromote the formation of lateral roots?

a) Auxin

b) Cytokinin

c) Gibberellin

d) Ethylene

26. The primary function of photoperiodism in plantsis to:

a) Regulate flowering

b) Stimulate seed germination

c) Promote root growth

d) Inhibit leaf senescence

27. Which hormone is commonly involved in theprocess of fruit ripening?

a) Ethylene

b) Gibberellin

c) Cytokinin

d) Abscisic acid

28. The phase of plant development where the plantreaches full maturity is known as:

a) Vegetative phase

b) Reproductive phase

c) Germination phase

d) Senescence phase

29. The plant hormone that promotes seedling growthunder low-light conditions is:

a) Gibberellin

b) Auxin

c) Ethylene

d) Cytokinin

30. Which structure in plants is primarily responsiblefor the detection of light?

a) Photoreceptors

b) Stomata

c) Roots

d) Xylem

31. Which process leads to the development of a newplant from a part of the parent plant?

a) Asexual reproduction

b) Sexual reproduction

c) Pollination

d) Fertilization

32. The increase in the length of the plant roots andshoots is due to:

a) Secondary growth

b) Primary growth

c) Tertiary growth

d) Lateral growth

33. Which plant hormone is known to promote theshedding of leaves and fruits?

a) Ethylene

b) Auxin

c) Cytokinin

d) Gibberellin

34. In plants, the primary site of photosynthesis is:

a) Leaves

b) Roots

c) Stems

d) Flowers

35. The term used to describe the cessation of growthin plants is:

a) Dormancy

b) Germination

c) Senescence

d) Maturation

36. The role of gibberellins in seed germination is to:

a) Inhibit germination

b) Promote enzyme production

c) Delay sprouting

d) Reduce seedling growth

37. The process by which a plant grows towards oraway from a stimulus is called:

a) Tropism

b) Photosynthesis

c) Respiration

d) Germination

38. The plant hormone involved in the defense againstpathogens is:

a) Abscisic acid

b) Cytokinin

c) Ethylene

d) Gibberellin

39. Which of the following is a characteristic ofsecondary growth in plants?

a) Increase in length

b) Increase in diameter

c) Formation of flowers

d) Production of seeds

40. Which hormone is involved in the regulation ofplant growth and development during drought
conditions?

a) Abscisic acid

b) Gibberellin

c) Cytokinin

d) Ethylene

41. The process where plant cells differentiate intovarious types is called:

a) Cell division

b) Cell differentiation

c) Cell elongation

d) Cell expansion

42. Which hormone is crucial for the development ofvascular tissues in plants?

a) Auxin

b) Cytokinin

c) Gibberellin

d) Ethylene

43. The growth response of plants to wateravailability is known as:

a) Hydrotropism

b) Thigmotropism

c) Phototropism

d) Geotropism

44. Which hormone is essential for the initiation offlowering in long-day plants?

a) Auxin

b) Cytokinin

c) Gibberellin

d) Ethylene

45. The stage of plant development characterized byrapid

growth and organ formation is:

a) Vegetative phase

b) Reproductive phase

c) Germination phase

d) Senescence phase

46. The primary function of the root system in plantgrowth is to:

a) Anchor the plant and absorb nutrients

b) Produce flowers

c) Photosynthesize

d) Support the plant

47. Which hormone is known for its role in delayingleaf abscission?

a) Cytokinin

b) Ethylene

c) Auxin

48. In plants, the term "photoperiodism" refers to:

a) Response to day length

b) Response to light intensity

c) Response to water availability

d) Response to temperature changes

49. Which plant hormone influences the rate offlowering in short-day plants?

a) Auxin

b) Gibberellin

c) Cytokinin

d) Ethylene

50. The term used to describe the process of aging anddeath of plant parts is:

a) Senescence

b) Germination

c) Dormancy

d) Maturation

Answer Key for Chapter 12 (Plant Growth &Development)

1	2	3	4	5
A	A	A	A	A
6	7	8	9	10
A	B	A	D	A
11	12	13	14	15
A	B	A	B	A
16	17	18	19	20
A	B	A	A	B
21	22	23	24	25
A	A	A	A	A
26	27	28	29	30
A	A	B	A	A
31	32	33	34	35
A	B	A	A	A
36	37	38	39	40
B	A	A	B	A
41	42	43	44	45
B	A	A	C	A
46	47	48	49	50
A	A	A	B	A