

SECTION A: ANSWER KEY

Q. No.	a	b	c	d	Q. No.	a	b	c	d
1.				✓	11.			✓	
2.	✓				12.			✓	
3.				✓	13.			✓	
4.			✓		14.		✓		
5.				✓	15.		✓		
6.			✓		16.	✓			
7.		✓			17.	✓			
8.		✓			18.		✓		
9.			✓		19.				✓
10.				✓	20.			✓	

	X	Y	Not attempted	
SECTION A				3X - Y =

SECTION B: ANSWER KEY

CELL BIOLOGY (14 points)

21. (2 points)

- A. ___F
- B. ___T
- C. ___F
- D. ___T

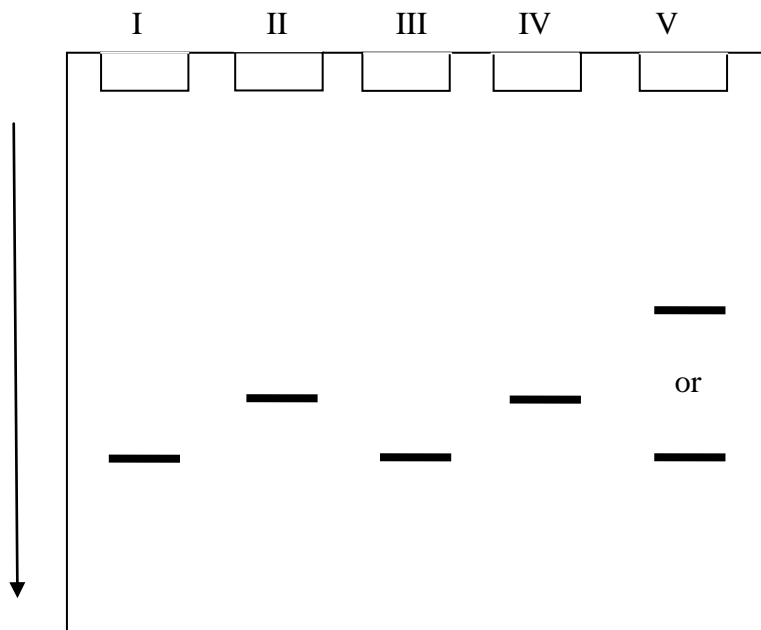
22. (2 points)

- a. ___T
- b. ___F
- c. ___T
- d. ___F

23. (2 points)

- a. _____IV
- b. _____II
- c. _____III
- d. _____I

24. (4 points)



25. (2 points)

Answer: _____6

26. (2 points)

- a. ___F
- b. ___T
- c. ___T
- d. ___F

PLANT SCIENCES (10 points)

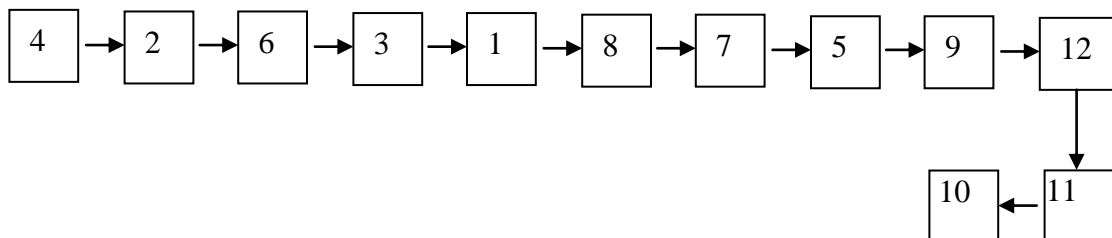
27. (2 points)

A.	B.	C.	D.
✓			

28. (2 points)

- A. ___T
- B. ___T
- C. ___T
- D. ___T

29. (4 points)



30. (2 points)

- a. ✓
- b. X
- c. ✓
- d. ✓

ANIMAL SCIENCES (11.5 points)

31. (2 points)

- a. T
- b. F
- c. F
- d. T

32. (5 points)

(A).

- a. _____ IV, V _____
- b. _____ II, III _____
- c. _____ I, II _____

(B).

- a. 10 mm
- b. -8 mm

33. (2.5 points)

- a. F
- b. F
- c. T
- d. T
- e. F

34. (2 points)

- a. ___F
- b. ___F
- c. ___T
- d. ___F

GENETICS & EVOLUTION (17 points)

35. (2 points)

Answer: _____12.5_ %

36. (2 points)

- a. ___F
- b. ___T
- c. ___F
- d. ___T

37. (2 points)

- I. ___ X
- II. ___ ✓
- III. ___ X
- IV. ___ ✓

38. (2 points)

Answer: _____ 0.0121 or 0.012

39. (2 points)

- a. ___F
- b. ___T
- c. ___F
- d. ___F

40. (2 points)

Answer: _____ 3/8 or 0.375

41. (3 points)

- a. ___F
- b. ___F
- c. ___T
- d. ___F
- e. ___F
- f. ___F

42. (2 points)

- a. ___T
- b. ___T
- c. ___F
- d. ___T

ECOLOGY (15 points)

43. (2 points)

- a. ___F
- b. ___F
- c. ___F
- d. ___T

44. (4 points)

(A)

a.	b.	c.	d.
	✓		

(B)

a. ____F

b. ____F

c. ____T

d. ____T

45. (2 points)

a.	b.	c.	d.
	✓		

46. (3 points)

A) ____F

B) ____T

C) ____T

47. (4 points)

Statement	Hypothesis	Graph
a.	2	Q
b.	1	P
c.	3	S
d.	4	R

ETHOLOGY (4 points)

48. (2 points)

- a. ___F
- b. ___F
- c. ___T
- d. ___F

49. (2 points)

- a. ___T
- b. ___F
- c. ___F
- d. ___T

BIOSYSTEMATICS (8.5 points)

50. (2 points)

Statements	Possible Explanation	True	False
a.	Pre-existing genes were silenced during early stages of evolution in Cnidaria.		✓
c.	Cnidaria are most probably the degenerative forms of Acoelomates with knockdown of mesoderm genes.		✓
d.	The Cnidarian genes possibly duplicated, mutated and later were switched on for new functions in Bilateria.		✓
e.	The genes pre-existed in Cnidaria-Acoela ancestor but, the expression was delayed till evolution of mesoderm.		✓

51. (3 points)

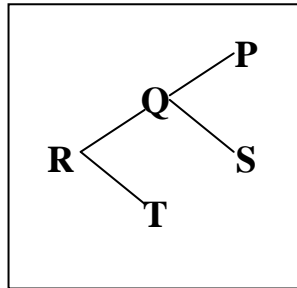
Cladogram	Correct	Incorrect
P		✓
Q		✓
R		✓

52. (2 points)

Cladogram	Correct	Incorrect
P		✓
Q	✓	
R		✓
S		✓

53. (1.5 points)

Answer:

******* END OF SECTION B *******