

# INDIAN NATIONAL BIOLOGY OLYMPIAD- 2010

## ANSWER KEY: SECTION A

Q. No.	a	b	c	d	Q. No.	a	b	c	d
1					18				
2					19				
3					20				
4					21				
5					22				
6					23				
7					24				
8					25				
9					26				
10					27				
11					28				
12					29				
13					30				
14					31				
15					32				
16					33				
17					34				

**ANSWER KEY: SECTION B****CELL BIOLOGY (20.5)**

35. (2 points)

a.	b.	c.	d.	e.	f.	g.
	√		√		√	√

36. (6 points)

(A)

a.	b.	c.
	√	

(B)

a.	b.	c.
	√	

(C)

a.	b.	c.
	√	

37. (3 points)

Answer: \_\_\_\_\_ c, e, g, d, b, k

38. (2 points)

(A) Answer: \_\_\_\_\_ a

(B) Answer: \_\_\_\_\_ b

39. (3 points)

(A)

a.	b.	c.	d.
√			

(B)

a.	b.	c.	d.
√			

40. (2.5 points)

Answer: \_\_\_\_\_ 8

41. (2 points)

Answer: \_\_\_\_\_  $9 \times 10^6$

**PLANT SCIENCES (4)**

42. (2 points)

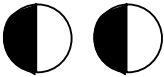
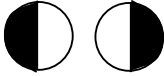
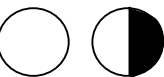
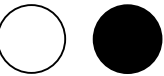
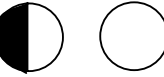
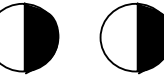
a.	b.	c.	d.
			√

43. (2 points)

a.	b.	c.	d.
√			

**ANIMAL SCIENCES (9)**

44. (4 points)

Visual Field defect (Black portion in the circle indicates loss of vision)	Lesion site
	4
	3
	
	2
	1
	

45. (5 points)

(A)

Conclusion	Yes	No
a.		√
b.	√	
c.		√
d.		√
e.		√
f.	√	

(B).

a.	b.	c.	d.
	√		

**GENETICS & EVOLUTION (9)**

46. (3 points)

(A)

a.	b.	c.	d.
√			

(B)

a.	b.	c.	d.
		√	

(C)

a.	b.	c.	d.
		√	

47. (2 points)

I	II	III	IV
		√	

48. (2 points)

Answer: \_\_\_\_\_ 28.571% or 29%

49. (2 points)

(A)

a.	b.	c.	d.
			√

(B)

a.	b.	c.	d.
		√	√

**ETHOLOGY (6.5)**

50. (3.5 points)

(A)

a.	b.	c.	d.	e.	f.
√				√	√

(B)

a.	b.	c.	d.
√			

51. (3 points)

(A)

$$rB = \underline{\hspace{2cm}} 0.5$$

$$C = \underline{\hspace{2cm}} 0.4$$

(B)

a.	b.	c.	d.
√			

**ECOLOGY (10)**

52. (5 points)

(A)

1. \_\_\_\_\_ 4000 cal

2. \_\_\_\_\_ 0 cal

3. \_\_\_\_\_ 8000 cal

(B)

1. \_\_\_\_\_ 2700 cal

2. \_\_\_\_\_ 840 cal

3. \_\_\_\_\_ 8408 cal

(C)

a.	b.	c.	d.
		√	



53. (2 points)

Strategy	Yes	No
1.	√	
2.		√
3.	√	
4.		√

54. (3 points)

- A. \_\_\_\_\_ 1
- B. \_\_\_\_\_ 5
- C. \_\_\_\_\_ 4
- D. \_\_\_\_\_ 1
- E. \_\_\_\_\_ 3
- F. \_\_\_\_\_ 2

**BIOSYSTEMATICS (7)**

55. (1 point)

a.	b.	c.	d.
	√		

56. (2 points)

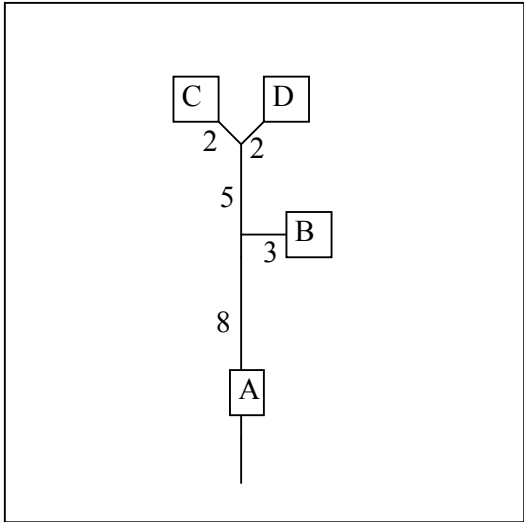
a.	b.	c.	d.
√	√	√	√

57. (4 points)

(A)

a.	b.	c.	d.
			√

(B)



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