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## Sri Lankan Biology Olympiad 2010



### Answer sheet

**Fill all your answers in the answer sheet.**

Please hand over this part to the Invigilator.

#### Part A – Multiple Choice Questions

- |      |   |   |   |   |   |      |   |   |   |   |   |
|------|---|---|---|---|---|------|---|---|---|---|---|
| (01) | 1 | 2 | 3 | 4 | 5 | (21) | 1 | 2 | 3 | 4 | 5 |
| (02) | 1 | 2 | 3 | 4 | 5 | (22) | 1 | 2 | 3 | 4 | 5 |
| (03) | 1 | 2 | 3 | 4 | 5 | (23) | 1 | 2 | 3 | 4 | 5 |
| (04) | 1 | 2 | 3 | 4 | 5 | (24) | 1 | 2 | 3 | 4 | 5 |
| (05) | 1 | 2 | 3 | 4 | 5 | (25) | 1 | 2 | 3 | 4 | 5 |
| (06) | 1 | 2 | 3 | 4 | 5 | (26) | 1 | 2 | 3 | 4 | 5 |
| (07) | 1 | 2 | 3 | 4 | 5 | (27) | 1 | 2 | 3 | 4 | 5 |
| (08) | 1 | 2 | 3 | 4 | 5 | (28) | 1 | 2 | 3 | 4 | 5 |
| (09) | 1 | 2 | 3 | 4 | 5 | (29) | 1 | 2 | 3 | 4 | 5 |
| (10) | 1 | 2 | 3 | 4 | 5 | (30) | 1 | 2 | 3 | 4 | 5 |
| (11) | 1 | 2 | 3 | 4 | 5 | (31) | 1 | 2 | 3 | 4 | 5 |
| (12) | 1 | 2 | 3 | 4 | 5 | (32) | 1 | 2 | 3 | 4 | 5 |
| (13) | 1 | 2 | 3 | 4 | 5 | (33) | 1 | 2 | 3 | 4 | 5 |
| (14) | 1 | 2 | 3 | 4 | 5 | (34) | 1 | 2 | 3 | 4 | 5 |
| (15) | 1 | 2 | 3 | 4 | 5 | (35) | 1 | 2 | 3 | 4 | 5 |
| (16) | 1 | 2 | 3 | 4 | 5 | (36) | 1 | 2 | 3 | 4 | 5 |
| (17) | 1 | 2 | 3 | 4 | 5 | (37) | 1 | 2 | 3 | 4 | 5 |
| (18) | 1 | 2 | 3 | 4 | 5 | (38) | 1 | 2 | 3 | 4 | 5 |
| (19) | 1 | 2 | 3 | 4 | 5 | (39) | 1 | 2 | 3 | 4 | 5 |
| (20) | 1 | 2 | 3 | 4 | 5 | (40) | 1 | 2 | 3 | 4 | 5 |

**Part B – Short Answer Questions**

1. (2 points)

Composition	Structure	Found in	Function	Substance
C, H,O	branched chain	animals microorganisms	food storage	
C, H, O	unbranched chain	animals microorganisms	Protection	
C, H, O, N	unbranched chain	plants	Protection	
C, H, O, N	Globular	animals	Food storage	

2. (2 points)

	Present (+) or absent (-) in Cyanobacteria	Contain (+) or do not contain (-) nucleic acids	Contain (+) or do not contain (-) enzymes	Mainly anabolic (+) or catabolic (-) in function
Ribosomes				
Lysosomes				
Mitochondria				
Chloroplasts				

3. (3 points)

	C3 photosynthesis	C4 photosynthesis
Phosphoglycerate		
phosphoglycolate		
phosphoglyceraldehyde		
Phosphoenol puruvate		
Pyruvate		
Ribulose bisphosphate		

4. (2 points)

.....

5. (2 points)

.....

6. (4 points)

Position	Water Potential
Soil solution	
Root hair cell	
Xylem vessel	
Leaf mesophyll cell	

7. (2 points)

1. .... 2. .... 3. .... 4. .... 5. ....

8. (2 points)

1. .... 2. .... 3. .... 4. ....

9. (4 points)

.....

10. (3 points)

Type of heart.	Type of circulation			
	Open	Closed	Single	double
Several pairs of lateral hearts				
Dorsal tubular heart				
Ventral muscular heart				

11. (5 points)

Vertebrates .....

Cephalopods .....

Asteroids .....

Polychaetes .....

Crustaceans .....

12. (2 points) .....

13. (3 points)

1. .... 2. .... 3. .... 4. .... 5. .... 6. ....

14. (5 points)

1. .... 2. .... 3. .... 4. .... 5. ....

15. (5 points)

1. .... 2. .... 3. .... 4. .... 5. ....

16. (2 points)

a. .... b. ....

17. ( 2 points)

1. .... 2. .... 3. .... 4. .... 5. ....

18. ( 4 points)

	Proterozoic (Precambrian)	Paleozoic	Mesozoic	Cenozoic
Amphibians				
Algae				
Trilobites				
Dinosaurs				
Mollusks				
Insects				
Apes				

19. ( 5 points)

Mammalia	.....	Insecta	.....
Gastropoda	.....	Bivalvia (Pelycopoda)	.....
Cehapapoda	.....	Amphibia	.....
Reptilia	.....	Annelida	.....
Aves	.....	Crustacea	.....

20. (2 points)

	Increase	Decrease
Evapo-transpiration		
Surface run-off		
Flash floods		
Oxygen released by vegetation		
CO2 absorbed by vegetation		
Landslides		
Leaching of minerals		
Surface temperature		