

**INDEX
NUMBER**

BA PROVINCIAL FREE BIRD INSTITUTE

ANNUAL EXAMINATION 2020

YEAR 12 BIOLOGY

ANSWER BOOKLET

**HAND IN THIS ANSWER BOOKLET TO THE SUPERVISOR
BEFORE YOU LEAVE THE EXAMINATION ROOM.**

**Mark
Gained:**

Circle the letter which represents the best answer.

(14 marks)

1	A	B	C	D
2	A	B	C	D
3	A	B	C	D
4	A	B	C	D
5	A	B	C	D
6	A	B	C	D
7	A	B	C	D
8	A	B	C	D
9	A	B	C	D
10	A	B	C	D
11	A	B	C	D
12	A	B	C	D
13	A	B	C	D
14	A	B	C	D

- 15. (i) **A** : _____ (1mark)
- (ii) **C** : _____ (1mark)
- (iii) **E** : _____ (1mark)

(iv) Name and description of process which leads to the formation of structure G

(1mark)

(v) Two changes :

(2marks)

16. Diameter of the field of view at 400x magnification :

(2marks)

Turn Over

STRAND 1 : STRUCTURE AND LIFE PROCESSES (continued)

17.

Description	Prokaryotes	Eukaryotes
Chromosome is circular		
Transcription & translation occurs sequentially		
Chlorophyll contained in the chromatophores		
Bidirectional DNA replication		

18.(i) Sequence of amino acids :

(2marks)

(1mark)

(ii) Effect of this mutation :

(1mark)

(iii) Term : _____

(1mark)

(iv) One harmful and one beneficial effect of mutation :

(2marks)

19.(i) Hydrolysis reaction and Condensation reaction :

(2marks)

(ii) Transcription and DNA Replication:

(2marks)

20. Reason :

(1mark)

21.(i)

(2marks)

Turn Over

STRAND 1 : STRUCTURE AND LIFE PROCESSES (continued)

(ii) Two features :

(2marks)

(iii) Disorder :

(1mark)

22. (i) Purpose :

(1mark)

(ii)

(1mark)

(iii)

(1mark)

(iv) _____

(1mark)

23.(i) Interpretation of results :

(2marks)

(ii) Reason :

(1mark)

24. (i)

(1mark)

(ii) Pure breeding :

(1mark)

Turn Over

STRAND 1 : STRUCTURE AND LIFE PROCESSES (continued)

(iii) Genotype of Strain A : _____

Genotype of Strain B : _____ (1mark)

(iv) Gamete types of Strain A : _____

Gamete types of Strain B : _____ (1mark)

(v) Genotype of F1 generation : _____

Phenotype of F1 generation : _____ (2marks)

(vi)

(2 marks)

25.(i) Reasons :

(2marks)

(ii)

Explanation :

(1mark)

26. Trend :

(2marks)

27.(i) Double fertilization :

(1mark)

(ii) Advantage of double fertilization :

(1mark)

Turn Over

STRAND 1 : STRUCTURE AND LIFE PROCESSES (continued)

28. Advantage of excreting uric acid in birds:

(1mark)

29. Trend shown and a reason for the trend seen :

(2marks)

STRAND 2 : LIVING TOGETHER

[14 marks]

1	A	B	C	D
2	A	B	C	D
3	A	B	C	D

(3marks)

4. (i) Zone : _____

Evidence :

(1mark)

(ii) Acclimation :

(1 mark)

(iii) Biological law :

(1 mark)

5.(i) Term :

(1 mark)

(ii)

A _____

B _____

(2marks)

6.(i) _____

(1 mark)

(ii) _____ 7.

(1 mark)

(i) Community pattern :

(1 mark)

Turn Over

STRAND 2 : LIVING TOGETHER (continued)

(ii) Abiotic factor :

(1mark)

(iii)

(1mark)

**STRAND 3: BIODIVERSITY, CHANGE
AND SUSTAINABILITY**

[12 marks]

1	A	B	C	D
2	A	B	C	D
3	A	B	C	D

(3marks)

4. (i) 3 Domains :

(3marks)

