

THE HONG KONG POLYTECHNIC UNIVERSITY  
HONG KONG COMMUNITY COLLEGE

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**Subject Title** : General Biology

**Subject Code** : CCN1109

**Session** : Semester Two, 2017/18

**Numerical Answers**

**Question B6**

- (a)(i) 333 nucleotides  
3 nucleotides code for 1 amino acid in prokaryotic cell  
Hence, number of amino acid =  $333/3 = 111$  amino acids
- (a)(ii) RNA and protein are being processed and some parts of mRNA and protein are being cut up/removed.
- (b) A:T= 1:1,  
so, A and T occupies  $18+18=36\%$   
The remaining =  $100\%-36\% = 64\%$   
G:C=1:1,  
hence, 32%