

THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

Subject : Human Biology II
Title
Session : Semester Two, 2016/17

Subject Code : CCN 2234

Numerical Answers

Question B3

- (a) rate of urine production = $\frac{600 \text{ ml}}{1 \times 60 \text{ min}} = 10 \text{ ml/min}$
- (b) rate of creatinine excretion = $10 \text{ ml/min} \times 30 \text{ mg/ml} = 300 \text{ mg/min}$
- (c) rate of glomerular filtration rate (GFR)
= $\frac{\text{rate of creatinine excretion}}{\text{Plasma creatinine conc.}}$
= $300 \text{ mg/min} / 300 \text{ mg/ml}$
= 1 ml/min