

THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

Subject Title : Electronic Circuits

Subject Code : CCN2268

Session : Semester Two, 2017/18

Numerical Answers

Question 1

- (a) -1
- (b) -50, -200

Question 2

- (e) gain = 1 and corner frequency = 1 rad/s

Question 3

- (c) $V_{dc} = 35.355V$
- (d) $0.862F$

Question 5

- (b) $I_B = 15.641\mu A$, $I_C = 0.00313A$, $V_{CE} = 11.867V$, $V_{BC} = -11.167V$
- (d) $A_v = -115.538$, $R_i = 1301.538\Omega$, $R_o = 1153.846\Omega$

Question 6

- (b) $V_{GSQ} = 4.25V$, $I_{DQ} = 0.75mA$, $V_{DSQ} = 28.75V$
- (d) $A_v = -4$, $R_i = 2.4k\Omega$, $R_o = 3.33 k\Omega$