UJIAN TENGAH SEMESTER GANJIL 2018/2019

MID SEMESTER EXAM OF ODD SEMESTER

FAKULTAS/FACULTY : TEKNIK/ENGINEERING			
JURUSAN/DEPARTMENT : Teknik Elektro/Electronic Engineering			
Mata Uji - *Course*	Elektronika Analog Lanjut	Hari / Tanggal – *Day/Date*	
Smt./Klas - *Class*	3/I	Jam ke - *Session*	
Penguji - *Examiner*	Dr. Ir. Bana Handaga, MT	Waktu - *Duration*	90 menit

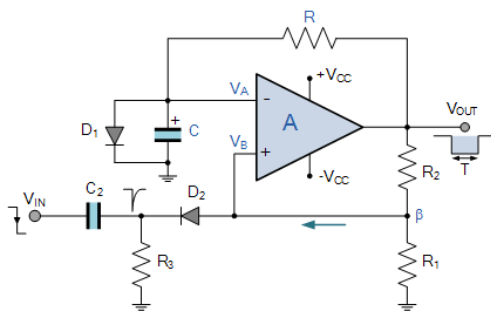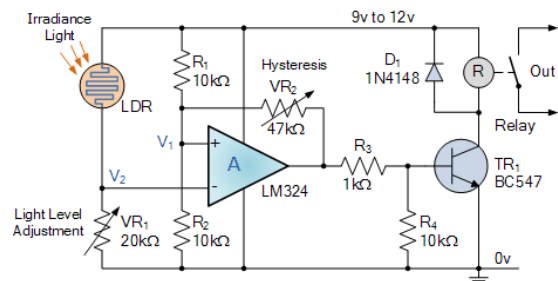**Open Cheatsheet (1 sheet A4)**

Figure-01

Figure-02

1. Descript the four ideal characteristics of an operational amplifier? (25%)
2. Design an inverting ampplifier which have voltage gain 40dB? How much phase shifted on output signal as compare with input signal? (25%)
3. See Figure-01, what the name of that circuit? How the circuit work? If the formula to calculate time constant is T = RC * ln (1 + R1/R2), calculate the T of that circuit in second! Draw the output signal (25%)
4. See Figure-02, analys how the circuit work? What is the main function of OpAmp there? What the condition which can cause the relay to become active? (25%)