



Menoufia University

Faculty of Electronic Engineering.

Department of Electronics and Electrical Communications

Mid-term examination

Second Year

Time: 30 minutes

الفصيل:

Subject: Electronic Circuits

Date: 03 - 04 - 2019

Part1

Answer the following questions Q1(10 Marks)

الرقم:

1-a- What is meant by class A amplifier? . Show that its maximum efficiency is 25%.

(4 Marks)

- 1- b-For the circuit shown in Fig.1
 - i -Draw the DC Equivalent circuit and determine the operating point $(I_{CO}, V_{CEO}).$
 - ii-Determine the collector current and the collector to emitter voltage for the circuit at the points of saturation and cutoff with an ac input (I_{csat} , $V_{ce\ cutoff}$). Assume $X_{c1}=X_{c2}=X_{c3}=0$ and β ac=200.
 - iii-Draw the DC and AC load lines.

(6 Marks)

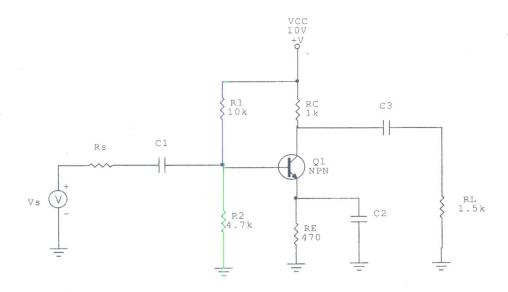


Fig.1