POSSESSION OF MOBILES IN EXAM IS UFM PRACTICE

Jaypee Institute of Information Technology, Noida
T-1 Examination, EVEN Semester-2017
B.Tech.II Semester

Course Title: Electrical Science-II/Basic Electronics Devices and Circuits
Course Code: 15B11EC211/10B11EC211
Max Marks: 20 **Max Time: 1 Hour**

All questions are compulsory.

Q1. Find the current i(t) after 0.2sec has elapsed for the circuit diagram shown in Fig.1. 2

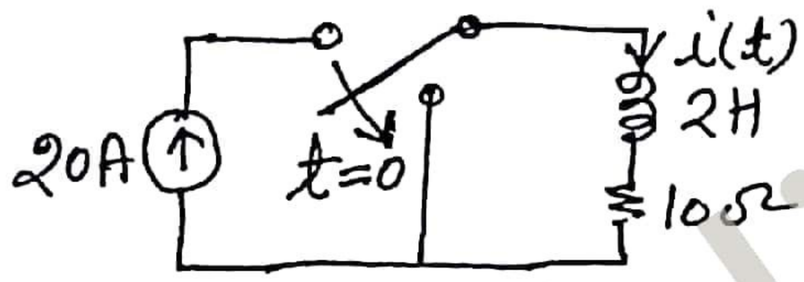

Fig.1.

Q2 Find the v(t) for t>0, for the circuit shown in Fig.2. Assuming I(0)=0 and v(0)=0. 5

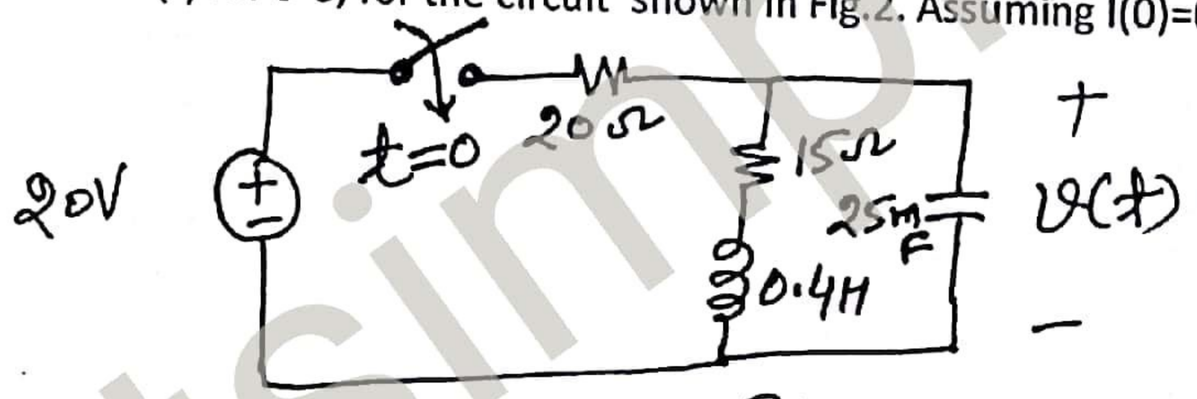

Fig.2.

Q3. Find the value of i(t) for the circuit given in Fig.3. 4

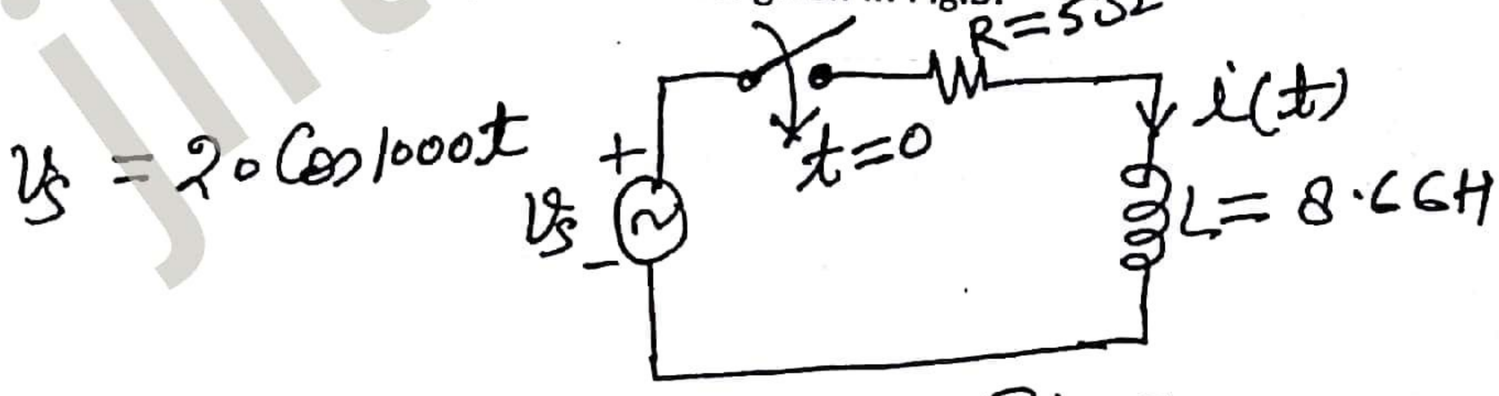

Fig.3.

Q4 Find the output voltage of the OPAMP circuit shown in Fig.4. 2

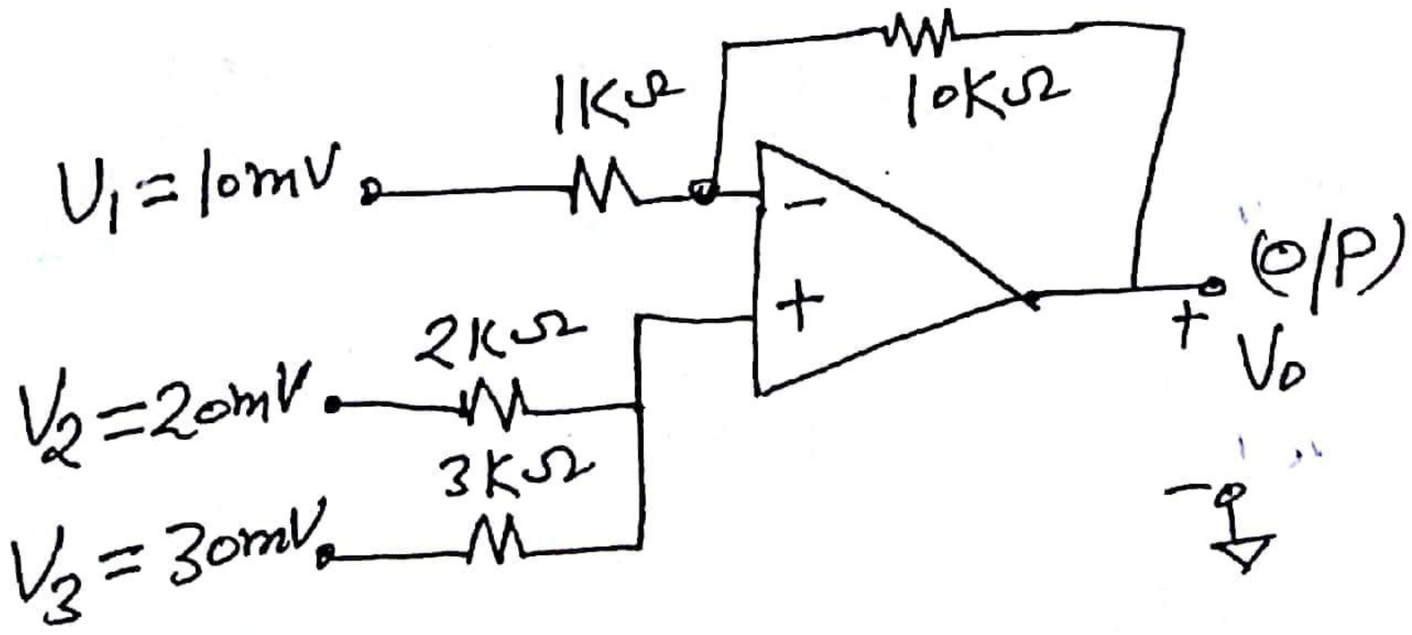

Fig.4

Q5. Draw the output waveform for the circuit shown in Fig.5. 2

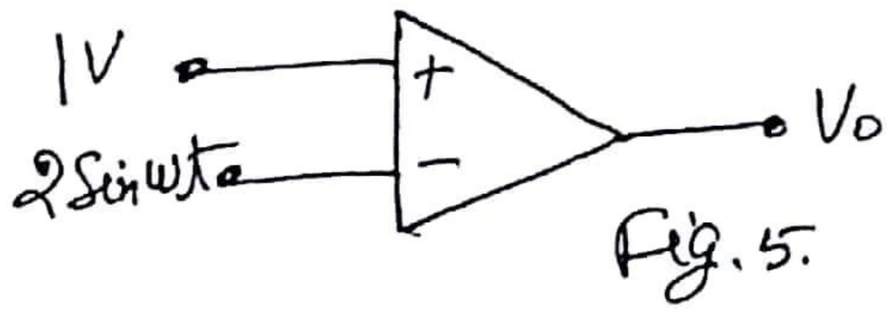

Fig. 5.

Q6.(i) When a series RC circuit is connected to a voltage V at t=0, the current passing through the circuit at t= (0^+) is 5*1

a) 0 b) infinity c) 1 d) V/R

(ii) Inductor does not allow sudden changes in .....

a) voltage b) power c) current d) all of the above

(iii) In the common mode, ...

a) both inputs are grounded

b) the output is connected to ground.

c) an identical signal appears on both the inputs

d) the output signal is in-phase with input.

(iv) If A_{DM}=3500 and A_{CM}=0.35, the CMRR is .....

a) 1225

b) 10,000

c) 90 dB

d) None of these

(v) The ideal OPAMP has the following characteristics.

a) $R_i=\infty$, $A=\infty$, $R_o=0$

b) $R_i=0$, $A=\infty$, $R_o=0$

c) $R_i=\infty$, $A=\infty$, $R_o=\infty$

d) $R_i=0$, $A=\infty$, $R_o=\infty$

xxxxx ALL THE BEST xxxxx