SANT GADGE BABA AMRVATI UNIVERSITY, AMRAVATI
Summer Examination 2020 Credit Point
HVPM's College of Engineering and Technology, Amravati
Department of Electronics & Tele communication Engineering
Bachelor of Engineering Sem. :- VI

Subject :- LIC   **Code :- 6XT2**

Que1)

 a)Explain the Internal block diagram of OP-AMP   (2 credit)
 b)Explain with circuit diagram the inverting & Non inverting OP AMP IC. (2 credit)
 c)Explain clipping &clamping circuit with waveform.(2 credit)
 d)Explain the block diagram of voltage regulator.(2 credit)
 e)Explain the block diagram of IC%%% timer. (1 credit)
 f)Explain the block diagram of PLL. (1 credit)

Que 2)
   a) Explain the circuit diagram of 'constant current source'of OPAMP (2 credit)
   b) What is an Integrator,Explain with circuit diagram & wave forms. (2 credit)
   c) What is Schmitt trigger circuit Explain with circuit diagram &Wave forms.(2 credit)
   d) Explain the block diagram of of IC723.   (2 credit)
   e) Explain an Astable multivibrator using Timer ic 555 (1 credit)
   f) Draw & Explain the Transfer characteristics of PLL.(1 credit)

Que 3)
a)What are the different frequency compensation methods of OPAMP.(2 credit)

b)Draw & explain the circuit diagram of instrumentation amplifier.(2 credit)

c)Draw & Explain thecircuit diagram og Ist order High pass butterworth filter using
   OPAMP.(2 cr)

d)Draw the pin diagram of voltage regulator IC317. (2 credit)

e)Explain monostable multivibrator using timer IC 555. (1 credit)

f)Draw the pin diagram of function generator IC8038. (1 credit)

Que 4)
a))Explain the Transfer characteristics of OPAMP. (2 credit)
b)Explain with circuit diagram the differntiator circuit using OPAMP. (2 credit)
c)Explain with diagram the Ist order Low Pass filter using OPAMP. (2 credit)
d)What is short circuit protection in Voltage regulator. (2 credit)
e)Explain the application of Timer IC as a FSK generator. (1 credit)
f) Explain IC-565 PLL as AM detector. (1 credit)