LIC (MOCK)

(1MKS)

1.	Specified value of CMRR for 741 opamp is _____.
	    70dB
	    80dB
	    90dB
	    100dB

2.	The function of a differential amplifier is
	    to amplify input signals
	    to amplify the difference between two input signals
	    to find difference between two input signals
	    to amplify and differentiate two input signals

3.	Average of two input current of op-amp is _____
	    Input offset Current
	    Input Bias Current
	    Input offset Voltage
	    Output Offset Current

4.	Select correct voltage gain formula for Non-inverting Amplifier
	    $-(Rf/R)$
	    $1+(Rf/R)$
	    (Rf/R)
	    1

5.	If step input is given to Integrator circuit output will be
	    Square wave
	    Ramp
	    Cosine
	    Impulse

6.	Differentiator circuit is what type of filter
	    Low pass filter
	    High pass filter
	    Band pass filter
	    Band reject filter

7.	RC Phase shift oscillator 's gain must be
	    3
	    29
	    6
	    1

8.	Which ADC is known as fastest ADC
	    Flash type ADC
	    Successive approximation ADC
	    Single slope ADC
	    Dual slope ADC

9.	What type of wave form generated by square wave generator, at across capacitor

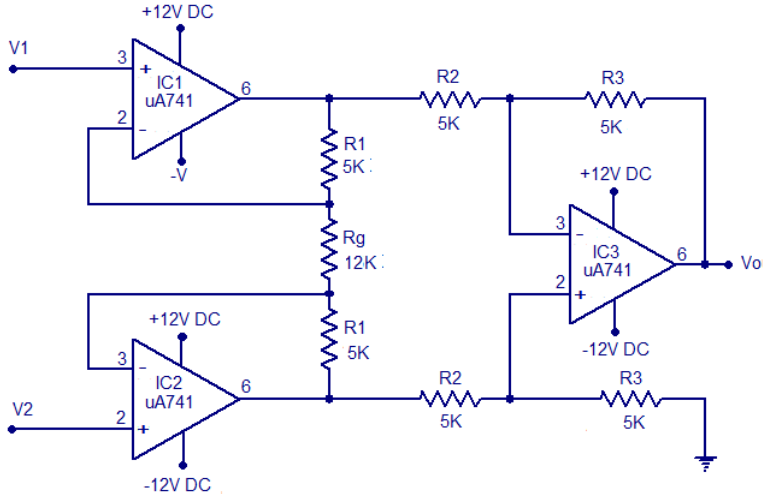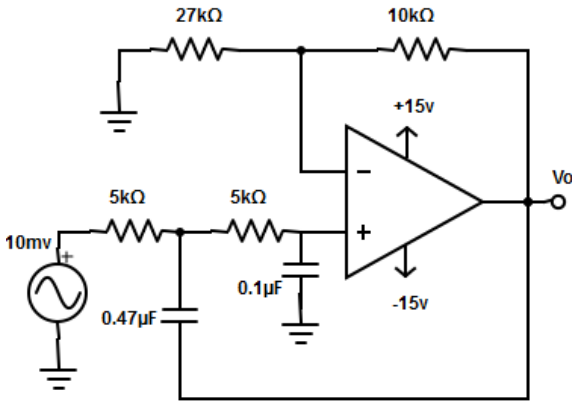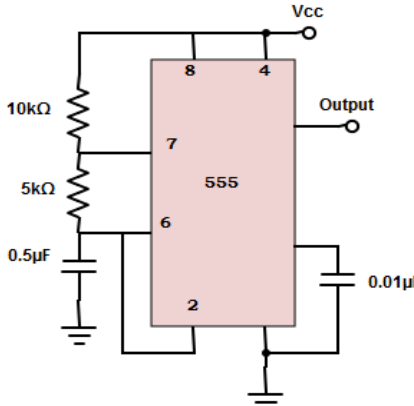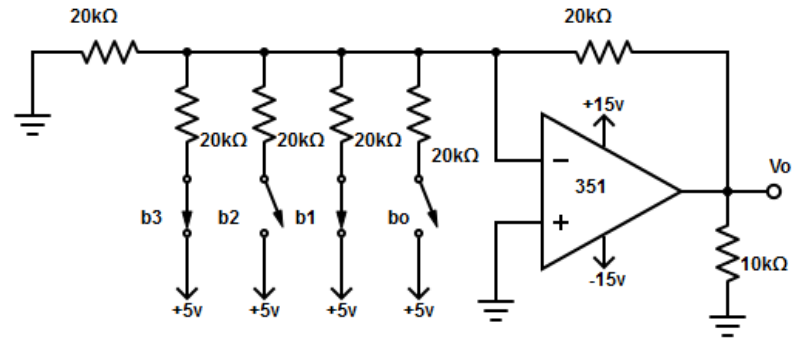|	
	square wave sawtooth Cosine Triangular wave

10.	Which voltage regulator IC is used for positive adjustable voltage
	    7805
	    317
	    337
	    7912

11.	In IC-555 pin no. 7 is known as
	    +Vcc
	    Threshold
	    Discharge
	    Ground

12.	Astable multivibrator does not require _____input
	
	    external trigger
	    internal trigger
	    Vcc
	    ground

13.	The frequency of the VCO can be changed by changing external component____
	    inductor
	    capacitor
	    transistor
	    transformer

14.	What will be the output of a IC 7812?
	    +12
	    -12
	    78
	    3

15.	The output voltage of phase detector use in PLL is
	    Phase voltage
	    Discrete voltage
	    Error voltage
	    Always 0

16.	What is the voltage gain of the Voltage follower circuit?
	    0
	    1
	    −1
	    infinity

(2MKS)

17.	Calculate the voltage regulation of a power supply having VNL = 12 V and VFL = 12 V 0%

	10% 20% 30%

18.	Wein bridge having R = 100kohms, C = 1nF. calculate frequency of oscillation.
	    1.6kHz
	    16kHz
	    650Hz
	    6.5kHz

19.	A Second Order Low Pass Filter having R1=R2 = 10kΩ and C1=C2 = 0.1uF. Calculate cut-off frequency
	    1.5kHz
	    159Hz
	    100Hz
	    2kHz

20.	Which are the correct statements for an integrator circuit - Statement 1- It is inverting amplifier Statement 2- It is non-inverting amplifier Statement 3- Uses positive feedback Statement 4- Uses negative feedback Statements 1& 3 are correct. Statements 2& 4 are correct. Statements 1& 4 are correct. Statements 2& 3 are correct.

21.	Series pass transistor always operates in the_____region in a linear IC voltage regulator
	    Active
	    Saturation
	    Cut-off
	    transient

22.	What is the value of current I_{ADJ} in Voltage regulator IC -LM317?
	    10 micro Amperes
	    50 micro Amperes
	    100 micro Amperes
	    150 micro Amperes

23.	Voltage 0.3 V can be rectified by
	    Half wave rectifier
	    Full wave rectifier
	    precision rectifier
	    bridge rectifier

24.	The range of frequencies over which the PLL can acquire lock with an input signal is called as capture range
	    True
	    False

25.	In IC-555 Voltage at pin no. 5 is
	1/3 Vcc
	2/3 Vcc
	1/2 Vcc
	Vcc
26.	Change in output voltage for a change in input voltage is known as
	Load regulation
	Line regulation
	voltage regulation
	current regulation

(2MKS)

27.	Calculate gain for given circuit
	18
	5
	1.8
	0.5
28.	Calculate the high cut-off frequency for the circuit given
	589Hz
	185Hz

147Hz
104Hz

29.	Find Ton time for given circuit.

5ms
3ms
2ms
1ms

30.	Calculate the output voltage for LM317 regulator, if R1=240Ω R2=5kΩ.

27v
32v
34v
22v

31.	To design Monostable M/V with delay time 11ms and C= 0.1uF. What will be the value of R=?

100Ω
1kΩ
100kΩ
1MΩ

32.	For the given circuit find the output voltage?

-4.6V
-3.13V
-3.83V
-5V

33.	An emitter bias Dual Input Balanced Output differential amplifier has VCC=12v and RE=2kΩ. Find IE 7.42mA 2.8mA 10mA 8.6mA