Online Assessment (Even Sem/Part-I/Part-II Examinations 2019 - 2020

Course Name - ANALOG ELECTRONICS II
Course Code - DECE 402

* You can submit the form ONLY ONCE.
* Fill the following information for further process.

* Required

1. Email address *

2. Name of the Student *

3. Enter Full Student Code *

4. Enter Roll No *

5. Enter Registration No *

6. Enter Course Code *

7. Enter Course Name *

8. Select Your Programme *

Mark only one oval.

- Diploma in Pharmacy
- Bachelor of Pharmacy
- B.TECH.(CSE)
- B.TECH.(ECE)
- BCA
- B.SC.(CS)
- B.SC.(BT)
- B.SC.(ANCS)
- B.SC.(HN)
- B.Sc.(MM)
- B.A.(MW)
- BBA
- B.COM
- B.A.(JMC)
- BBA(HM)
- BBA(LLB)
- B.OPTOMETRY
- B.SC.(MB)
- B.SC.(MLT)
- B.SC.(MRIT)
- B.SC.(PA)
- LLB
- PGDHM
- Dip.CSE
- Dip.ECE
- Dip.EE
- Dip.CE
- Dip.ME
- MCA
- M.SC.(CS)

- M.SC.(ANCS)
- M.SC.(MM)
- MBA
- M.SC.(BT)
- M.TECH(CSE)
- LLM
- M.A.(JMC)
- M.A.(ENG)
- M.SC.(MATH)
- M.SC.(MB)

Answer all the questions. Each question carry one mark.

9. 1. The problem of passive filters is overcome by using

Mark only one oval.

- Analog filte
- Active filter
- LC filter
- A combination of analog and digital filters

10. 2. Find out the incorrect statement about active and passive filters

Mark only one oval.

- Gain is not attenuated in active filter
- Passive filters are less expensive
- Active filter does not cause loading of source
- Passive filters are difficult to tune or adjust

11. 3. Mention the technique used in photolithography process

Mark only one oval.

- X-ray lithographic technique
- Ultraviolet lithographic technique
- Electron beam lithographic technique
- All of these

12. 4. Which among the following is used to increase phase angle between different voltages?

Mark only one oval.

- Phase detector
- Window detector
- Zero crossing detector
- None of these

13. 5. Name the comparator that helps to find unknown input.

Mark only one oval.

- Time marker generator
- Zero crossing detectors
- Phase meter
- Window detector

14. 6. Zero crossing detectors is also called as

Mark only one oval.

- Square to sine wave generator
- Sine to square wave generator
- Sine to triangular wave generator
- All of these

15. 7. Why clamp diodes are used in comparator?

Mark only one oval.

- To reduce output offset voltage
- To increase gain of op-amp
- To reduce input offset current
- To protect op-amp from damage

16. 8. Depending on the value of input and reference voltage a comparator can be named as

Mark only one oval.

- Voltage follower
- Digital to analog converter
- Schmitt trigger
- Voltage level detector

17. 9. How to limit the output voltage swing only to positive direction?

Mark only one oval.

- Combination of two zener diodes
- Combination of zener and rectifier diode
- All of these
- Combination of two rectifier diodes

18. 10. In which configuration a dead band condition occurs in schmitt trigger

Mark only one oval.

- Differential amplifier with positive feedback
- Voltage follower with positive feedback
- Comparator with positive feedback
- None of these

19. 11. Oscillators are used to _____ AC voltage

Mark only one oval.

- Prevent
- Generate
- Amplify
- Rectify

20. 12. Negative resistance are incorporated in oscillator for _____

Mark only one oval.

- Sustained oscillation
- Damped oscillation
- Biasing the oscillator
- Increasing amplitude of oscillation

21. 13. The output of a stable oscillator have _____

Mark only one oval.

- Constant amplitude
- Varying amplitude
- Constant amplitude at high frequencies only
- Constant amplitude at low frequencies only

22. 14. Which of these is incorrect for an operational amplifier?

Mark only one oval.

- It has a high voltage gain
- It is a direct coupled amplifier
- It is only useful for amplifying AC signals
- It was originally designed to perform mathematical operations

23. 15. In an ideal op-amp, which is not true?

Mark only one oval.

- Open loop voltage gain is infinite
- Input resistance is infinite
- Slew rate is infinite
- CMRR is zero

24. 16. Given that CMRR is 100dB. Input common-mode voltage is 12 V. Differential voltage gain is 4000. Calculate output common-mode voltage.

Mark only one oval.

- 48V
- 0.48V
- 20V
- 11V

25. 17. What is the use of the compensation capacitor in op-amp?

Mark only one oval.

- Improves the amplification of op-amp
- Decreases the slew rate of op-amp
- Increases the bandwidth of op-amp
- Op-amp acts as all pass filter

26. 18. RC phase shift oscillators contain a minimum of _____ Phase shift network.

Mark only one oval.

- 1
- 2
- 3
- 0

27. 19. One phase shift network of an RC phase contain _____ inductor.

Mark only one oval.

- 1
- 2
- 3
- 0

28. 20. Which of the following is not a reason for beginning oscillations in RC phase shift oscillator?

Mark only one oval.

- Phase shift network
- Noise inherent in transistor
- Minor variations in the voltage DC source
- Square wave signal

29. 21. The gain device in the Hartley oscillator act as a _____

Mark only one oval.

- Low pass filter
- High pass filter
- Band pass filter
- Band rejection filter

30. 22. Example for a self-limiting oscillator is _____

Mark only one oval.

- Hartley oscillator
- Weinbridge Oscillator
- RC phase shift oscillator
- Astable multivibrator

31. 23. Equivalent circuit of crystal oscillator contains _____

Mark only one oval.

- Two inductors and two capacitors
- One inductors and two capacitors
- Two inductors and one capacitors
- One inductors and one capacitors

32. 24. The crystal can be used to replace inductor in _____

Mark only one oval.

- RC phaseshift oscillator oscillator
- Colpitts oscillator
- Clapp oscillator
- Weinbridge oscillator

33. 25. Which of the following effect illustrate basic working of a quartz crystal oscillator?

Mark only one oval.

- Photovoltaic effect
- Piezo electric effect
- Electro-magnetic effect
- Electron excitation effect

34. 26. Compared to ceramic oscillator crystal oscillators are _____

Mark only one oval.

- Less reliable
- Less costly
- More accurate
- They are same

35. 27. The crystal resonator frequency will change according to operating time, this phenomenon is termed as _____

Mark only one oval.

- Magnus effect
- Retrace
- Aging
- Moore's effect

36. 28. How to improve CMRR value

Mark only one oval.

- Increase common mode gain
- Decrease common mode gain
- Increase Differential mode gain
- Decrease differential mode gain

37. 29. The open loop voltage gain of an ideal OPAMP has

Mark only one oval.

- unity
- small
- infinite
- none of these

38. 30. The maximum rate of change of output voltage per unit time is

Mark only one oval.

- CMRR
- Slew rate
- offset voltage
- voltage gain