

## DISCRETE ELECTRONIC CIRCUIT SEM IV

(CBGS SUB CODE: EXC 402)

### SAMPLE QUESTIONS (EACH QUESTION CARRY TWO MARKS)

1. ten-times change in frequency is called a

A. octave.

**B. decade.**

C. decimal.

D. none of the given

2. Each RC circuit causes the gain to drop at a rate of \_\_\_\_\_ dB/decade.

**A. 20**

B. 10

C. 6

D. none of the given

3. Current amplification of 2000 is a gain of

a) 3 dB

b) 66 dB

**c) 20dB**

d) 200dB

4. In the initial stages of an amplifier we use

a) RC coupling

b) Transformer coupling

c) Direct coupling

d) none of the given

5. RC coupling is used for..... amplification

- a) **voltage**
- b) current
- c) power
- d) none of the given

6. Transformer coupling is used for

- a) voltage
- b) current
- c) **power**
- d) none of the given

7. Lower and upper cut-off frequencies are called

- a) sideband
- b) resonant
- c) half resonant
- d) **half-power**

8. CMRR is

- a. Common mode relative ratio
- b. Common mode reaction ratio
- c. Common mode rejection ratio
- d. None of the above

9. Oscillator needs

- a. positive feedback

b. negative feedback

c. zero feedback

d. can't say

10.

12. In Miller's theorem, what is the constant K?

a) Total voltage gain

b) Internal voltage gain

c) Internal current gain

d) Internal power gain

13. Wien bridge oscillator is

a. LC oscillator

b. RC oscillator

c. C oscillator

d. None of the above

14. Hartley oscillator is

a. LC oscillator

b. RC oscillator

c. C oscillator

d. None of the above

15. Dual Input unbalanced Output differential amplifier has

a. two inputs and output is measured between two collector

b. Single input and output is measured between two collector

c. two inputs and output is measured at one collector end

d. single inputs and output is measured between two collector

16. In ideal Differential Amplifier, if same signal is given to both inputs, then output will be

- a. Same as input
- b. Double the input
- c. Not equal to zero
- d. Zero

17. Common mode rejection ratio is

- a.  $A_d/A_{cm}$
- b.  $A_{cm}/A_d$
- C.  $A_d \times A_{cm}$
- d.  $A_d + A_{cm}$

18. In a phase shift oscillator, we use ..... RC sections

- a. Two
- b. Three
- c. Four
- d. None of the above

19. When a negative voltage feedback is applied to an amplifier, its bandwidth.....

- a. Is increased
- b. Is decreased
- c. Remains the same
- d. Insufficient data

20. Maximum efficiency of resistance loaded class A power amplifier is

- a. 5%

b.50%

c.30%

d.25%

21. In class A operation, the operating point is located ..... of the load line

a. at cut-off

**b. at middle**

c. at saturation

d. none of the given

22. Two transistor class B power amplifier is commonly called as

a. Dual

**b. Push Pull**

c. Symmetrical

d. Differential

23. Output stage of a multistage amplifier usually employ

**a. push pull amplifier**

b. preamplifier

c. Class A power amplifier

d. None of the given

24. Push Pull circuit must use

a. Class A

**b. Class B**

c. Class AB

d. Class C

25. Class.... Amplifier has highest efficiency

a. C

b. A

c. AB

d. B