

BEL Solved Paper

1. Rise time of an amplifier is defined as time required
 - a. To change from 0 to 100 % of its final value
 - b. To change from 0 to 50 % of its final value
 - c. To change from 10 to 90 % of its final value
 - d. To change from 10 to 100 % of its final value

2. High speed amplifier design emphasized on
 - a. Extremely small bandwidth
 - b. Very slow response
 - c. Unity gain bandwidth after 10 MHz
 - d. None of these

3. Tuned amplifier having the frequency range between
 - a. 150 KHz ? 50 MHz
 - b. 100 Hz ? 100 KHz
 - c. 100 KHz ? 120 KHz
 - d. 50 MHz ? 100 MHz

4. The resonance frequency of a tuned circuit made up of R, L, C is given by
 - a. $\frac{1}{2} \sqrt{\frac{L}{C}}$
 - b. $2 \sqrt{\frac{L}{C}}$
 - c. $2 \pi \sqrt{\frac{L}{C}}$
 - d. $\frac{\sqrt{L}}{2C}$

5. The voltage follower can be obtained using operational amplifier
 - a. Without any feedback
 - b. Series parallel feedback of unity
 - c. Parallel feedback
 - d. Series feedback

6. Fidelity of the amplifier is when
 - a. It is a linear amplifier
 - b. It does not add or subtract any spectral components
 - c. It amplifies each component by the same amount
 - d. All of the above

7. What would be the output when two input sine waves of frequency 50 KHz and 100 KHz passed through an amplifier in the medium signal
 - a. 50 KHz and 100 KHz
 - b. 100 KHz and 200 KHz
 - c. 50 KHz and 150 KHz
 - d. All of the above

8. The important application of Schmitt trigger is
 - a. To convert slowly varying input voltage to abrupt voltage change
 - b. To convert abruptly varying input voltage into slowly varying output
 - c. To change the frequency of the input
 - d. None of these

9. Meaning of decoding is
 - a. Binary addition
 - b. Data transmission
 - c. Demultiplexing
 - d. Storage of binary information

10. Approximately how many number of gates are incorporated in SSL chip
 - a. 12
 - b. 100
 - c. Excess of 100
 - d. Excess of 1000

11. The circuit diagram represents which one of the following
 - a. Half adder
 - b. Full adder
 - c. Exor gate
 - d. AND gate

12. Flip flop cannot be called as
 - a. Bistable multivibrator
 - b. 1 Bit memory unit
 - c. latch
 - d. combinational circuit

13. The important use of low pass filter in power supply is
 - a. To get the regulation in the output voltage
 - b. To filter out the ripple frequency
 - c. To increase the current rating
 - d. To convert AC into DC

14. Binary equivalent of the decimal number 145 is
 - a. 10010001
 - b. 1001011
 - c. 1010001
 - d. 1100010

15. In which of the following gate the output will be high when all the maintained at high level
 - a. NOR
 - b. AND
 - c. NAND
 - d. EXOR

16. Which of the following definition is true in the De Morgan's theorem
 - a. Multiplication symbols are replaced by addition symbol
 - b. Addition symbols are replaced by Multiplication symbol
 - c. Each of the terms are expressed in the complementary form
 - d. All of the above

17. 8421/BCD code fro a decimal number 149 is
 - a. 0001 0100 1001
 - b. 10010101
 - c. 10101001
 - d. None of these

18. Combinational circuit are mainly characterized by
 - a. Output depends upon the previous state & presents state
 - b. Output depends upon the input at that particular instant
 - c. Output depends upon the presents state & the clock state
 - d. Output does not depends upon the input at all

19. A flip flop is defined as
 - a. A bistable device with two complementary outputs

- b. It is memory element
- c. It will respond to input and it is a basic memory element
- d. All of the above

20. Four bit code is called

- a. Nibble
- b. Byte
- c. Word
- d. Register