**13th Feb 2012, Electronics II Quiz 2(B)**

Name: Roll Number

Instructions: 1: Marking would be done only for correct answers, no partial marks for procedure.

2: Write/tick your answer in the space provided only.

Q1: In a fixed-bias network, the input signal Vi is applied to the \_\_\_\_\_\_\_\_\_\_\_ of the transistor while the output Vo is off the \_\_\_\_\_\_\_\_\_\_\_\_.

Q2: Which of the following is (are) related to an emitter-follower configuration?

A. The input and output signals are in phase. B. The voltage gain is slightly less than 1.

C. Output is drawn from the emitter terminal. D. All of the above

Q3: At what region of operation is the base-emitter junction forward biased and the base-collector junction reverse biased?

A. Saturation B. Linear or active C. Cutoff D. None of the above

Q4: Which of the following voltages must have a negative level (value) in any npn bias circuit?

A. VBE B. VCE C. VBC D. None of the above

Q5: For the dc analysis the network can be isolated from the indicated ac levels by replacing the capacitor with \_\_\_\_\_\_\_\_.

A: an open circuit equivalent B: a short circuit equivalent C: a source voltage D: None

Q6: The emitter resistor in an emitter-stabilized bias circuit appears to be \_\_\_\_\_\_\_\_ in the base circuit.

A: larger B. smaller C. the same D. None of the above

Q7: If VCC = +18 V, voltage-divider resistor R1 is 4.7 k, and R2 is 1500, what is the base bias voltage?

A. 8.70 V B. 4.35 V C. 2.90 V D. 0.7 V

Q7: The C-B configuration is used to provide which type of gain?

A: voltage B. current C. resistance D. power

Q8: The Q point on a load line may be used to determine:

A. VC B. VCC C. VB D. IC

Q9: A transistor may be used as a switching device or as a:

A. fixed resistor B. tuning device C. rectifier D. variable resistor

Q10: With low-power transistor packages, the base terminal is usually the:

A: tab end B. middle C. right end D. stud mount

Q11: With a PNP circuit, the most positive voltage is probably:

A: ground B. VC C. VBE D. VCC

Q12: The Thevenin equivalent network is used in the analysis of the \_\_\_\_\_\_\_\_ circuit.

A: fixed bias B. emitter-stabilized bias C. voltage divider D. voltage feedback

Q13: Which is the largest current in pnp transistor

A: Base B: collector C: emitter D: any