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SUBJECT CODE NO:- B-2185
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. F.Y (Sem.-II) Examination OCT/NOV 2019
Electronics Paper-IV
Amplifiers

[Time: 1:30 Minutes]

[Max.Marks:50]

Please check whether you have got the right question paper.

- N.B
1. Attempt all questions
 2. Illustrate your answer with proper diagrams
- Q.1 Draw a neat circuit diagram of voltage divider Bias. Explain its working to setup I_{CQ} & V_{CEQ} on the D.C load line. Hence explain how stabilization of Q point is achieved. 20
- OR
- Draw a neat circuit diagram of h- parameter equivalent circuit of B.J.T. Explain its working as an amplifier in C.E. Mode and hence derive the expression for its voltage gain A_u . 20
- Q.2 With neat diagram of feedback and proper analysis show that there is a stabilization of gain by – ve feedback. 20
- OR
- Write short notes on any four 20
- a) Block diagram of Multistage Amplifiers
 - b) Decibel gain
 - c) frequency response
 - d) Feedback principle
 - e) Operating point
 - f) .h- parameters
- Q.3 Attempt the following Multiple choice questions with proper answer 10
- 1) operating point means -----
 - a) zero signal I_c and V_{CE}
 - b) zero signal I_c & V_{be}
 - c) zero signal I_B & V_{BE}
 - d) zero signal I_c & V_{be}
 - 2) For transistor there are ----- h- parameters
 - a) 2
 - b) 3
 - c) 4
 - d) 5
 - 3) Open loop gain of an Amplifier is
 - a) A
 - b) $A\beta$
 - c) β
 - d) A'
 - 4) voltage gain of R-C coupled Amplifier is ----- over mid frequency region
 - a) High
 - b) Low
 - c) Constant
 - d) undefined
 - 5) The trans conductance g_m is -----
 - a) h_{ie}/h_{fe}
 - b) h_{oe}/h_{fe}
 - c) h_{fe} / h_{ie}
 - d) h_{ie}/h_{oe}

- 6) An amplifier circuit consisting more than two stages is known as -----
 - a) 2- stage Amp.
 - b) cascaded Amp
 - c) Multistage Amp
 - d) single stage
- 7) The unit of hie is -----
 - a) Ampers
 - b) ohms
 - c) volts
 - d) watts
- 8) Transistor biasing is provided by
 - a) base biasing
 - b) Emitter above
 - c) collector biasing
 - d) none of above
- 9) Normal working of transistor provides
 - a) Reverse Bias
 - b) forwards Bias
 - c) F-R – Bias
 - d) R.F. bias
- 10) Decibel is the measure of
 - a) Resistance
 - b) Current
 - c) Power
 - d) Voltage