Total No. of Printed Pages: 2

SUBJECT CODE NO: - YY-2391
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. (CBCGS) (Pattern 2022) F.Y SEM II
Examination April / May - 2024
Electronics Paper-IV Amplifiers
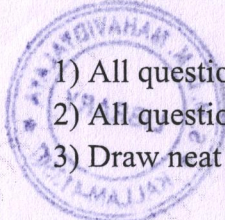
[Time:1:30 Hours]   [Max. Marks: 40]

Please check whether you have got the right question paper.

N. B   1) All questions are compulsory.
              2) All questions carry equal marks.
              3) Draw neat circuit diagram whenever necessary.

Q.1 What is transistor biasing? Explain base resistor bias method.   10

OR

Explain reduction of nonlinear distortion by negative feedback.   10

Q.2 Explain common emitter amplifier using h-parameter equivalent circuit   10

OR

With neat diagram explain direct coupled amplifier   10

Q.3 Write short notes on any two of the following.   10
   a) Faithful amplification
   b) The source follower FET amplifier.
   c) Multistage transistor amplifier.
   d) Stabilization of transistor.

Q.4 Attempt following multiple choice questions.   10

1) An emitter follower output impedance is _____.
   (a) High   (b) Low
   (c) Zero   (d) Very high.

2) Thermal runway occur when _____
   (a) Collector is reverse biased   (b) Transistor is not biased
   (c) Emitter is forward biased   (d) Junction capacitor is high

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3) If both input and output is voltage then the amplifier is called _____
    (a) Voltage amplifier   (b) Current amplifier
    (c) Trans conductance   (d) None of the above

4) Negative feedback in an amplifier improves
    (a) The signal to noise ratio at the output.
    (b) Reduces distortion
    (c) Both a and b.
    (d) None of the above.

5) RC coupling is used for _____ amplification.
    (a) Voltage   (b) Current
    (c) Power   (d) None of the above.

6) The best frequency response is of _____ coupling.
    (a) RC   (b) Transformer
    (c) Direct   (d) None of the above

7) Gain Av = _____
    (a) Vi/Vo   (b) Vo/Vi
    (c) Vo+Vi   (d) None of the above

8) Which feedback reduces the amplifier gain
    (a) Positive   (b) Negative
    (c) Both a and b   (d) None of the above

9) The best method of transistor bias is _____.
    (a) Base resistor method   (b) Voltage divider method
    (c) Biasing with feedback resistor   (d) None of the above

10) The negative feedback circuits are of _____ types
    (a) One   (b) Two
    (c) Three   (d) Four