Chapter 6.0 Hamtronics
Section 6.6 Amps & Tubes

G4A04 (B) p.231
What reading on the plate current meter of a vacuum tube RF power amplifier indicates correct adjustment of the plate tuning control?
A. A pronounced peak
B. A pronounced dip
C. No change will be observed
D. A slow, rhythmic oscillation

G4A05 (C) p.231
What is a reason to use Automatic Level Control (ALC) with an RF power amplifier?
A. To balance the transmitter audio frequency response
B. To reduce harmonic radiation
C. To reduce distortion due to excessive drive
D. To increase overall efficiency

G4A07 (D) p.225
What condition can lead to permanent damage to a solid-state RF power amplifier?
A. Insufficient drive power
B. Low input SWR
C. Shorting the input signal to ground
D. Excessive drive power

G4A08 (D) p.231
What is the correct adjustment for the load or coupling control of a vacuum tube RF power amplifier?
A. Minimum SWR on the antenna
B. Minimum plate current without exceeding maximum allowable grid current
C. Highest plate voltage while minimizing grid current
D. Maximum power output without exceeding maximum allowable plate current

G6A10 (A) p.229
Which element of a triode vacuum tube is used to regulate the flow of electrons between cathode and plate?
A. Control grid
B. Heater
C. Screen Grid
D. Trigger electrode

G6A11 (B) p.228
Which of the following solid state devices is most like a vacuum tube in its general operating characteristics?
A. A bipolar transistor
B. A field effect transistor
C. A tunnel diode
D. A varistor
G6A12 (A) p.229
What is the primary purpose of a screen grid in a vacuum tube?
A. To reduce grid-to-plate capacitance
B. To increase efficiency
C. To increase the control grid resistance
D. To decrease plate resistance

G7B08 (B) p.226
How is the efficiency of an RF power amplifier determined?
A. Divide the DC input power by the DC output power
B. Divide the RF output power by the DC input power
C. Multiply the RF input power by the reciprocal of the RF output power
D. Add the RF input power to the DC output power

G7B10 (D) p.227
Which of the following is a characteristic of a Class A amplifier?
A. Low standby power
B. High Efficiency
C. No need for bias
D. Low distortion

G7B11 (B) p.228
For which of the following modes is a Class C power stage appropriate for amplifying a modulated signal?
A. SSB
B. CW
C. AM
D. All of these choices are correct

G7B12 (D) p.228
Which of these classes of amplifiers has the highest efficiency?
A. Class A
B. Class B
C. Class AB
D. Class C

G7B13 (B) p.231
What is the reason for neutralizing the final amplifier stage of a transmitter?
A. To limit the modulation index
B. To eliminate self-oscillations
C. To cut off the final amplifier during standby periods
D. To keep the carrier on frequency

G7B14 (B) p.227
Which of the following describes a linear amplifier?
A. Any RF power amplifier used in conjunction with an amateur transceiver
B. An amplifier in which the output preserves the input waveform
C. A Class C high efficiency amplifier
D. An amplifier used as a frequency multiplier