

**EXAMINATION FOR THE ISSUE OF AMATEUR RADIO OPERATORS**  
**LICENCE BY DIRECTOR GENERAL OF TELECOMMUNICATIONS**  
**(General Class)**

**Fundamentals of Electricity & Radio Communications - 2000**

Answer for all question

One hour

- (1) In a series tuned (RLC) cct, at the resonance
  - (a) Current is maximum
  - (b) Impedance is maximum
  - (c) Current is minimum
  - (d) Voltage across C is minimum
- (2) A FET behaves as
  - (a) A current controlled current source
  - (b) A variable voltage regulator
  - (c) A constant voltage regulator
  - (d) A voltage controlled current source
- (3) The best frequency demodulation is the
  - (a) PLL discriminator
  - (b) envelop detector
  - (c) Ratio detector
  - (d) Pulse averaging discriminator
- (4) The main reason of image interference is
  - (a) High signal noise ratio
  - (b) Low signal noise ratio
  - (c) poor selectivity
  - (d) poor gain
- (5) An open or short transmission line has a standing wave ratio of
  - (a) Infinity
  - (b) Seventy
  - (c) Three Hundred
  - (d) Zero
- (6) A single-winding transformer is known as a
  - (a) Normal transformer
  - (b) special transformer
  - (c) Auto transformer
  - (d) Toroid transformer
- (7) For best selectivity and stability the IF should be
  - (a) Low
  - (b) Infinity
  - (c) Average
  - (d) Zero
- (8) The instrument used for d.c. measurement only is
  - (a) Permanent magnet type
  - (b) Induction type
  - (c) Electromagnetic type
  - (d) Moving iron type
- (9) In which type of transmitter class C amplifiers are not used
  - (a) DSB
  - (b) AM
  - (c) FM
  - (d) CW

- (10) The following can not be used to remove the unwanted side band in SSB  
(a) RC filter system (b) LC filter system  
(c) Balance shift method (d) Phase shift method.
- (11) A dummy load for use at VHF should be made from  
(a) Wire - wound resistors (b) Carbon resistors  
(c) Metal oxide resistors (d) Electric - fire heating elements
- (12) Which of the following would be used to examine the shape of a waveform,  
(a) an oscilloscope (b) an absorption  
(c) a digital frequency counter (d) a dip meter
- (13) Fading can be caused by  
(a) A poor antenna  
(b) Horizontal polarization  
(c) Interaction of the SKY and ground wave  
(d) Poor Coaxial cable
- (14) A VFO should ideally be followed by  
(a) a buffer amplifier (b) a power amplifier  
(c) a class C amplifier (d) a notch filter
- (15) Electrostatic instruments are not free from effect of  
(a) Inductance (b) Stray electrostatic field  
(c) Magnetic field (d) Resistance
- (16) De-emphasis circuit is used  
(a) before demodulation (b) after demodulation  
(c) before detection (d) after detection
- (17) Generally the value of a component increases as the temperature  
(a) decrease (b) remains constant  
(c) increases (d) none of above
- (18) If a transmitter is overdriven it is likely to cause  
(a) harmonics (b) sub-harmonics  
(c) a change in the modulation (d) small DC variation
- (19) If the frequency stability of a transmitter is poor it may cause  
(a) electric shocks (b) operation out of band  
(c) excessive collector dissipation (d) excessive power to the drawn from the supply
- (20) In order to radiate, an electromagnetic wave must have  
(a) E field (b) H field (c) E and H field (d) air to travel in

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**(General Class)**  
**Licensing Conditions, Operating Practice and Procedure - 2000**

Answer for all questions.

Two Hours

- (1) Abbreviation AA means
  - (a) End of message of communication
  - (b) End of transmission
  - (c) Invitation to a particular station to transmit
  - (d) Waiting period
- (2) Amplitude Modulated Single Side-Band full carrier is denoted by
  - (a) A1A
  - (b) J3E
  - (c) A3E
  - (d) H3E
- (3) Abbreviation KN means
  - (a) invitation to any station to transmit
  - (b) end of transmission
  - (c) end of message or communication
  - (d) invitation to a particular station to transmit
- (4) "Increase Power" is given by Q code
  - (a) QRS
  - (b) QRQ
  - (c) QRP
  - (d) QRO
- (5) "Your frequency varies" is given by Q - code
  - (a) QRK
  - (b) QRI
  - (c) QRH
  - (d) QRG
- (6) Abbreviation for "Stand by" is
  - (a) SK
  - (b) VA
  - (c) AR
  - (d) AAS
- (7) Abbreviation VA means
  - (a) end of work
  - (b) end of message
  - (c) stand by
  - (d) closing station
- (8) A log book must be kept for
  - (a) main station address and all temporary locations
  - (b) main station address only
  - (c) all temporary locations
  - (d) mobile operations

- (9) An amateur station log book shall be maintained in a  
 (a) Writing pad (b) An exercise book serially numbered and stapled  
 (c) Daily Diary (d) A folder with loose leaf
- (10) When using voice transmission  
 (a) Use secret cipher  
 (b) Reduce the power on the transmitter  
 (c) Switch off the transmitter  
 (d) Communicate in Q- code
- (11) Direction CQ calls should  
 (a) be made (b) not be made  
 (c) be acknowledged (d) not be acknowledged
- (12) The Q-code QSD means  
 (a) Your signals are mutilated  
 (b) Are you busy  
 (c) Stop sending  
 (d) I am ready
- (13) The Q-code QRO means  
 (a) Change transmission to another frequency  
 (b) I will call you again  
 (c) Shall I increase transmitter power  
 (d) I am ready
- (14) The Q-code for "send more slowly" is given by  
 – (a) QSR (b) QSU (c) QRX (d) QSS
- (15) The Q-code for "what working frequency will you use" is  
 (a) QRL (b) QRT (c) QRX (d) QSS
- (16) Abbreviation KA means  
 (a) Stating signal (b) End of work  
 (c) Please do not interfere (d) End of QSO
- (17) Abbreviation AR means  
 (a) End of work (b) Send faster  
 (c) Waiting period (d) end of transmission
- (18) In amateur transmission it is permissible to use  
 (a) Phone patched traffic  
 (b) Secret codes  
 (c) The words of a third party publicly spoken  
 (d) None of the above

- (19) To prevent interference to other users of an amateur band a transmitter should initially be tuned into a
- (a) Antenna
  - (b) Dummy load
  - (c) Real load
  - (d) None of the above
- (20) In a RST code "Tone" is given by
- (a) RS
  - (b) RT
  - (c) T
  - (d) S
- (21) Listen on the frequency
- (a) Before initialing a CQ call
  - (b) After initialing a CQ call
  - (c) While initiating a CQ call
  - (d) None of the above
- (22) Q - code abbreviation QSV means —
- (a) Send a message
  - (b) Do not send a message
  - (c) Send a series of VVVS
  - (d) Do not send a series of VVVS
- (23) Which of the following types of messages can be received by an amateur license
- (a) Secret transmission
  - (b) Air force transmission
  - (c) Standard frequency transmission
  - (d) Diplomatic transmission
- (24) Q - code abbreviation QTH means
- (a) What is your location
  - (b) Is my signal fading
  - (c) Is my keying defective
  - (d) What is the strength of my signal
- (25) Abbreviation K means
- (a) What is the correct true
  - (b) How many messages have you send
  - (c) What is your location
  - (d) Invitation to any station to transmit.