

## Examrace

# Multiple Choice Questions for Electronics Engineering Part 4

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Q.54 In a tunnel diode, electrons can tunnel through the P-N junction mainly because

1. impurity level is low
2. they have high energy
3. barrier potential is very low
4. depletion layer is extremely thin

Answer: 4

Q.55 Most of the transistors are NPN type and not PNP type because

1. NPN transistor gives large voltage gain
2. NPN transistors are more negative than PNP transistors
3. In NPN transistor, the current conduction is by free electrons which are less obiles than holes
4. We can have high conduction is NPN transistors

Answer: 4

Q.56 In a transistor

1. Emitter is heavily doped while the collector moderately doped
2. Collector base junction is forward biased
3. Emitter is made wider than collector
4. The input resistance is much larger than output resistance

Answer: 1

Q.57 If the instantaneous current in a ckt is given  $I=2 \cos (t + \varphi)$  amperes, the r.m.s. value of t current is

1. 2 amp
2.  $\sqrt{2}$  amp
3.  $2\sqrt{2}$  amp

4. Zero amp

Answer: 2

Q.58 In an A.C. ckt, voltage and current are given  $V = 100 \sin (100t)$  volts  $i = 100 \sin (10t + \frac{\pi}{3})$  mA. The power dissipated in the ckt is

1.  $10^4$  watts
2. 10 watts
3. 2.5 watts
4. 5 watts

Answer: 3

Q.59 A 0.05 H-F capacitor charges through a resistor and is discharged through a resistor  $20K \Omega$ . The time constant of the circuit is

1. the same both during charging and discharging
2. larger during charging process
3. larger during discharging process
4. none

Answer: 2

Q.60 The basic element of radio communication system which generates radio waves is

1. micro phone
2. transmitter
3. transmitting antenna
4. Loudspeaker

Answer: 2

Q.61 The input frequency of a bridge rectifier is 50 its output frequency will be

1. 25 Hz
2. 50 Hz
3. 75 Hz
4. 100 Hz

Answer: 4

Q.62 Which of the following voltage is used represent binary '1' in digital circuits.

1. 0 V
2. 15 V
3. +5 V
4. 25 V

Answer: 3

Q.63 Hexadecimal number system is used as hand language for representing

1. decimal number
2. binary number
3. octal number
4. all the above

Answer: 2

Q.64 Logic state 0 in positive logic corresponds to

1. zero voltage
2. positive voltage
3. higher voltage level
4. lower voltage level

Q.65 The o/p of a 2 - input OR gate is 1 when its

1. both inputs are 1
2. both inputs are 0
3. either input is 1
4. either input is 0

Answer: 3

Q.66 TTL logic family is most popularly used industries because it

1. provides greater operating speed
2. has a good fan in & fan out
3. has easy interface with other digital circuitry
4. all the above

Answer: 2

Q.67 Transformer cores are laminated in order to

1. simplify its construction
2. minimise eddy current loss
3. reduce cost
4. reduce hysteresis loss

Answer: 2

Q.68 The external characteristic of a shunt generator can be obtained directly from its – characteristic

1. internal
2. open-circuit
3. load-saturation
4. performance

Answer: 2

Q.69 Load saturation characteristic of a d.c. generator gives relation between

1. V and  $I_a$
2. E and  $I_a$
3.  $E_o$  and  $I_f$
4. V and  $I_f$

Answer: 4

Q.70 The biggest advantage of T-T connection over the V-V connection of 3-phase power transformation is that it provides.

1. a set of balanced voltages under load
2. a true 3-phase, 4-wire system
3. a higher ratio of utilization
4. more voltages

Answer: 3

Q.71 The biggest advantage of T-T connection over the V-V connection of 3-phase power transformation is that it provides.

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Answer: 2

Q.72 U.H.F. band covers the range of

1. 0-300 KHz
2. 3-30 MHz
3. 300-3000 KHz
4. 300 MHz - 3 GHz

Answer: 4

Q.73 The ripple factor of a bridge rectifier is

1. 0.48
2. 0.812
3. 1.11
4. 1.21

Answer: 1

Q.74 The high level language is/are

1. Machine language
2. BASIC
3. Assembly language
4. PASCAL

Answer: 2,4

Q.75 The high level language can be translated into machine language with the help of

1. Assembler
2. Stack pointer
3. Compiler
4. Multiplexer

Answer: 3

Q.76 In the emitter characteristic of UJT, the negative resistance portion.

1. lies in the cut-off region
2. continues up to peak point
3. lasts until the valley point is reached
4. does not exist

Answer: 3

Q.77 After firing as SCR, the gating pulse is removed. The current in the SCR will

1. remain the same
2. immediately fall to zero
3. rise up
4. None

Answer: 1

Q.78 When reverse bias is applied to a junction diode, it

1. Increases the potential barrier
2. Decreases the potential barrier
3. greatly increases the minority carrier current
4. greatly increases the majority carrier current

Answer: 1

Q.79 Transformer cores are laminated in order to

1. simplify its construction
2. minimise eddy current loss
3. reduce cost
4. reduce hysteresis loss

Answer: 2

Q.80 When a P – N junction is forward biased

1. Only electrons in N-region are injected into P-region
2. Only holes in P-region are injected into N-region

3. Majority carriers in each region are injected into the other region
4. Minority current is reduced to zero

Answer: 3

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