# ITI Quiz - 30-june-2026 02:12 PM

Q. ID: ITISKILL2137A6

June 2026 | **Sri Mahalingeswara ITI** | Question Paper

**Duration: 30 Mins** | **Total Marks: 100** | **ID: ITISKILL2137A6**

Student Name: _____ Roll No: _____

**1.** When does the zener diode begins to conduct in the reverse biased condition?

A) After the barrier voltage cancelled
B) When bias voltage reached 0.7V
C) Voltage across it reached the zener voltage
D) Voltage across zener reached 0.3V

**2.** What is the unit of inductance?

A) Henry
B) Farad
C) Watts
D) Joule

**3.** Which device is used to produce hard copy of a document in a computer?

A) Printer
B) Monitor
C) Speaker
D) Modem

**4.** Why the transformer core is made as thin laminations?

A) To minimize eddy current losses
B) To increase core saturation losses
C) To increase the hysteresis losses
D) To maximize eddy current losses

**5.** Which is the first step followed in troubleshooting of electronic circuit?

A) Chemical test
B) Thermal test
C) Physical and sensory test
D) Mechanical test

**6.** What is the switching speed of solid state relays?

A) 1 to 25 nano seconds
B) 10 to 60 nano seconds
C) 1 to 100 milli seconds
D) 1 to 100 nano seconds

**7.** How the solid state relays are working for increased lifetime?

A) No moving parts to wear and tear
B) Slower in operations
C) Spark generated during switching
D) Bulky profile

**8.** Which of the device is opto-coupled TRIACS?

A) BT136
B) 2N2648
C) MOC3020
D) B3202

**9.** What is successive approximation (SAR)?

A) Method of D/A conversion
B) Method of D/A conversion
C) Method of SMT
D) Method of IC fabrication

**10.** Which coding system for transistor type numbering system is followed by American standard?

A) JIS standard
B) Home codes
C) PRO-ELECTRON standard
D) JEDEC standard

**11.** What is the type of transistor BPX81?

A) NPN - Photo transistor
B) PNP - Photo transistor
C) Audio frequency transistor
D) Uni - Junction transistor

**12.** What is the name of effect of changing current in one coil, induces EMF in nearby coil?

A) Induction
B) Coupling
C) Self induction
D) Mutual induction

**13.** What is the percentage of charge accumulated by the capacitor at the end of 2 time constant limit?

A) 0.864
B) 0.4
C) 0.5
D) 0.632

**14.** What is the gate current (Ig) of the JFET, when reverse biased?

A) Practically very low
B) Practically infinity
C) Practically zero
D) Practically unity

**15.** Which unit is used to measure capacitance value?

A) Mho
B) Ohm
C) Farad
D) Henry

**16.** Why the electronic device IGBT is preferred over the power MOSFET?

A) Higher driving power requirement
B) Low switching speed
C) Suitability for medium power applications
D) Higher switching repetition rates

**17.** What is the use of screw driver?

A) Tighten or loosen screws
B) Tighten or loosen rivets
C) Tighten or loosen bolts
D) Hold the screws

**18.** What is the maximum current ratings of solid state relays available in high power packages?

A) 100 Amp
B) 10 Amp
C) 40 Amp
D) 1 Amp

**19.** What type of control is used for FET?

A) Voltage controlled device
B) Current controlled device
C) Resistance controlled device
D) Frequency controlled device

**20.** What is the relation of wire diameter with current carrying capacity of conductor?

A) Inversely proportional
B) Drops more voltage across it
C) Wire gets less heat
D) Directly proportional

**21.** Which is the major factor determines the quality performance of A/D converter?

A) Depends on data latch
B) Conversion cycle
C) Measuring parameter
D) Measuring parameter

**22.** Which section is used by the processor to save instructions?

A) System unit
B) Memory
C) Micro processor
D) Graphics card

**23.** Which is the drain current (Id) in JFET?

A) Electron from source to drain
B) Electron from drain to source
C) Electron from gate to source
D) Electron from drain to gate

**24.** What is the main problem caused for severe pitting in relays?

A) Low contact current
B) Chatter during a slow release
C) Excessive number of operations
D) Excessive contact current

**25.** What is the range of temperature used in soldering station?

A) 600 Degree Centigrade to 800 Degree Centigrade
B) 800 Degree Centigrade to 1000 Degree Centigrade
C) 150 Degree Centigrade to 450 Degree Centigrade
D) 450 Degree Centigrade to 600 Degree Centigrade

**26.** How the single strand wire is called?

A) Flexible wire
B) Twisted wire
C) Multistrand wire
D) Hook - up wire

**27.** What is the name of the process of converting AC into DC voltage?

A) Amplifying
B) Rectifying
C) Inverting
D) Demodulating

**28.** What is the purpose of using positive feed back in amplifiers?

A) To produce oscillation
B) To produce demodulation
C) To produce modulation
D) To produce multiplexion

**29.** What is the input impedance of IGBT?

A) High input impedance
B) Medium input impedance
C) Low input impedance
D) Infinity input impedence

**30.** Which memory device loses data on power failure?

A) CD ROM
B) Hard disc
C) ROM
D) RAM

**31.** Which control is used in repulsion type moving iron instrument to keep the pointer at zero position?

A) Air damping control
B) Magnetic repulsion control
C) Spring control
D) Magnetic attraction control

**32.** How the mechanical zero error of panel meter is corrected?

A) By replacing moving coil
B) By replacing moving coil
C) By replacing pointer
D) Keeping the meter in vertical position

**33.** What is the typical forward voltage drop of the RED colour LED?

A) 2 V
B) 2.2 V
C) 2.1 V
D) 1.8 V

**34.** At which temperature the 6040 solder start meeting?

A) 100 Degree Centigrade
B) 200 Degree Centigrade
C) 300 Degree Centigrade
D) 380 Degree Centigrade

**35.** What is the reason for electric fire?

A) Overloading
B) Proper earthing
C) Deviation
D) Open circuit

**36.** Which impurity is added to pure semiconductor to form N-type material?

A) Gallium
B) Indium
C) Arsenic
D) Boron

**37.** When does the rosin flux melts in a soldering process?

A) When the solder is melting
B) During the solder is melting
C) After the solder melts
D) When the solder is heated

**38.** What is the name of the procedure carried out to ensure the trustworthy standards of the measuring instrument?

A) Re-alignment
B) Testing standards
C) Range test
D) Calibration

**39.** How the lamp failures caused by the high inrush currents in lamp dimmer circuits using TRIAC is eliminated?

A) Using Safety resistor
B) By the fuse
C) Using MCB
D) By soft start circuit

**40.** Which is the N - channel FET?

A) AC supply connected to drain termin
B) Main current flows through N-doped material
C) S-terminal connected to positive
D) Main current flows through P-doped material

**41.** Which method is adopted to charge a car battery with voltage rating of 2.3 V per cell?

A) Float charging method
B) Constant voltage charging method
C) Trickle charging method
D) Constant current charging method

**42.** Which method is followed to troubleshoot the problem causing section by the symptom?

A) Logical approach method
B) Sensory test method
C) Trial and error method
D) Step by step method

**43.** What is the advantage of using bias in transistor circuits?

A) Easily sets saturated
B) Gives maximum distortion
C) Provides positive feed back
D) Never reach saturation

**44.** Which configuration of transistor amplifier is most commonly used in electronic circuits?

A) Common collector configuration
B) Common base configuration
C) Common emitter configuration
D) Common drain amplifier configuration

**45.** Which gauge number of rosin-cored solder is suitable for soldering medium sized joints?

A) 22 gauge rosin cored
B) 18 gauge rosin cored
C) 16 gauge rosin cored
D) 24 gauge rosin cored

**46.** Which type of defects are occurring in solid state relays?

A) Tendency to fail shorted
B) Intermittent working
C) Tendency to fail open
D) More sparking

**47.** Which characteristics enable the deflection of pointer in the attraction type moving iron meter?

A) Deflection is independent of current direction
B) Deflection is inversely proportional to current
C) Deflecting and controlling torques are
D) Weight of the soft iron pieces

**48.** What is the percentage of conductivity of electric current in aluminium?

A) 0.47
B) 0.56
C) 0.22
D) 0.76

**49.** What is the advantage of SMPS in computer?

A) Servicing of SMPS is easy
B) Bulky
C) High frequency noise low
D) High efficiency

**50.** Which soldering instrument has hot air blowing facility?

A) Soldering iron
B) Temperature controlled soldering iron
C) Wave soldering machine
D) Soldering station

**51.** What is the effect of electric shock at very low voltage levels (Less than 40v)?

A) Muscles contact
B) Unpleasant tingling sensation
C) Burning of the skin
D) Fibrillation

**52.** How many gauge numbers in SWG, changed to double the cross section area of the conductor?

A) Three gauge sizes decreased
B) Four gauge sizes increased
C) Five gauge sizes increased
D) Two gauge sizes decreased

**53.** What is the range of photo current for photo transistor BPX 38?

A) 0.2MA to 1.6MA
B) 0.1MA to 1.2MA
C) 0.3MA to 2.7MA
D) 0.4MA to 3.8MA

**54.** What is the advantage of MOSFET?

A) Superior current conduction capability
B) Low gate signal power requirements
C) Very low on-state voltage
D) Low driving power

**55.** What is the power dissipation of the standard TTL chip?

A) 5 mW/gate
B) 20 mW/gate
C) 15 mW/gate
D) 10 mW/gate

**56.** What is the function of solid state relay(SSR)?

A) Low pass filter
B) High gain amlifier
C) High speed switching
D) High frequency oscillator

**57.** Which bearing is supporting the shaft of moving coil assembly in a PMMC instrument?

A) Bush bearings
B) Gun metal bearings
C) Jewelled bearings
D) Steel bearings

**58.** What is the peak to peak voltage in a bridge rectifier circuit with load current of 10 mA, capacitance of 470 F and 50 Hz supply frequency?

A) 3.567 v
B) 1.525 v
C) 0.213 v
D) 2.134 v

**59.** Which is the output pin number IC 555 timer?

A) Pin number 6
B) Pin number 5
C) Pin number 5
D) Pin number 3

**60.** How batteries are classified based on their working?

A) Dry cells and alkaline cells
B) Cylindrical cells and rectangular cells
C) Button cells and lithium cells
D) Primary cells and secondary cells

**61.** Which ratio of tin-lead combination is used for electronic component soldering work?

A) 60:40:00
B) 20:40
C) 63:37:00
D) 40:60

**62.** What is the defect on the soldered joint, if it is cooled by blowing air?

A) Dry solder joint
B) Dull grainy surface
C) Pits and voids
D) Poor wetting

**63.** Which battery is used for cellular phones?

A) Sodium sulphur
B) Nickel ion
C) Zinc chloride
D) Lithium ion

**64.** Which three terminal voltage regulator IC has adjustable output?

A) LM 317
B) LM 305
C) LM 100
D) LM 105

**65.** Which device is a unipolar transistor?

A) FET
B) UJT
C) IGBT
D) BJT

**66.** Which factor influences the severity of electrical shock?

A) Duration of current passing
B) Person receives the shock
C) Very low DC voltage
D) Level of current in micro ampere

**67.** How gate is biased in JFET?

A) Reverse biased
B) Dual supply function
C) AC supply function
D) Forward biased

**68.** What is the effect of over heating on soldering a joint?

A) Poor wetting
B) Cold joint
C) Flux trapped against lead
D) Dull grainy surface

**69.** Which characteristics exhibits the current conduction increases while the voltage across the devices decreases in a DIAC?

A) Nonlinearity characteristics
B) Linearity characteristics
C) Negative resistance characteristics
D) Positive resistance characteristics

**70.** What is the disadvantage of the two diode full wave rectifier compared with a bridge rectifier?

A) DC output level is higher
B) The need of bulky transformer
C) The ripple frequency is higher
D) Each diode carries half the load current

**71.** What is the purpose of covering provided over the electrical conductor?

A) Increase current flow
B) Decrease voltage rating
C) Protection against weather
D) Reduce current flow

**72.** What is the name of flux used for soldering electronic components?

A) Resin
B) Mild acid
C) Organic acid
D) Rosin

**73.** What is the forward voltage drop of single colour Red LED?

A) 2 V
B) 2.1 V
C) 1.8 V
D) 2.2 V

**74.** What is the name of multi-stage amplifiers?

A) Cascoded amplifier
B) Complementry symmetry amplifier
C) Cascaded amplifier
D) Darlington pair amplifier

**75.** What is the full form of the abbreviation CD-ROM in computer?

A) Connectivity Digital Read Only Memory
B) Computer Disk Read Only Memory
C) Classified Device Read Only Memory
D) Compact Disk Read Only Memory

**76.** What is the purpose of standard wire gauge (SWG)?

A) Measure current
B) Measure voltage
C) Measure insulation of wire
D) Measure diameter of wire

**77.** What is the use of clamper in electronic circuits?

A) For DC component restoration
B) For negative peak clipping
C) For positive peak clipping
D) For slicing both peaks

**78.** What is the effect on the current flow with increased diameter of conductor?

A) More voltage dropped
B) Opposes more current
C) Allows high current flow
D) Resistance increases

**79.** What is the maximum power dissipation Pmax for BF 245B?

A) 100 mw
B) 200 mw
C) 300 mw
D) 400 mw

**80.** What is the current rating of voltage regulator IC LM338K?

A) 5A
B) 4A
C) 3A
D) 2A

**81.** What is the minimum forward current If for single colour LEDs?

A) 30 MA
B) 5 MA
C) 10 MA
D) 20 MA

**82.** Why transistors made of silicon is preferred over the germanium semiconductor material?

A) Higher thermal stability
B) Complex design
C) Requires complicated bias arrangement
D) Silicon transistor needs low cut-in-voltage

**83.** When does the biased positive clipper removes the portion of input signal?

A) During the negative half cycle of input
B) Signal voltage becomes greater than bias battery voltage
C) Signal voltage equals the bias battery voltage
D) Signal voltage is lesser than bias battery

**84.** Which circuit uses photo-darlington devices?

A) DC circuits
B) Counter circuits
C) AC powered circuits
D) Amplifier circuits

**85.** Which frame is used for winding the coil of PMMC meter?

A) Aluminium frame
B) Ceramic frame
C) Wooden frame
D) Steel frame

**86.** Why NPN type of transistors are preferred over the PNP type transistors?

A) NPN has higher switching speed
B) NPN has good bias stability
C) NPN has lower switching speed
D) Low operating voltage

**87.** Which is the N - channel FET?

A) AC supply connected to drain termin
B) Main current flows through N-doped material
C) Main current flows through P-doped material
D) S-terminal connected to positive

**88.** Which electrical quantity controls the operation of the bipolar transistor device?

A) Voltage
B) Frequency
C) Energy
D) Current

**89.** Which electrolyte is used in lead-acid battery?

A) Zinc chloride
B) Potassium hydroxide solution
C) Sulphuric acid
D) Alkaline solution

**90.** What is the name of defect if the flux is unable to remove the tarnish from the soldered joint?

A) Poor wetting
B) Cold joint
C) Dull gravity surface
D) Pits and voids

**91.** What in the current gain of a common ? base amplifier?

A) Infinity
B) Greater than 1
C) Less than 1
D) Unity

**92.** What is the result of hysteresis loss in magnetic material?

A) Energy loss takes place
B) Magnetic flux increases
C) Eddy current decreases
D) Back emf increases

**93.** Which semiconductor devices are composed inside the solid state relays?

A) Thyristor and transistors
B) MOSFETs and IGBTs
C) UJYs and FETs
D) Diodes and transistors

**94.** What is the full form of the abbreviation SPDT used in switches?

A) Single Pole Single Throw
B) Single Phase Dual Throw
C) Single Pole Double Throw
D) Shared Pole Double Throw

**95.** Why the solvent Iso Propyl Alcohol (IPA) is used on the solder joint?

A) To break down the acid within the joint
B) Remove residual flux and prevent corrosion
C) To help the corrosive action
D) Cleaning before soldering the joint

**96.** What type of packaging is generally used to transistors utilized for low power amplification?

A) Ceramic packaging
B) Plastic packaging with metal heatsinks
C) Metal packaging
D) Plastic packaging

**97.** Which terminal of the meter is connected for measuring electrical quantity?

A) Input terminal
B) Pointer mechanism
C) Output terminal
D) Output terminal

**98.** How the sensitivity of voltmeter is determined?

A) Maximum voltage measurement
B) Meter coil resistance
C) FSD current
D) Ohms per volt rating

**99.** Which codes are stored in computer ROM BIOS chip?

A) Temporary codes
B) Change codes
C) Permanent codes
D) Partial change codes

**100.** Why the complementary - symmetry amplifier is preferred over the other types of amplifier configurations?

A) To eleminate the transformer
B) To minimize the gain
C) To get less distortion
D) To get more voltage gain