

PROVISIONAL ANSWER KEY

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Question1:-The capacity of a battery is expressed in

- A:-Amperes
- B:-Ampere-hour
- C:-Watts
- D:-Watt-hour

Correct Answer:- Option-B

Question2:-Speed of a universal motor is

- A:-Dependent on frequency of supply
- B:-Proportional to frequency of supply
- C:-Independent of frequency of supply
- D:-None of these

Correct Answer:- Option-C

Question3:-A cylindrical wire one meter in length has a resistance of 100Ω . What would be the resistance of wire made from the same material if both the length and cross-sectional area are doubled?

- A:-200 ohm
- B:-400 ohm
- C:-100 ohm
- D:-50 ohm

Correct Answer:- Option-C

Question4:-Semi conductor have ____ temperature Co-efficient

- A:-Zero
- B:-Positive
- C:-Negative
- D:-None of these

Correct Answer:- Option-C

Question5:-Power factor of a R-L-C parallel circuit is

- A:-zero
- B:-0.8 lagging
- C:-0.8 leading
- D:-Unity

Correct Answer:- Option-D

Question6:-____ damping method is common in moving coil instrument

- A:-Eddy current
- B:-Fluid
- C:-Air
- D:-Spring

Correct Answer:- Option-A

Question7:-An auto-transformer consists of 200 turns. Winding is connected to 200V AC supply main for getting 24V output. The winding should be tapped at ____ turns number

- A:-12
- B:-24
- C:-100
- D:-72

Correct Answer:- Option-B

Question8:-a six pole induction motor is connected to 50 c/s supply. It is running at 970 rpm. Find the percentage of slip

- A:-30%
- B:-0.3%
- C:-0.03%

D:-3%

Correct Answer:- Option-D

Question9:-The material used for fuse must have

A:-Low melting point and high specific resistance

B:-Low melting point and any specific resistance

C:-Low melting point and low specific resistance

D:-High melting point and low specific resistance

Correct Answer:- Option-A

Question10:-In an inductive circuit, the inductance of 0.02 Henry is connected to 200 V, 50 c/s supply. Inductive reactance is

A:-628Ω

B:-62.8 Ω

C:-6.28 Ω

D:-6280 Ω

Correct Answer:- Option-C

Question11:-Processing of data in computers is done under the control of sets of instructions, is termed as _____

A:-Data instruction

B:-Information

C:-Programs

D:-None of these

Correct Answer:- Option-C

Question12:-In Windows, Resetting of system date and time can be done using

A:-Control Panel

B:-Calendar

C:-Devices & Printers

D:-Accessories

Correct Answer:- Option-A

Question13:-To install new font the sequence of command is

A:-Start -> setting -> control panel -> font

B:-Start -> setting -> control panel -> font -> install new font

C:-Start -> control panel -> font -> install new font

D:-Start -> setting -> font

Correct Answer:- Option-B

Question14:- _____ is a secondary Storage Device

A:-DVD

B:-CDR&W

C:-Memory Cards

D:-All these

Correct Answer:- Option-D

Question15:-Which printer cable use male DB-25 connector to connect with a computer

A:-Serial

B:-USB

C:-Parallel

D:-None of these

Correct Answer:- Option-C

Question16:-Which device use friction feed mechanism to load paper into the print assembly?

A:-Laser Printer

B:-Dot Matrix printer

C:-Line Printer

D:-None of these

Correct Answer:- Option-A

Question17:-Which of the following command is used in Ms Word to open "find and replace" dialogue box with activating "go to tab" is

A:-Ctrl + O

B:-Ctrl + F

C:-Ctrl + G

D:-Ctrl + H

Correct Answer:- Option-C

Question18:-In Ms Word pressing F8 three times selects _____

A:-Paragraph

B:-Word

C:-Page

D:-Sentence

Correct Answer:- Option-D

Question19:-In excel, a function inside another function is called _____

A:-Roundoff

B:-Nested

C:-Mode

D:-Conditional

Correct Answer:- Option-B

Question20:- _____ function is used in Excel to find the largest number in a series of numbers

A:-Maximum

B:-High

C:-Highest

D:-Max

Correct Answer:- Option-D

Question21:-In a conductor the resistance changes with _____

A:-Voltage

B:-Temperature

C:-Current

D:-Humidity

Correct Answer:- Option-B

Question22:-The letter C is the symbol for _____

A:-Impedance

B:-Capacitance

C:-Current

D:-Charge

Correct Answer:- Option-D

Question23:-An ideal volt meter is connecting to a 200 V supply having internal resistance of 10 ohms. What will be the reading of the volt meter

A:-Exact 20 Volt

B:-Just below 20 Volt

C:-Exact 200 Volt

D:-Just below 200 Volt

Correct Answer:- Option-C

Question24:-Which of the following diode is used in detector stage of an AM receiver

A:-OA 79

B:-BY 127

C:-IN4001

D:-All of the above

Correct Answer:- Option-A

Question25:-In low frequency transformers the core materials are generally soft silicon steel because

A:-They are having large hysteresis loop area

B:-They are having least coercivity

C:-They are having high coercivity

D:-High retentivity

Correct Answer:- Option-B

Question26:-the expected energy of electrons at absolute zero is known as

A:-Workfunction

B:-Fermi level energy

C:-Emission energy

D:-Forbidden energy

Correct Answer:- Option-B

Question27:-The first storage location of stack operation in 8051 microcontroller is

A:-00H

B:-01H

C:-07H

D:-08H

Correct Answer:- Option-D

Question28:-After the execution of the instruction "move A, 20H"

A:-Accumulator content is the content of the memory location 20H

B:-Accumulator content is 20H

C:-The content of accumulator moves to the memory location 20 H

D:-The stack pointer points to the memory location 20H

Correct Answer:- Option-A

Question29:-MOV A, @R0 is

A:-Register addressing

B:-Indexed addressing

C:-Register indirect addressing

D:-Immediate addressing

Correct Answer:- Option-C

Question30:-The one and only register inside the CPU holds 16 bit address of the instructions is

A:-DPTR

B:-Program counter

C:-Stack pointer

D:-Instruction decoder

Correct Answer:- Option-B

Question31:-After the execution of the following instructions,

mov SP, #08H

MOV R1, #12H

MOV R4, #0F3H

Push 1

Push 4

The stack pointer points to which location?

A:-08H

B:-09H

C:-10H

D:-0AH

Correct Answer:- Option-D

Question32:-The unit of modulation index is

A:-Unitless

B:-Hertz

C:-Volt

D:-Volt/microsecond

Correct Answer:- Option-A

Question33:-Whenever there is a temperature gradient in a conductive material, an e.m.f will induce and the gradient of voltage is proportional to the gradient in temperature. This is known as

A:-Stroboscopic effect

B:-Seebeck effect

C:-Hall effect

D:-Esaki effect

Correct Answer:- Option-B

Question34:-The working of OFC is based on the principle

A:-Total internal reflection

B:-Total internal defraction

C:-Total internal refraction

D:-Total radiation

Correct Answer:- Option-A

Question35:-Which value of BCD input activates all segments of the seven segment decoder IC 7447

A:-1001

B:-1111

C:-1000

D:-0000

Correct Answer:- Option-C

Question36:-The wavelength of 2-GHz wave is:

A:-15 cm

B:-15 mm

C:-1.5 cm

D:-1.5 mm

Correct Answer:- Option-A

Question37:-The cross talk due to the electromagnetic interference can be eliminated by

A:-Placing a high value inductor in series with the transmission line

B:-Using capacitance network in parallel with the transmission line

C:-Twisting the copper wires

D:-A stub of appropriate length is placed at some distance from the load

Correct Answer:- Option-C

Question38:-The insulation thickness in conductor of a cable depend on

A:-power handling ability of cable

B:-Applied voltage

C:-Current carrying capability of cable

D:-The length of the cable

Correct Answer:- Option-B

Question39:-In multi digit seven segment displays, the Ripple Blank Input and Ripple Blank Outputs are used for

A:-Dynamic display in order to save power and to increase the life of the display

B:-Blank out the all the zeros and make it look more intelligent

C:-Cascading the display otherwise displays not works synchronously

D:-Blank out the leading zeros and make it look more intelligent

Correct Answer:- Option-D

Question40:-A 1KVA, 12V online ups connected to a load of 500 Watts, the battery used is 100Ah, then what will be the back up time if the losses are negligible

A:-120 minutes

B:-2 hour and 40 minutes

C:-144 minutes

D:-2.6 hours

Correct Answer:- Option-C

Question41:-Candela is the unit for

A:-Light flux

B:-Luminous intensity

C:-Wavelength

D:-Luminous efficiency

Correct Answer:- Option-B

Question42:-Which of the following is not true in case of a DSO.

A:-The waveforms are stored in memory to enable them to be processed as needed.

B:-The accuracy of DSO is higher than that of analogue scopes

C:-It is possible to programme the DSO to high level of functionality

D:-It has low input impedance which enables the conversion of ADC faster

Correct Answer:- Option-D

Question43:-Manganin is the alloy of

A:-Copper, Manganese and Nickel

B:-Copper, Magnesium and Nickel

C:-Manganese, Gallium, Nickel and Iron

D:-Manganese, Copper, Gallium, Nickel

Correct Answer:- Option-A

Question44:-Which type of transducer is generally used in electronic weighing machines

A:-Inductive

B:-Capacitive

C:-Resistive

D:-All of the above

Correct Answer:- Option-C

Question45:-What will be the output when one of the Zener diode short in the zener diode peak clipper

A:-Only one half cycle in the output which resembles halfwave rectifier output

B:-No output due to the short circuited zener diode

C:-The output is only the peak portion of one half cycle

D:-The output is the peak clipped halfwave output

Correct Answer:- Option-D

Question46:-At room temperature, a silicon crystal act like

- A:-Conductor
- B:-Insulator
- C:-Semiconductor
- D:-Super conductor

Correct Answer:- Option-B

Question47:-Which of the following solid state device is fastest

- A:-BJT
- B:-IGBT
- C:-MOSFET
- D:-SCR

Correct Answer:- Option-C

Question48:-Which of the following is not true in companding

- A:-Compressing the signal before input to an Analog to digital converter
- B:-Which expanding the signal after a Digital to analog converter
- C:-It increases the signal to noise ratio (SNR) at reduced bit rates
- D:-Higher SnR can be achieved by uniform quantization rather than non uniform

Correct Answer:- Option-D

Question49:-What is the effective band width of a two stage cascaded amplifier each having a band width of one mega hertz(1MHz)

- A:-640KHz
- B:-1640KHz
- C:-885KHz
- D:-500KHz

Correct Answer:- Option-A

Question50:-What is the maximum allowable tracking error frequency in amplitude modulation

- A:-+/- 1KHz
- B:-+/- 2KHz
- C:-+/- 3 KHz
- D:-+/- 5KHz

Correct Answer:- Option-C

Question51:-The 78XX series regulator lcs are commonly found in the through hole package of

- A:-T0 92
- B:-T0 220
- C:-T0 18
- D:-T0 206A

Correct Answer:- Option-B

Question52:-The decimal number 16 is equivalent to the hexadecimal

- A:-11H
- B:-10H
- C:-A0 H
- D:-01H

Correct Answer:- Option-B

Question53:-PWM can be generated by

- A:-Astable multivibrator
- B:-Bistable multivibrator
- C:-Monostable multivibrator
- D:-Schmitt trigger

Correct Answer:- Option-C

Question54:-During the counting because of noise spikes, the counter may goes to some unused state and the subsequent clock pulses may causes the counter to move from one unused state to another unused state is known as

- A:-Lockout
- B:-Fly Wheel
- C:-Corona
- D:-Moore

Correct Answer:- Option-A

Question55:-Which colour LEDs has the highest forward voltage drop generally

- A:-Red
- B:-Blue
- C:-Green

D:-White

Correct Answer:- Option-D

Question56:-A half wave dipole at a frequency of 200 MHz has a length of

A:-200 metre

B:-1.5 metre

C:-3 metre

D:-6 m

Correct Answer:- Option-B

Question57:-The thickness of PCB used for surface mount devices is

A:-0.8 mm to 1 mm

B:-1.5 mm to 2 mm

C:-0.2 mm to 2 mm

D:-above 2 mm

Correct Answer:- Option-A

Question58:-Which of the following is not a feature or advantage of FPGS over micro controller

A:-FPGA doesn't have a fixed hardware structure

B:-Ability of parallel processing

C:-Process larger data with few clock cycle

D:-Low cost

Correct Answer:- Option-D

Question59:-The LEDs operate in visible range, only when the semiconductor should have the band gap energy

A:-Above 3.2eV

B:-Between 1.4 to 3.0eV

C:-Less than 1eV

D:-Between 1eV to 1.32eV

Correct Answer:- Option-B

Question60:-Which of the following is a photo emissive material

A:-Selenium

B:-Tellurium

C:-Polonium

D:-Cesium silver

Correct Answer:- Option-D

Question61:-Which of the following is a non-renewable source of energy

A:-Tidal power

B:-Geothermal energy

C:-Nuclear energy

D:-Wind power

Correct Answer:- Option-C

Question62:-The electrical apparatus that provides power to load when mains power fails is known as

A:-USB

B:-UPS

C:-UCP

D:-UPC

Correct Answer:- Option-B

Question63:-Which one of the following is an impact printer

A:-Dot matrix

B:-Inkjet

C:-Laser

D:-None of these

Correct Answer:- Option-A

Question64:-The maximum operating voltage of LCD panel may be

A:-100v

B:-10v

C:-1v

D:-0.1v

Correct Answer:- Option-C

Question65:-The maximum usual diagonal size of the LCD panel is

A:-160cm

B:-260cm

C:-360cm

D:-460cm

Correct Answer:- Option-A

Question66:-The principle of LCD display is

A:-Twisted pneumatic

B:-Pneumatics

C:-Thermocouple

D:-Vaccum display

Correct Answer:- Option-A

Question67:-In a 7 segment display system the decimal point is displayed by

A:-any one of the 7 bit

B:-f bit

C:-a separate 8th bit

D:-g bit

Correct Answer:- Option-C

Question68:-An UPS which does not require inverter is _____

A:-Online UPS

B:-Offline UPS

C:-DC power UPS

D:-Line interactive UPS

Correct Answer:- Option-C

Question69:-In a UPS the failure of AC input supply is indicated by

A:-Red lightonly

B:-A buzzer only

C:-Both red light and buzzer

D:-None of these

Correct Answer:- Option-C

Question70:-The desirable changeover period for a UPS is _____

A:-2 ms

B:-5 ms

C:-10 ms

D:-1 ms

Correct Answer:- Option-D

Question71:-Solar energy is _____ resource of energy

A:-Consumable

B:-Renewable

C:-Dangerous

D:-Negligible

Correct Answer:- Option-B

Question72:-A solar panel is usually designed to generate _____ volts DC

A:-1-2 V

B:-3-5 V

C:-6-7 V

D:-12-20 V

Correct Answer:- Option-D

Question73:-Which device is used in remote control operated electronic equipment to work as an acceptor for the remote signal

A:-Zener diode

B:-Photo diode

C:-IR LED

D:-Photo voltaic cell

Correct Answer:- Option-B

Question74:-The overall thickness of a LED is abaout

A:-1.5 cm

B:-2.5 cm

C:-3.5 cm

D:-4.5 cm

Correct Answer:- Option-B

Question75:-A LCD panel is not a self illuminated panel. For illuminating this panel _____ are used as backlight devices

- A:-100 w lamp
- B:-20 w fluorescent tube
- C:-CCFL
- D:-Electric arc lamp

Correct Answer:- Option-C

Question76:-The contract ratio for the LED TV is defined as

- A:-The difference b/w bright and dark portions
- B:-The difference b/w most bright and most dark portions
- C:-The most bright portion divided by most dark portions
- D:-The most bright portion into most dark portion

Correct Answer:- Option-B

Question77:-LCD/LED display panel are usually made in

- A:-1 cm to 100 cm
- B:-2.5 cm to 125 cm
- C:-3 cm to 300 cm
- D:-6 cm to 160 cm

Correct Answer:- Option-D

Question78:-semi automatic washing machine consist of 2 tubs one is wash tub and the other is

- A:-Spin tub
- B:-Agitator tub
- C:-Pulsator tub
- D:-Cleaning tub

Correct Answer:- Option-A

Question79:-Generally the HP of motor used in a washing machine is

- A:-0.1 to 0.15 HP
- B:-0.3 to 0.5 HP
- C:-1.0 to 3.0 HP
- D:-1.5 to 3.5 HP

Correct Answer:- Option-B

Question80:-A microwave oven works on ____ frequency

- A:-1.45GHz
- B:-2.45GHz
- C:-3.45GHz
- D:-1.5 - 3.5GHz

Correct Answer:- Option-B

Question81:-A vacuum cleaner cleans carpets etc on the principle of

- A:-Radiation
- B:-Suction
- C:-Dispersion
- D:-Absorption

Correct Answer:- Option-B

Question82:-A vacuum cleaner does not run but gives buzzing sound when the defect lies in its

- A:-Main fuse
- B:-Socket
- C:-Armature winding
- D:-Capacitor

Correct Answer:- Option-C

Question83:-A mixer grinder grinds food grains by employing

- A:-2 grinding stones
- B:-High speed spinning blade
- C:-Low speed spinning blade
- D:-Crushing blade

Correct Answer:- Option-B

Question84:-The testing of a mixer grinder is called ____

- A:-Inching
- B:-Plugging
- C:-Loading
- D:-Mixing

Correct Answer:- Option-A

Question85:-KU band used for satellite communication is _____

A:-10.0 to 19.0 GHz

B:-10.7 to 19.7 GHz

C:-20.0 to 31.0 GHz

D:-20.7 to 31.7 GHz

Correct Answer:- Option-B

Question86:-Frequency band referred as 6/4 GHz is named as

A:-L band

B:-C band

C:-KU band

D:-KA band

Correct Answer:- Option-B

Question87:-A dish antennae used in DTH service consist of a paraboloid reflector of about ____ diameter

A:-15 cm to 30 cm

B:-25 cm to 50 cm

C:-45 cm to 90 cm

D:-115 cm to 150 cm

Correct Answer:- Option-C

Question88:-LNB stands for

A:-Less noisy block

B:-Low noise block

C:-Left norm balloon

D:-Linear norm block

Correct Answer:- Option-B

Question89:-The set top receivers output lies in the frequency band of

A:-30 to 300 MHz

B:-300 to 3000 MHz

C:-600 to 900 MHz

D:-900 to 1400 MHz

Correct Answer:- Option-D

Question90:-A transponder is a _____

A:-Sort of transmitter

B:-Sort of relay station

C:-Frequency channel used by a satellite station

D:-None of the above

Correct Answer:- Option-C

Question91:-A CCTV security system installed in border areas for day and night watch contains a _____ CCTV camera

A:-Infrared

B:-Day and night

C:-Dome

D:-PTZ

Correct Answer:- Option-A

Question92:-The output of a CCTV camera should be

A:-0.1 V P-P

B:-1.0 V P-P

C:-10 V P-P

D:-5 V P-P

Correct Answer:- Option-B

Question93:-The smallest size CCTV camera is

A:-Dome type

B:-Bullet type

C:-PTZ type

D:-Outdoor type

Correct Answer:- Option-B

Question94:-In DTH system a _____ is necessary in addition to dish antennae and cable etc

A:-LNA

B:-LNB

C:-Set top receiver

D:-Transponder

Correct Answer:- Option-C

Question95:-For watching intruders during totally dark time a CCTV camera is associated with

- A:-Search light
- B:-Halogen lamp
- C:-CCFL
- D:-IR LED

Correct Answer:- Option-D

Question96:-Magnetron is an / a _____

- A:-Amplifier
- B:-Oscillator
- C:-Multivibrator
- D:-Chopper

Correct Answer:- Option-B

Question97:-Induction heating is a type of _____ heating

- A:-A zero frequency
- B:-High frequency
- C:-Power frequency
- D:-None of the above

Correct Answer:- Option-B

Question98:-Forced commutations requires

- A:-A pre charged inductor
- B:-A pre charged capacitor
- C:-An over damped RLC load
- D:-A very high frequency AC source

Correct Answer:- Option-B

Question99:-Which part of microwave oven generates micro waves

- A:-A generator
- B:-Magnetron
- C:-Metal mesh
- D:-Booster

Correct Answer:- Option-B

Question100:-Application of cycloconverters include

- A:-Speed control of AC drive
- B:-Induction heating
- C:-Static VAR compensation
- D:-All of the mentioned

Correct Answer:- Option-D