1.

From the given alternative words, select the word which cannot be formed using the letters of the given word: Given: IMPASSIONABLE

(A)

IMPASSABLE

(B)

IMPOSSIBLE

(C)

IMPASSIVE

(D)

IMPASSION

Answer: (C) IMPASSIVE

2.

BDAC : FHEG : : NPMO : ?

(A)

RQTS

(B)

NTRC

(C)

TRQS

(D)

RTQS

Answer: (D) RTQS

3.

What is the pH value of the human body?

(A)

9.2 to 9.8

(B)

7.0 to 7.8

(C)

6.1 to 6.3

(D)

5.4 to 5.6

Answer: (B) 7.0 to 7.8

4.

Writer : Pen : : ?

(A)

Needle : Tailor

(B)

Artist : Brush

(C)

Painter : Canvas

(D)

Teacher : Class

Answer: (C) Painter : Canvas

5.

NUMERAL : UEALRMN : : ALGEBRA : ?

(A)

LRBAGEA

(B)

BARLAGE

(C)

LERAGBA

(D)

LERABGA

Answer: (D) LERABGA

6.

FGID : OPQR : : BCDE : ?

(A)

KLMJ

(B)

KLMN

(C)

IUVW

(D)

STUW

Answer: (B) KLMN

7.

Ashok's mother was 3 times as old Ashok 5 years ago. After 5 years she will be twice as old as Ashok. How old is Ashok today?

(A)

10 years

(B)

15 years

(C)

20 years

(D)

25 years

Answer: (B)

8.

Which one of the following is not a prime number?

(A)

31

(B)

61

(C)

71

(D)

91

Answer: (D) 91

9.

How many 3-digit numbers are completely divisible 6 ?

(A)

149

(B)

150

(C)

151

(D)

166

Answer: (B) 150

10.

If the number 5 * 2 is divisible by 6, then * = ?

(A)

2

(B)

3

(C)

6

(D)

7

Answer: (A) 2

11.

Two goods train each 500 m long, are running in opposite directions on parallel tracks. Their speeds are 45 km/hr and 30 km/hr respectively. Find the time taken by the slower train to pass the driver of the faster one.

(A)

12 sec

(B)

24 sec

(C)

48 sec

(D)

60 sec

Answer: (B) 24 sec

12.

A, B and C jointly thought of engaging themselves in a business venture. It was agreed that A would invest Rs. 6500 for 6 months, B, Rs. 8400 for 5 months and C, Rs. 10,000 for 3 months. A wants to be the working member for which, he was to receive 5% of the profits. The profit earned was Rs. 7400. Calculate the share of B in the profit.

(A)

Rs. 1900

(B)

Rs. 2660

(C)

Rs. 2800

(D)

Rs. 2840

Answer: (B) Rs. 2660

13.

A train moving at 50 km/hr crosses a bridge in 45 seconds. The length of train is 150 meters. Find the length of the bridge.

(A)

525 m

(B)

545 m

(C)

575 m

(D)

500 m

Answer: (C) 575 m

14.

Two trains are running in opposite directions with the same speed. If the length of each train is 120 metres and they cross each other in 12 seconds, then the speed of each train (in km/hr) is:

(A)

10

(B)

18

(C)

36

(D)

72

Answer: (C) 36

15.

"Identify the segment in the sentence which contains a grammatical error.

The man played the flute and led all the mouse out of the town."

(A)

all the mouse

(B)

the flute and led

(C)

out of the town

(D)

The man played

Answer: (A) all the mouse

16.

Choose the correctly spelt word.

(A)

Maneouvrable

(B)

Manoeuvrrable

(C)

Manoeuvrable

(D)

Manouverable

Answer: (C) Manoeuvrable

17.

"In the following sentence a word of phrase is written in bold. For each bold part four word/phrases are listed below each sentence. Choose the word nearest in meaning to bold part.

He is a good looking but insipid young man."

(A)

arrogant

(B)

unscrupulous

(C)

sick

(D)

lacking in spirit

Answer: (D) lacking in spirit

18.

"Select the most appropriate option to improve the underlined segment in the given sentence. If there is no need to improve it, select ‘No improvement’.

The place was not cold only and also damp."

(A)

No improvement

(B)

only cold not also

(C)

not only cold but also

(D)

not only cold and both

Answer: (C) not only cold but also

19.

"Select the correct direct form of the given sentence.

Saaransh said he had solved the crossword the previous day."

(A)

Saaransh said, “I solved the crossword yesterday.”

(B)

Saaransh said, “He have solved the crossword yesterday.”

(C)

Saaransh said, “I have solved the crossword the previous day.”

(D)

Saaransh said, “He has solved the crossword the previous day.”

Answer: (A) Saaransh said, “I solved the crossword yesterday.”

20.

These medicines are ____ for curing cold.

(A)

Proper

(B)

Real

(C)

Effective

(D)

Capable

Answer: (C) Effective

21.

Anita ___ me of a girl I used to know.

(A)

remembers

(B)

recalls

(C)

recollects

(D)

reminds

Answer: (D) reminds

22.

Select the synonym of carnal

(A)

spiritual

(B)

sensual

(C)

decent

(D)

chaste

Answer: (B) sensual

23.

The RBI has decided new Business timing for RTGS. What are the new timings?

(A)

6:00 AM- 6.30 PM

(B)

6:30 AM- 5.00 PM

(C)

7:00 AM – 6.00 PM

(D)

7:30 AM – 6.00 PM

Answer: (C) 7:00 AM – 6.00 PM

24.

Which state has decided to recruit women drivers for government vehicles?

(A)

Kerala

(B)

Tamil Nadu

(C)

Andhra Pradesh

(D)

Telangana

Answer: (A) Kerala

25.

The National War Memorial in Delhi was inaugurated on

(A)

24th February, 2019

(B)

25th February, 2019

(C)

26th February, 2019

(D)

28th February, 2019

Answer: (B) 25th February, 2019

26.

Who becomes the youngest player to takes a hat-trick in IPL cricket history?

(A)

Jasprit Bumrah

(B)

Sam Curran

(C)

Rashid Khan

(D)

S Gopal

Answer: (B) Sam Curran

27.

A syndicated loan is a loan that is _____?

(A)

Secured by Mortgages

(B)

Unsecured

(C)

Provided by Group of Banks

(D)

Provided to a Group of Customers

Answer: (C) Provided by Group of Banks

28.

What is the theme of World Photography Day 2023?

(A)

Landscapes

(B)

Dedicated to History

(C)

Understanding Clouds

(D)

Be Nice

Answer: (A) Landscapes

29.

The green planet in the solar system is?

(A)

Mars

(B)

Uranus

(C)

Venus

(D)

Earth

Answer: (B) Uranus

30.

Right to emergency medical aid is a

(A)

Legal Right

(B)

Illegal Right

(C)

Constitutional Right

(D)

Fundamental Right.

Answer: (D) Fundamental Right.

31.

Which of the following is a part of SMPS component?

(A)

Output filter coil

(B)

MOSFET

(C)

Zener Diode

(D)

FET

Answer: (A) Output filter coil

32.

Automatic switching OFF function is accomplished in MCB by_____

(A)

Relay

(B)

Clutch

(C)

Bimetallic-strip

(D)

Diode

Answer: (C) Bimetallic-strip

33.

Which of these is a correct definition of electronic current?

(A)

Current that flows from lower potential to higher potential

(B)

The current which remains static

(C)

Current constituted by the flow of ions

(D)

Current that flows from higher potential to lower potential

Answer: (A) Current that flows from lower potential to higher potential

34.

The circuit design of switching regulated power supplies is _____

(A)

Complex

(B)

Moderately complex

(C)

Simple

(D)

Not possible

Answer: (A) Complex

35.

The load regulation of switching regulated DC power supply is from _____

(A)

0.05% - 0.5%

(B)

5% - 15%

(C)

25% - 35%

(D)

1.5% - 2.5%

Answer: (A) 0.05% - 0.5%

36.

The efficiency of switching regulated DC power supply is _____

(A)

1-20%

(B)

70-85%

(C)

10-85%

(D)

10-20%

Answer: (B) 70-85%

37.

A Zener voltage regulator is used for _____load currents

(A)

High

(B)

Very High

(C)

Moderate

(D)

Small

Answer: (D) Small

38.

Where square wave inverters are used?

(A)

Computers

(B)

TV receiver

(C)

DVD Players

(D)

General lighting

Answer: (D) General lighting

39.

How the backup time of UPS can be increased?

(A)

Increase the VA rating of UPS

(B)

Increase the AH capacity of battery

(C)

Decrease the AH capacity of battery

(D)

Maintain battery terminal voltage always 90% of rating

Answer: (B) Increase the AH capacity of battery

40.

Which term refers that the mass of a substance liberated from an electrolyte by one coloumb of electricity?

(A)

Electrolysis

(B)

Electro plating

(C)

Electro copying

(D)

Electro chemical equivalent

Answer: (D) Electro chemical equivalent

41.

The transmitter-receiver combination in the satellite is known as a _____

(A)

Relay

(B)

Repeater

(C)

Transponder

(D)

Duplexer

Answer: (C) Transponder

42.

Why are VHF, UHF, and microwave signals used in satellite communication?

(A)

More bandwidth

(B)

More spectrum space

(C)

Are not diffracted by the ionosphere

(D)

Economically viable

Answer: (C) Are not diffracted by the ionosphere

43.

Which of the following is not a common use for radio waves in the VHF band?

(A)

FM radio broadcasting

(B)

Walkie-talkie communication

(C)

Marine communications

(D)

Television broadcasting

Answer: (B) Walkie-talkie communication

44.

What is the full form of SSB modulation?

(A)

Shaky-sideband modulation

(B)

Separated-sideband modulation

(C)

Sorted-sideband modulation

(D)

Singe-sideband modulation

Answer: (D) Singe-sideband modulation

45.

The radar in which both transmission and reception is done using the same antenna are called:

(A)

Monostatic radar

(B)

Bistatic radar

(C)

Monopole radar

(D)

Dipole radar

Answer: (A) Monostatic radar

46.

Pulse radar operating at 10GHz frequency has an antenna with a gain of 28 dB and a transmitted power of 2kW. If it is desired to detect a target of cross section 12m, and the minimum detectable

signal is -90 dBm, the maximum range of the radar is:

(A)

8114 m

(B)

2348 m

(C)

1256 m

(D)

4563 m

Answer: (A) 8114 m

47.

“GPS Accuracy”

Which among the following is more accurate in its output?

(A)

Absolute positioning

(B)

Resection method

(C)

Modern GPS surveying

(D)

Conventional GPS method

Answer: (D) Conventional GPS method

48.

Which of the following indicates the correct set of classification for absolute positioning?

(A)

Carrier wave, pseudo range

(B)

Pseudo range, SPS

(C)

SPS, carrier wave

(D)

Absolute positioning, SPS

Answer: (A) Carrier wave, pseudo range

49.

Which among the following can act as a cause wrong GPS tracking?

(A)

Refraction of signal

(B)

Strength of signal

(C)

Atomic clock

(D)

Reflection of satellite signals

Answer: (D) Reflection of satellite signals

50.

The accuracy speed of the GPS depends on _____

(A)

Reflection of signal

(B)

Signal blockage

(C)

Refraction of signal

(D)

Position of satellite

Answer: (B) Signal blockage

51.

What is Artificial Intelligence?

(A)

Artificial Intelligence is a field that aims to make humans more intelligent

(B)

Artificial Intelligence is a field that aims to improve the security

(C)

Artificial Intelligence is a field that aims to develop intelligent machines

(D)

Artificial Intelligence is a field that aims to mine the data

Answer: (C) Artificial Intelligence is a field that aims to develop intelligent machines

52.

Who is the inventor of Artificial Intelligence?

(A)

Geoffrey Hinton

(B)

Andrew Ng

(C)

John McCarthy

(D)

Jurgen Schmidhuber

Answer: (C) John McCarthy

53.

Digital multimeter is used for _____

(A)

measuring AC and DC current, voltage and resistance

(B)

measuring AC current and voltage

(C)

measuring DC current and resistance

(D)
measuring AC voltage and resistance

Answer: (A) measuring (AC) and (DC) current, voltage and resistance

54.

Multimeter can be used as an ammeter by _____

(A)

connecting series resistances

(B)

making use of a transducer

(C)

making use of a transformer

(D)

connecting shunts

Answer: (D) connecting shunts

55.

An LCR meter is used to measure _____.

(A)

current

(B)

power

(C)

inductance

(D)

Voltage

Answer: (C) inductance

56.

Oscilloscope is _____

(A)

a ohmmeter

(B)

an ammeter

(C)

a voltmeter

(D)

a multimeter

Answer: a voltmeter

57.

How many pressure and current coil is present in Megger?

(A)

Two pressure coils and one current coil

(B)

Two pressure coils and two current coils

(C)

One pressure coil and one current coil

(D)

One pressure coil and two current coils

Answer: Two pressure coils and one current coil

58.

An induction type voltmeter are categorized into _____ types?

(A)

Two

(B)

Three

(C)

Four

(D)

Five

Answer: (A) Two

59.

An ammeter is a

(A)

Secondary instrument

(B)

Absolute instrument

(C)

Recording instrument

(D)

Integrating instrument

Answer: (A) Secondary instrument

60.

In an ammeter the shunt resistance usually _____ meter resistance

(A)

Equal to

(B)

Less than

(C)

Greater than

(D)

Of any value

Answer: (B) Less than

61.

Which of the following device can be used for measurement of frequency?

(A)

Voltmeter

(B)
Ammeter

(C)

Stroboscope

(D)

Barometer

Answer: (C) Stroboscope

62.

A power factor meter has ..... control springs

(A)

One

(B)

Two

(C)

Four

(D)

No

Answer: (D) No

63.

Which of the following method of measurement does a bridge circuit uses?

(A)

relative

(B)

comparison

(C)

absolute

(D)

differential

Answer: (B) comparison

64.

Identify the type of modulation where the frequency of the modulated wave is equal to that of the carrier wave.

(A)

Frequency modulation

(B)

Amplitude modulation

(C)

Carrier modulation

(D)

Phase modulation

Answer: (B) Amplitude modulation

65.

Of the following which is the preferred modulation scheme for digital communication?

(A)

Pulse code modulation

(B)

Pulse amplitude modulation

(C)

Pulse position modulation

(D)

Pulse width modulation

Answer: (A) Pulse code modulation

66.

Which modulator is used for the generation of the DSB-SC signal?

(A)

Balanced modulator

(B)

Square law modulator

(C)

Armstrong phase modulator

(D)

Envelope detector

Answer: (A) Balanced modulator

67.

Which of the following requires the least bandwidth?

(A)

DSB SC

(B)

DSB

(C)

VSB

(D)

SSB

Answer: (D) SSB

68.

Which of the following stage is present in FM receiver but not in AM receiver?

(A)

Amplitude limiter

(B)

Demodulator

(C)

AM amplifier

(D)

Mixer

Answer: (A) Amplitude limiter

69.

Baseband compression produces _____

(A)

a small range of frequencies from low to high

(B)

a small range of different phases

(C)

a small range of angles

(D)

a small range of amplitude

Answer: (D) a small range of amplitude

70.

Which of the following is not an advantage of digital modulation?

(A)

Greater noise immunity

(B)

Greater security

(C)

Easier multiplexing

(D)

Less bandwidth requirement

Answer: (D) Less bandwidth requirement

71.

Which has same probability of error?

(A)

BPSK and QPSK

(B)

BPSK and ASK

(C)

BPSK and PAM

(D)

BPSK and QAM

Answer: (C) BPSK and PAM

72.

Which of the following modulation schemes gives the maximum probability of error?

(A)

DBPSK

(B)

PSK

(C)

BFSK

(D)

ASK

Answer: (D) ASK

73.

_____ is a type of digital modulation.

(A)

Amplitude modulation

(B)

Frequency modulation

(C)

Phase modulation

(D)

Frequency shift keying

Answer: (D) Frequency shift keying

74.

A video camera generates data at a rate of 5 Mbps. The data is channel coded at rate 1/3 and 8 PSK modulate(D) Which of the following statements is correct?

(A)

Information rate: 15 Mbps; Symbol rate: 5 Msps

(B)

Information rate: 5 Mbps; Symbol rate: 15 Msps

(C)

Information rate: 15 Mbps; Symbol rate: 15 Msps

(D)

Information rate: 5 Mbps; Symbol rate: 5 Msps

Answer: Information rate: 15 Mbps; Symbol rate: 5 Msps

75.

Which of the following is not true about VHF propagation?

(A)

Can penetrate building walls

(B)

Can travel long distances

(C)

Transmitting antennas are huge

(D)

Can be received indoors

Answer: (C) Transmitting antennas are huge

76.

Standard AM broadcast stations usually use what type of transmitting antenna

(A)

Log periodic

(B)

Driven collinear array

(C)

Marconi array

(D)

Yagi-Uda

Answer: (C) Marconi array

77.

Which array uses two half-wave dipoles spaced along with one-half wavelength apart?

(A)

Broad-end array

(B)

End- fire array

(C)

Back-fire array

(D)

Binomial array

Answer: (B) End- fire array

78.

Which among the following are the advantages of the Yagi antenna?

i. It has a gain that allows lower strength

ii. The antenna becomes strong for high gain levels

iii. It can be easily mounted

iv. It is mechanically relatively straight forward

(A)

i, iii, and iv

(B)

i, ii, and iv

(C)

ii, iii, and iv

(D)

Only ii

Answer: (A) i, iii, and iv

79.

Most radar antenna use a

(A)

Dipole

(B)

Broadside array

(C)

Horn and parabolic reflector

(D)

Collinear array

Answer: (C) Horn and parabolic reflector

80.

The discone antenna is

(A)

A useful direction-finding antenna

(B)

Used as a radar receiving antenna

(C)

Circularly polarized like other circular antennas

(D)

Useful as VHF receiving antenna

Answer: (D) Useful as VHF receiving antenna

81.

Which type of antenna is used for the transmission of microwave of 4 GHz to 20 GHz

(A)

Dish antenna

(B)

Parabolic dish antenna (PD(A)

(C)

Yagi antenna

(D)

Marconi antenna

Answer: (B) Parabolic dish antenna (PD(A)

82.

In radio transmission, what does the term 'attenuation' refer to?

(A)

The increase in signal strength over a distance

(B)

The distortion of the signal over a distance

(C)

The decrease in signal strength over a distance

(D)

The stability of the signal over a distance

Answer: (C) The decrease in signal strength over a distance

83.

What is a common use of a Band Pass Filter in Radio Engineering?

(A)

It allows all frequencies to pass through

(B)

It allows only a specific range of frequencies to pass through

(C)

It blocks all frequencies from passing through

(D)

It amplifies all frequencies equally

Answer: (B) It allows only a specific range of frequencies to pass through

84.

What is the function of a modem?

(A)

Encryption and Decryption

(B)

Converts data to voice and vice-versa

(C)

Convert analog signals to digital and vice-versa

(D)

Serves as a hardware anti-virus

Answer: (C) Convert analog signals to digital and vice-versa

85.

RADAR is an _____ sensor?

(A)

Electro-magnetic

(B)

Electric

(C)

Magnetic

(D)

Static

Answer: (A) Electro-magnetic

86.

Echoes are observed from _____ in Radars?

(A)

Targets

(B)

Antennas

(C)

Repeaters

(D)

Systems

Answer: (A) Targets

87.

Radars are _____ devices?

(A)

Active Sensing

(B)

Passive Sensing

(C)

Static Sensing

(D)

Dynamic Sensing

Answer: (C) Static Sensing

88.

What should be placed at the initial receiver’s stage?

(A)

Voltage Regulator

(B)

Current Regulator

(C)

Transistor Amplifier

(D)

Multiplexer

Answer: (C) Transistor Amplifier

89.

What frequency determines the signal transmitted by the Radar?

(A)

Pulse Reallocation

(B)

Pulse Retrieving

(C)

Pulse Repetition Frequency

(D)

Post Reallocation Frequency

Answer: (C) Pulse Repetition Frequency

90.

Unwanted component in the signal received at the Radars receiver is _____?

(A)

Receiver Noise

(B)

Transmitter Noise

(C)

Threshold Noise

(D)

Noise Power

Answer: (A) Receiver Noise

91.

How many types does a pulse radar have?

(A)

Four

(B)

Three

(C)

Two

(D)

One

Answer: (C) Two

92.

What principle is used in MTI Radar?

(A)

Flemming Effect

(B)

Doppler Effect

(C)

Hall Effect

(D)

Thevenin’s Effect

Answer: (B) Doppler Effect

93.

What is utilized to detect targets that are non-stationary?

(A)

Basic Pulse Radar

(B)

Moving Target Indication Radar

(C)

Symmetric Radar

(D)

Discontinuous Wave Radar

Answer: (B) Moving Target Indication Radar

94.

Echo signal in FMCW radar is received by _____?

(A)

Transmitting Antenna

(B)

Oscillator

(C)

Receiving Antenna

(D)

Duplexer

Answer: (C) Receiving Antenna

95.

The ability of an antenna to focus its radiated power in a certain direction is measured by which of the following property of the antenna?

(A)

Directivity

(B)

Impedance matching

(C)

Resonance

(D)

Antenna gain

Answer: (A) Directivity

96.

A short monopole antenna is a type of?

(A)

A short monopole antenna is a type of resonating antenna that consists of many conducting elements

(B)

A short monopole antenna is a type of harmonic antenna that consists of two conducting elements

(C)

A short monopole antenna is a type of horizontal antenna that consists of a conducting element

(D)

A short monopole antenna is a type of vertical antenna that consists of a conducting element

Answer: (D) A short monopole antenna is a type of vertical antenna that consists of a conducting element.

97.

Name the region around an antenna where the electromagnetic waves it emits behave consistently and predictably?

(A)

Near field region

(B)

Far-field region

(C)

Intensity field

(D)

Radiation field

Answer: (B) Far-field region

98.

Which of the following type of antenna has a directivity of 0 dB?

(A)

Horn antenna

(B)

General antenna

(C)

Patch antenna

(D)

Isotropic antenna

Answer: (D) Isotropic antenna

99.

Which of the following formula is used to calculate the bandwidth of an antenna?

(A)

Bandwidth= Higher frequency* lower frequency

(B)

Bandwidth= Higher frequency+ lower frequency

(C)

Bandwidth= Higher frequency/ lower frequency

(D)

Bandwidth= Higher frequency- lower frequency

Answer: (D) Bandwidth= Higher frequency- lower frequency

100.

____ refers to the frequency where an antenna exhibits its maximum efficacy and radiation performance.

(A)

Quality factor

(B)

Fractional bandwidth

(C)

Resonant frequency

(D)

Cut off frequency

Answer: (C) Resonant frequency