Which of the following is a part of SMPS component?

- 1. Output filter coil
- 2. MOSFET
- 3. Zener diode
- 4. FET

Answer (Detailed Solution Below)

Option 1: Output filter coil

Which of the following is a feature of SMPS?

- 1. High efficiency
- 2. AF gain
- 3. Power buck
- 4. RF gain

Answer (Detailed Solution Below)

Option 1 : High efficiency

Which of the following is NOT a valid characteristics of switched mode power supply as compared to linear power supply?

- 1. Higher efficiency
- 2. Low noise at output
- 3. Light weight
- 4. Smaller size of transformer

Answer (Detailed Solution Below)

Option 2: Low noise at output

Which of the following parts is NOT a part of DC power supply?

- 1. Load resistance
- 2. Rectifier
- 3. Filter
- 4. Regulator

Option 1 : Load resistance

SMPS stand for _____

- 1. Simple mode power supply
- 2. Switch mode power supply
- 3. Surge mode power supply
- 4. None of these

Answer (Detailed Solution Below)

Option 2 : Switch mode power supply

The bistable multivibrator

- 1. has two stable states
- 2. has one stable state
- 3. is free running
- 4. none of the above

Answer (Detailed Solution Below)

Option 1: has two stable states

Which signal is generated by using a monostable multivibrator?

- 1. PCM
- 2. TDM
- 3. PAM
- 4. PWM

Answer (Detailed Solution Below)

Option 4: PWM

Schmitt trigger can be used as a

- 1. Comparator
- 2. Square wave generator

- 3. Flip flop
- 4. All of these

Option 4: All of these

A monostable multivibrator is frequently used:

- 1. in memory and timing circuits
- 2. for regeneration of distorted waves
- 3. in counting circuits
- 4. for producing triangular waves

Answer (Detailed Solution Below)

Option 2: for regeneration of distorted waves

A Schmitt trigger is a digital circuit that produces

- 1. triangular output for sinusoidal input
- 2. sinusoidal output for any type of input
- 3. trapezoidal output for any type of input
- 4. rectangular output for any type of input

An astable multivibrator produces

- 1. Sine wave
- 2. Triangular wave
- 3. Sawtooth wave
- 4. Square wave

Answer (Detailed Solution Below)

Option 4 : Square wave

Digital storage oscilloscope is used to measure amplitude of_____

- 1. Sinusoidal
- 2. Triangular
- 3. Sawtooth

4. All the above
Answer (Detailed Solution Below)
Option 4 : All the above
The output of Schmitt trigger is:
1. Sine wave
2. Square wave
3. Random wave
4. Rectangle wave
Answer (Detailed Solution Below)
Option 2 : Square wave
Which of the following parts is NOT a part of DC power supply?
1. Load resistance
2. Rectifier
3. Filter
4. Regulator
Answer (Detailed Solution Below)
Option 1 : Load resistance
SMPS stand for
1. Simple mode power supply
2. Switch mode power supply
3. Surge mode power supply
4. None of these
Answer (Detailed Solution Below)
Option 2 : Switch mode power supply
Automatic switching OFF function is accomplished in MCB by
1. Relay

- 2. clutch
- 3. bimetallic-strip
- 4. diode

Option 3: bimetallic-strip

The most suitable device for high-frequency inversion in SMPS is

- 1. BJT
- 2. IGBT
- 3. MOSFET
- 4. GTO

Answer (Detailed Solution Below)

Option 3: MOSFET

The working of SMPS is based on:

- 1. Integral control principle
- 2. Frequency control principle
- 3. Chopper principle
- 4. Phase control principle

Answer (Detailed Solution Below)

Option 3 : Chopper principle

Which of the following is the main advantage of SMPS over linear power supply?

- 1. No transformer is required
- 2. Higher efficiency
- 3. No filter required
- 4. Only one stage of conversion

Answer (Detailed Solution Below)

Option 2: Higher efficiency

In the SMPS regulator is accompanied by:

- 1. Duty cycle control
- 2. Regulator IC
- 3. Zener
- 4. Stabilizer

Option 1: Duty cycle control

The disadvantage of SMPS over conventional linear power supply is _____

- 1. Low efficiency
- 2. Bulky components
- 3. Generates strong electomagnetic interference field
- 4. Low cost

Answer (Detailed Solution Below)

Option 3: Generates strong electomagnetic interference field

Which of the following parts is NOT a part of DC power supply?

- 1. Load resistance
- 2. Rectifier
- 3. Filter
- 4. Regulator

Answer (Detailed Solution Below)

Option 1 : Load resistance

Which of the following is NOT a valid characteristics of switched mode power supply as compared to linear power supply?

- 1. Higher efficiency
- 2. Low noise at output
- 3. Light weight
- 4. Smaller size of transformer

Answer (Detailed Solution Below)

Option 2 : Low noise at output

The most suitable device for high-frequency inversion in SMPS is

- 1. BJT
- 2. IGBT
- 3. MOSFET
- 4. GTO

Answer (Detailed Solution Below)

Option 3: MOSFET

Switch mode power supply is used for:

- 1. Obtaining controlled DC supply
- 2. Switching over from one supply to another
- 3. Obtaining AC voltage of low frequencies
- 4. Obtaining AC voltage of high frequencies

Answer (Detailed Solution Below)

Option 1: Obtaining controlled DC supply

The working of SMPS is based on:

- 1. Integral control principle
- 2. Frequency control principle
- 3. Chopper principle
- 4. Phase control principle

Answer (Detailed Solution Below)

Option 3: Chopper principle

In the SMPS regulator is accompanied by:

- 1. Duty cycle control
- 2. Regulator IC
- 3. Zener
- 4. Stabilizer

Option 1 : Duty cycle control

Clamping is a process of introducing a/an

- 1. dc level into an ac signal
- 2. ac level into an ac signal
- 3. ac level into a dc signal
- 4. dc level into a dc signal

Answer (Detailed Solution Below)

Option 1 : dc level into an ac signal

Digital storage oscilloscope is used to measure amplitude of_____

- 1. Sinusoidal
- 2. Triangular
- 3. Sawtooth
- 4. All the above

Answer (Detailed Solution Below)

Option 4: All the above

Which of the following is NOT a valid characteristics of switched mode power supply as compared to linear power supply?

- 1. Higher efficiency
- 2. Low noise at output
- 3. Light weight
- 4. Smaller size of transformer

Answer (Detailed Solution Below)

Option 2: Low noise at output