

WORK SHEETS

UNIT-III: DC-DC Converters

- DC-DC converter is also called:
 - Rectifier
 - Chopper
 - Cycloconverter
 - Transformer

Answer: B
- Duty ratio is:
 - OFF time / Total time
 - ON time / Total time
 - ON time / OFF time
 - Total time / ON time

Answer: B
- Buck converter is used to:
 - Increase voltage
 - Decrease voltage
 - Convert AC to DC
 - Convert DC to AC

Answer: B
- Boost converter is used to:
 - Decrease voltage
 - Increase voltage
 - Produce AC
 - Reduce current only

Answer: B
- Buck-Boost converter can:
 - Only increase voltage
 - Only decrease voltage
 - Increase or decrease voltage
 - Produce AC

Answer: C
- Main energy storage element in a converter is:
 - Inductor
 - Fuse
 - Switch
 - Lamp

Answer: A
- A capacitor mainly stores:
 - Magnetic energy

- B) Electrical energy
- C) Heat energy
- D) Mechanical energy

Answer: B

8. Output voltage of a buck converter depends on:

- A) Duty ratio
- B) Color of switch
- C) Size of diode
- D) Temperature only

Answer: A

9. SMPS stands for:

- A) Switched Mode Power Supply
- B) Static Mode Power System
- C) Switching Main Power Source
- D) Simple Mode Power Supply

Answer: A

10. In boost converter, output voltage is:

- A) Less than input
- B) Greater than input
- C) Equal to zero
- D) Equal to input always

Answer: B

11. Choppers are used in:

- A) DC motor speed control
- B) AC motor starting
- C) Radio transmission
- D) Television display

Answer: A

12. Average inductor voltage in steady state is:

- A) Positive
- B) Negative
- C) Zero
- D) Infinite

Answer: C

13. Duty ratio is controlled by:

- A) Switching action
- B) Resistance
- C) Transformer
- D) Fuse

Answer: A

14. The active switch may be:

- A) MOSFET
- B) IGBT
- C) BJT
- D) All of these

Answer: D

15. DC-DC converters provide:

- A) Variable DC output
- B) AC output
- C) RF output
- D) Audio signal

Answer: A

NRCM