Started on	Tuesday, 5 March 2024, 12:08 PM
State	Finished
Completed on	Tuesday, 5 March 2024, 12:08 PM
Time taken	11 secs
Marks	0.00/13.00
Grade	**0.00** out of 10.00 (**0**%)

Question **1**

Not answered

Marked out of 1.00

1. A DC generator converts_____energy to_____energy.

a. (a) electrical, mechanical

b. (b) electrical, electrical

c. (c) chemical, electrical

d. (d) mechanical, electrical

Your answer is incorrect.

The correct answer is:

(d) mechanical, electrical

Question **2**

Not answered

Marked out of 1.00

1. The principle by which emf's are generated in a DC generator is:

a. (a) electromagnetic induction.

b. (d) chemical reaction.

c. (b) Lenz's law .

d. (c) self inductance.

Your answer is incorrect.

The correct answer is:
(a) electromagnetic induction.

Question **3**

Not answered

Marked out of 1.00

1. The function of the commutator in a DC generator is to:

a. (a) connect the AC generated in the windings directly to an external circuit.

b. (b) convert the AC generated in the windings to DC when connecting to an external circuit.

c. (d) allow the generator to be converted to a motor.
(a) allow the generator to be converted to a motor.

d. (c) supply an external current to the armature to drive the generator.

Your answer is incorrect.

The correct answer is:

(b) convert the AC generated in the windings to DC when connecting to an external circuit.

Question **4**

Not answered

Marked out of 1.00

1. The windings for the magnetic field system are mounted on the:

a. .

(b) Commutator.

b.

(c) Frame.

c.

(d) Pole cores.

d. (a) Armature

Your answer is incorrect.

The correct answer is:

(d) Pole cores.

Question **5**

Not answered

Marked out of 1.00

1. The value of the generated emf's in the armature conductors is_____to the field flux, and_____to the armature speed.

a. (b) Proportional, inversely proportional

b. (a) Proportional, proportional

c. (d) inversely Proportional, inversely proportional

d. (c) inversely Proportional, proportional

Your answer is incorrect.

The correct answer is:
(a) Proportional, proportional

Question **6**

Not answered

Marked out of 1.00

1. To increase the output of a generator you could either_____the field current or _____ the armature speed.

a.

(c) increase, increase

(c) increase, increase

b. (a) decrease, decrease

c. (d) decrease, increase

d. (b) increase, decrease

Your answer is incorrect.

The correct answer is:

(c) increase, increase

(c) increase, increase

Question **7**

Not answered

Marked out of 1.00

1. The relationship between current, magnetic flux and the force applied to a conductor within a generator can be determined by:

a. (d) Faraday's left hand rule.

b. (a) Fleming's right hand rule.

c. (c) Faraday's right hand rule.

d. (b) Fleming's left hand rule.

Your answer is incorrect.

The correct answer is:
(a) Fleming's right hand rule.

Question **8**

Not answered

Marked out of 1.00

A single conductor of 150mm length is rotated through a field flux of 0.8T at a velocity of 10m/s. Determine the emf induced in the conductor.

a. 15V

b. 12V

c. 8V

d. 10V

Your answer is incorrect.

The correct answer is:
12V

Question **9**

Not answered

Marked out of 1.00

Determine the flux density of the magnetic field required to generate 12.6V in a conductor with an effective length of 2m which moves through the magnetic field at

90 degree with a uniform velocity of 10.5m/s. (0.6T)

a. 2T

b. 0.6T

c. 0.3T

d. 1T

Your answer is incorrect.

The correct answer is:
0.6T

Question **10**

Not answered

Marked out of 1.00

A generator is wound with 6 series connected coils, each wound with 40 turns. If the length of the armature is 200mm, the density of the flux is 1.25 Tesla and the armature rotates with a velocity of 2m/s, determine the generated output voltage of the generator.

a. 240V

b. 120V

c. 480V

Your answer is incorrect.

The correct answer is:
240V

Question **11**

Not answered

Marked out of 1.00

1. A self-excited shunt generator relies on _____ _____ for its initial magnetic flux.

a. (c) Field flashing

b. (b) Residual magnetism

c. (a) Separate excitation

Your answer is incorrect.

(d) Good luck

The correct answer is:

(b) Residual magnetism

Question **12**

Not answered

Marked out of 1.00

1. The generator type which is used for certain welding applications would be a _____ type.

a. (c) shunt

b. (b) cumulatively compounded

c. (a) Differentially compounded

d. (d) Series

Your answer is incorrect.

The correct answer is:
(a) Differentially compounded

Question **13**

Not answered

Marked out of 1.00

1. A separately excited generator has an effective flux of 8mWb and is operated at a speed of 292 rpm. If the machine constant is 12, determine the:

(a) generated voltage;

(b) no-load terminal voltage.

a. 14v, 14v

b. 28V, 20V

c. 28V, 28V

Your answer is incorrect.

The correct answer is:
28V, 28V

◄ Wk 6 Quiz

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