

Moderate

Assistant Engineer (Electrical), Class 2025

Building Department

Choose the incorrect statement.

A

SMPS is less sensitive to input voltage variations

B

SMPS is smaller as compared to rectifiers

C

SMPS has low input ripple

Correct

D

SMPS is a source of radio interference

Correct Answer: C

Full Detailed Explanation

Concept & Reasoning A switched-mode supply operates semiconductor devices at high frequency, allowing smaller magnetic components and high efficiency. Regulation can tolerate a wide input range. The same fast switching edges, however, create conducted and radiated EMI, so input/output filters are important. The question asks for the incorrect characteristic, so the ripple/noise statement must be read carefully. How to Solve It in the Exam SMPS advantages: compact, efficient, regulated; drawback: EMI/switching noise. Important Exam Point Watch the word 'incorrect' before selecting an attractive advantage. Related Revision Path This question sits in the revision path Power Electronics Switched Mode Power Supplies SMPS Characteristics .

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