

Solution

Q P Code: 25186

Subject: Power Electronics

Sem VI

Electronics & Electrical Engineering

Theory paper marking scheme

- Q1
- | | | |
|----|---|----------|
| A] | Minimum 5 comparison points each carrying 1 Marks | |
| B] | Diagram showing position of FWD
Significance | 2M
3M |
| C] | Heat Sink. Diagram
Significance | 2M
3M |
| D] | Diagram of DC-DC converter
Principle | 2M
3M |
- Q2
- | | | |
|----|--|----------------------|
| A] | Minimum 5 Techniques with diagram (if applicable) & explanation (2 marks for each) | |
| B] | Cycloconverter: Introduction
Diagram
Waveforms
Explanation | 2m
2M
3M
3M |
- Q3
- | | | |
|----|---|----------------|
| A] | Circuit of 3 ϕ inverter
waveforms
Explanation | 3M
4M
3M |
| B] | Circuit of 3- ϕ semi converter
waveforms
Explanation | 3M
4M
3M |
- Q4
- | | | |
|----|---|----------------|
| A] | Space vector Modulation
Introduction
Diagram
Explanation | 2M
3M
5M |
|----|---|----------------|

B] Commutation Introduction 2 m
Definition 2 m
any three methods with diagram 2 marks each

Q 5 A] Boost Converter
Introduction 2 m
Diagram 2 m
Explanation 4 m
Waveform 2 m

B] At least two PWM Techniques with
diagram/waveform/Explanation
5 marks each

Q 6 A] TRIAC :- Symbol & Diagram 3 m
Construction 3 m
Working 2 m
Application 2 m

B] ON-OFF phase controller 3 m
Diagram 3 m
Waveform 3 m
Explanation 4 m