

Program: BE Electrical Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester VI

Course Code: EEDL06022 and Course Name: Micro Grid

Time: 1-hour

Date:6/10/2020

Max. Marks: 50

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Note to the students: - All the Questions are compulsory and carry equal marks.

Q1.	AMI provides
Option A:	One-way communication
Option B:	One to One communication
Option C:	Two-way Communication
Option D:	One to many Communication
Q2.	Micro grid communication infrastructure consists_____ layers.
Option A:	3
Option B:	2
Option C:	4
Option D:	1
Q3.	_____ islanding detection technique uses extensive communication technologies like SCADA, PLC to monitor circuit breaker status
Option A:	communication based
Option B:	Passive
Option C:	Hybrid
Option D:	Active
Q4.	The external control of ac output voltage can be achieved in an inverter by
Option A:	connecting a cyclo-converter
Option B:	connecting an ac voltage controller between the dc source and inverter
Option C:	connecting an ac voltage controller between the output of the inverter and the load
Option D:	connecting an ac voltage controller between the load and the dc source
Q5.	Full form of RTU is given by
Option A:	Remote transformer unit
Option B:	Ring transmission unit
Option C:	Remote Terminal
Option D:	Unit Remote Transfer unit
Q6.	which of the following statement in isolated mode is correct
Option A:	all the DGs operate in PQ mode

Option B:	all the DGs operate in VF mode
Option C:	Some DGs in PQ mode and some DGs in VF mode
Option D:	All DGs in VSI mode
Q7.	Typical signal levels exchanged in CHIL applications is ?
Option A:	$\pm 9V$
Option B:	$\pm 12V$
Option C:	$\pm 10V$
Option D:	$\pm 8V$
Q8.	It is a combination of active and passive detection techniques
Option A:	Passive islanding detection technique
Option B:	Hybrid islanding detection technique
Option C:	communication based islanding detection technique
Option D:	Active islanding detection technique
Q9.	The maximum power in a synchronous machine is obtained when the load angle is
Option A:	120 degree
Option B:	0 degree
Option C:	60 degree
Option D:	90 degree
	D
Q10.	a 15MW micro grid capacity can be categorized under
Option A:	corporate micro grid
Option B:	feeder area micro grid
Option C:	substation area micro grid
Option D:	simple micro grid
Q11.	Rate of change of frequency (ROCOF) function is used for
Option A:	fast load shedding
Option B:	to detect loss of grid
Option C:	to detect frequency
Option D:	to speed up operation time in over- and under frequency situations
Q12.	Micro-Grid has property of self _____
Option A:	protection
Option B:	healing
Option C:	controlling
Option D:	demand management
Q13.	Which of the following is the key control variable in the DC Microgrid?
Option A:	voltage
Option B:	reactive power
Option C:	frequency
Option D:	phase angle

Q14.	_____ is the zone of real and reactive power mismatches if islanding occurs the corresponding relay fails to identify the islanding condition
Option A:	Non detection zone
Option B:	detection zone
Option C:	CRZ zone
Option D:	error detection zone
Q15.	By interconnecting two isolated DC grids one may not achieve this
Option A:	Local energy security
Option B:	Effective RES utilization
Option C:	Less reliability
Option D:	more reliability
Q16.	Consider two alternators are running in parallel now if the excitation of the one of the alternators is changed then it will
Option A:	change power factor
Option B:	reduce speed
Option C:	change load demand
Option D:	change frequency
Q17.	_____ islanding detection technique is Continuously monitor electrical quantities or parameters derived from electrical quantities to identify islanding detection
Option A:	Active
Option B:	Passive
Option C:	Hybrid
Option D:	communication based
Q18.	Dual converter handle_____ during load
Option A:	very high temperature
Option B:	only circulating current
Option C:	no current
Option D:	load current
Q19.	Battery capacity is measured in terms of
Option A:	amps
Option B:	volts
Option C:	watts
Option D:	ampere hour
Q20.	The advantage of smart grid is
Option A:	Improves power reliability
Option B:	increase peak power demand
Option C:	increase energy cost

Option D:	Reduce operational efficiency
Q21.	In a single phase VSI square wave feeds pure inductive load. The wave form of the load current is
Option A:	sinusoidal
Option B:	rectangular
Option C:	trapezoidal
Option D:	triangular
Q22.	Which of the following statement with respect to grid feeding converter is correct?
Option A:	They can operate independently in isolated mode.
Option B:	They cannot operate parallel with other grid feeding converters
Option C:	They can participate in the control of microgrid AC voltage and frequency
Option D:	They can participate in the control of microgrid DC voltage
Q23.	Which of the following communication network is commonly used in SCA
Option A:	HAN
Option B:	FAN
Option C:	IAN
Option D:	WAN
Q24.	"IEEE Guide for Monitoring, Information Exchange, and Control of Distributed Resources Interconnected with Electric Power Systems is a part of "
Option A:	IEEE Standard 1547.1
Option B:	IEEE Standard 1547.3
Option C:	IEEE Standard 1547.4
Option D:	IEEE Standard 1547.2
Q25.	Ring DC microgrid is an example of
Option A:	single bus topology
Option B:	reconfigurable topology
Option C:	two bus topologies
Option D:	multi bus topology

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<b>Question</b>	<b>Correct Option (Enter either 'A' or 'B' or 'C' or 'D')</b>
Q1.	C
Q2.	A
Q3.	A
Q4	C
Q5	C
Q6	C
Q7	C
Q8.	B
Q9.	D
Q10.	B
Q11.	C
Q12.	B
Q13.	B
Q14.	A
Q15.	C
Q16.	A

Q17.	D
Q18.	B
Q19.	D
Q20.	A
Q21.	D
Q22.	C
Q23.	D
Q24.	B
Q25.	B