

Id	1
Question	Demux and DAC are used in-
A	Supervisory control
B	Fixed data loggers
C	PLC
D	DCS
Answer	
Marks	2
Unit	1

Id	2
Question	DAS comprises-
A	Demultiplexer, ADC
B	Multiplexer , ADC
C	Multiplexer, DAC
D	Demultiplexer, DAC
Answer	
Marks	2
Unit	1

Id	3
Question	Portable data logger can be temporarily connected to process
A	True
B	False
Answer	
Marks	2
Unit	1

Id	4
Question	Which is not recording media of data logger
A	Digital strip chart recorder
B	Alarm
C	Magnetic tape
D	Magnetic disc
Answer	
Marks	2
Unit	1

Id	5
Question	Which is recording media of data logger-
A	Alarm
B	Digital strip chart recorder
C	Annunciator
D	Valve
Answer	
Marks	2
Unit	1

Id	6
Question	Computerized data logger has – Better reliability
A	True
B	False
Answer	
Marks	2
Unit	1

Id	7
Question	Computerized data logger has – less reliability
A	True
B	False
Answer	
Marks	2
Unit	1

Id	8
Question	Analog data logger has better reliability than Computerized data logger
A	True
B	False
Answer	
Marks	2
Unit	1

Id	9
Question	Analog data logger has lesser reliability than Computerized data logger
A	True
B	False
Answer	
Marks	2
Unit	1

Id	10
Question	Analog data logger uses microprocessor for its operation
A	True
B	False
Answer	
Marks	2
Unit	1

Id	11
Question	Digital data logger uses microprocessor for its operation
A	True
B	False
Answer	
Marks	2
Unit	1

Id	12
Question	Analog data logger uses microprocessor for its operation
A	True
B	False
C	
D	
Answer	
Marks	2
Unit	1

Id	13
Question	Digital data logger is same as DAS
A	True
B	False
Answer	
Marks	2
Unit	1

Id	14
Question	Digital sensors can not be connected to DAS
A	True
B	False
Answer	
Marks	2
Unit	1

Id	15
Question	Digital sensors can be connected to DAS
A	True
B	False
Answer	
Marks	2
Unit	1

Id	16
Question	A/D converter is used for _____
A	converting analog to digital
B	converting digital to analog
C	converting digital to mixed signal mode
D	converting analog to mixed signal mode
Answer	
Marks	2
Unit	1

Id	17
Question	D/A converter is used for _____
A	converting analog to digital
B	converting digital to analog
C	converting digital to mixed signal mode
D	converting analog to mixed signal mode
Answer	
Marks	2
Unit	1

Id	18
Question	Data acquisition systems are not widely used.
A	True
B	False
Answer	
Marks	2
Unit	1

Id	19
Question	Data acquisition systems are widely used.
A	True
B	False
Answer	
Marks	2
Unit	1

Id	20
Question	For lower accuracies _____
A	digital acquisition system is used
B	both digital and analog acquisition systems are used
C	analog acquisition system is used
D	mechanical data acquisition system is used
Answer	
Marks	2
Unit	1

Id	21
Question	For higher accuracies _____
A	digital acquisition system is used
B	both digital and analog acquisition systems are used
C	analog acquisition system is used
D	mechanical data acquisition system is used
Answer	
Marks	2
Unit	1

Id	22
Question	A multiplexer is used for _____
A	accepting multiple inputs
B	accepting single input
C	accepting multiple outputs
D	accepting single output
Answer	
Marks	2
Unit	1

Id	23
Question	A demultiplexer is used for _____
A	accepting multiple inputs
B	accepting single input
C	accepting multiple outputs
D	accepting single output
Answer	
Marks	2
Unit	1

Id	24
Question	Multiplexers are used when the distance between source and destination is less.
A	True
B	False
Answer	
Marks	2
Unit	1

Id	25
Question	Multiplexers are used when the distance between source and destination is more.
A	True
B	False
Answer	
Marks	2
Unit	1

Id	26
Question	An analogue multiplexer is a form of electrically controlled switch, based on the use of analogue switches.
A	True
B	False
Answer	
Marks	2
Unit	1

Id	27
Question	A digital multiplexer is a form of electrically controlled switch, based on the use of analogue switches.
A	True
B	False
Answer	
Marks	2
Unit	1

Id	28
Question	A digital multiplexer is a form of digital semiconductor IC
A	True
B	False
Answer	
Marks	2
Unit	1

Id	29
Question	An analog multiplexer is a form of digital semiconductor IC
A	True
B	False
Answer	
Marks	2
Unit	1

Id	30
Question	A/D converter means _____
A	analog to digital converter
B	analog to data converter
C	analog to discrete converter
D	None of above
Answer	
Marks	2
Unit	1

Id	31
Question	DAC means _____
A	analog to digital converter
B	digital to analog converter
C	discrete analog converter
D	None of above
Answer	
Marks	2
Unit	1

Id	32
Question	DAS means-
A	Discrete analog system
B	Data acquisition system
C	Digital analog system
D	None of above
Answer	
Marks	2
Unit	1

Id	33
Question	CPU means-
A	Central processing unit
B	Central programming unit
C	Both A and B
D	None of above
Answer	
Marks	2
Unit	1

Id	34
Question	Magnetic tape is recording media in data logger
A	True
B	False
Answer	
Marks	2
Unit	1

Id	35
Question	Magnetic disc is recording media in data logger
A	True
B	False
C	
D	
Answer	
Marks	2
Unit	1

Id	36
Question	Printer can be used as recording media in data logger
A	True
B	False
Answer	
Marks	2
Unit	1

Id	37
Question	Magnetic tape is not a recording media in data logger
A	True
B	False
Answer	
Marks	2
Unit	1

Id	38
Question	Magnetic disc is not a recording media in data logger
A	True
B	False
Answer	
Marks	2
Unit	1

Id	39
Question	Printer is not a recording media in DAS
A	True
B	False
Answer	
Marks	2
Unit	1

Id	40
Question	Digital and analog sensors can be connected to DAS
A	True
B	False
Answer	
Marks	2
Unit	1

Id	41
Question	Digital sensors can be connected to DAS
A	True
B	False
Answer	
Marks	2
Unit	1

Id	42
Question	Analog sensors can be connected to DAS
A	True
B	False
Answer	
Marks	2
Unit	1

Id	43
Question	Digital and analog sensors can not be connected to DAS
A	True
B	False
Answer	
Marks	2
Unit	1

Id	44
Question	Preamplifier is a example of signal conditioning circuit
A	True
B	False
Answer	
Marks	2
Unit	1

Id	45
Question	Current to voltage converter is a example of signal conditioning circuit
A	True
B	False
Answer	
Marks	2
Unit	1

Id	46
Question	RTD requires DC bridge circuit as a signal converter
A	True
B	False
Answer	
Marks	2
Unit	1

Id	47
Question	Thermocouple needs DC bridge circuit for converting temperature to voltage
A	True
B	False
Answer	
Marks	2
Unit	1

Id	48
Question	Thermocouple is a example of digital sensor
A	True
B	False
Answer	
Marks	2
Unit	1

Id	49
Question	Optical encoder is a example of analog sensor
A	True
B	False
Answer	
Marks	2
Unit	1

Id	50
Question	Digital multiplexer can accept only voltage signal of 0V and 5 V as its input
A	True
B	False
Answer	
Marks	2
Unit	1

Id	51
Question	ADC 0808 has in-built multiplexer
A	True
B	False
Answer	
Marks	2
Unit	1

Id	52
Question	The acronym PLC stands for:
A	PID Loop Controller
B	Pneumatic Logic Capstan
C	Programmable Logic Controller
D	Pressure Load Control
Answer	
Marks	2
Unit	2

Id	53
Question	The acronym PID stands for:
A	Proportional Integral Device
B	Proportional Integral Derivative
C	Programmable Integral Device
D	None of above
Answer	
Marks	2
Unit	2

Id	54
Question	The acronym RTU stands for:
A	Remote temperature unit
B	Remote terminal unit
C	Remote thermal unit
D	None of above
Answer	
Marks	2
Unit	2

Id	55
Question	Ladder logic programming consists primarily of:
A	Text-based code
B	Virtual relay contacts and coils
C	Hieroglyphics
D	None of above
Answer	
Marks	2
Unit	2

Id	56
Question	Ladder is symbolic programming language
A	True
B	False
Answer	
Marks	2
Unit	2

Id	57
Question	In a PLC, the scan time refers to the amount of time in which
A	the technician enters the program
B	timers and counters are indexed
C	one "rung" of ladder logic takes to complete
D	the entire program takes to execute
Answer	
Marks	2
Unit	2

Id	58
Question	An OR function implemented in ladder logic uses:
A	Normally-closed contacts in series
B	Normally-open contacts in series
C	Normally-closed contacts in parallel
D	Normally-open contacts in parallel
Answer	
Marks	2
Unit	2

Id	59
Question	The part that monitors the inputs and makes decisions in a PLC is the CPU.
A	True
B	False
C	None of above
Answer	
Marks	2
Unit	2

Id	60
Question	One of the following is an input device
A	Motor
B	Light
C	Valve
D	Sensor
Answer	
Marks	2
Unit	2

Id	61
Question	Which one of the following is not a PLC manufacturer
A	Siemens
B	Mitsubishi
C	Microsoft
D	ABB
Answer	
Marks	2
Unit	2

Id	62
Question	Solenoids, lamps, motors are connected to:
A	Analog output
B	Analog input
C	Digital output
D	Digital input
Answer	
Marks	2
Unit	2

Id	63
Question	In a PLC “I” is used for output and “Q” is used for input
A	True
B	False
C	None of Above
Answer	
Marks	2
Unit	2

Id	64
Question	Sensors are connected to:
A	Analog output
B	Analog input
C	Digital output
D	Digital input
Answer	
Marks	2
Unit	2

Id	65
Question	PLC stands for programmable logo controller
A	True
B	False
Answer	
Marks	2
Unit	2

Id	66
Question	To increase the number of inputs and outputs of the PLC, one can use expansion modules.
A	True
B	False
Answer	
Marks	2
Unit	2

Id	67
Question	An example of discrete (digital) control is:
A	Varying the volume of a music system
B	Turning a lamp ON or OFF
C	Varying the brightness of a lamp
D	Controlling the speed of a fan
Answer	
Marks	2
Unit	2

Id	68
Question	A solenoid is an example of an output device.
A	True
B	False
Answer	
Marks	2
Unit	2

Id	69
Question	Which of the following statements is correct?
A	Ladder logic is a PLC graphical programming technique introduced in the last 10 years.
B	A ladder logic program is hard to analyze because it is totally different when compared with the equivalent relay logic solution.
C	The number of ladder logic virtual relays and input and output instructions is limited only by memory size.
D	The number of contacts for a mechanical relay is limited to number of coils on the relay.
Answer	
Marks	2
Unit	2

Id	70
Question	Which of the following statements is NOT correct?
A	The status of each input can be checked from one location and outputs can be forced on and off.
B	All symbols in the RLL represent actual components and contacts present in the control system.
C	PLCs are not as reliable as electromechanical relays in RLL.
D	Input and output instruction symbols in the ladder logic represent only data values stored in PLC memory.
Answer	
Marks	2
Unit	2

Id	71
Question	Full form of RLL is
A	Relay lamp logic
B	Relay ladder logic
C	Rung ladder logic
D	None of above
Answer	
Marks	2
Unit	2

Id	72
Question	Which of the following statements is NOT correct?
A	If a problem in a PLC module occurs, the module can be changed in a matter of minutes without any changes in wiring.
B	Outputs can be paralleled on the same rung.
C	The physical wires between the input and output field devices and the PLC input and output modules are the only signal wires required in the PLC system.
D	The cost and size of PLCs have increased significantly in the last 10 years.
Answer	
Marks	2
Unit	2

Id	73
Question	Full form of SPDT is – single pole double through
A	True
B	False
Answer	
Marks	2
Unit	2

Id	74
Question	Relay has two contacts- NO and NC
A	True
B	False
Answer	
Marks	2
Unit	2

Id	75
Question	Which of the following statements about a single pole double throw relay is NOT true?
A	It is called an SPDT type of relay.
B	It has one common contact.
C	It has two positions (NC and NO).
D	It has a center off position.
Answer	
Marks	2
Unit	2

Id	76
Question	Which of the following statements about a single pole double throw relay is true?
A	Insulators are used in the armature to isolate the electrical switching contacts from the rest of the relay components.
B	The NC contact and the pole are in contact when the relay is off.
C	It has just one coil.
D	All of the above.
Answer	
Marks	2
Unit	2

Id	77
Question	Which of the following statements about RLL is NOT true?
A	NO contact symbol has two parallel lines to indicate an open contact.
B	RLL stands for Relay Ladder Logic.
C	NC contact symbol has the same two parallel lines with a line across them to indicate closed contacts.
D	The right power rail is positive or the high side of the source, and the left power rail is the power return or ground.
Answer	
Marks	2
Unit	2

Id	78
Question	The _____ is moved toward the relay electromagnet when the relay is on.
A	Armature
B	Coil
C	NO contact
D	NC contact
Answer	
Marks	2
Unit	2

Id	79
Question	When a relay is NOT energized:
A	There is an electrical path through the NO contacts
B	There is an electrical path through the NC contacts
C	Neither the NO or the NC contacts have an electrical path
D	Both the NO or the NC contacts have an electrical path
Answer	
Marks	2
Unit	2

Id	80
Question	Which of the following RLL applications is not normally performed in early automation systems?
A	On/off control of field devices
B	Logical control of discrete devices
C	On/off control of motor starters
D	Proportional control of field devices
Answer	
Marks	2
Unit	2

Id	81
Question	Current flows into the _____
A	Input terminal of a sinking DC input module
B	Input terminal of a sinking output field device
C	Output terminal of a sinking input field device
D	All of the above
Answer	
Marks	2
Unit	2

Id	82
Question	In a current sinking DC input module _____
A	The current flows out of the input field device
B	Requires that a AC sources be used with mechanical switches
C	The current flows out of the input module
D	Currents can flow in either direction at the input module
Answer	
Marks	2
Unit	2

Id	83
Question	When _____ contacts are actuated, they disrupt the power supply through them.
A	normally open type
B	normally closed type
C	both A and B.
D	None of above
Answer	
Marks	2
Unit	2

Id	84
Question	The type of memory which is fast and temporarily stores the data which are immediately required for use is called as_____.
A	HDD
B	ROM
C	RAM
D	SSD
Answer	
Marks	2
Unit	2

Id	85
Question	HDD means hard disc drive
A	True
B	False
Answer	
Marks	2
Unit	2

Id	86
Question	ROM memory can be rewritten
A	True
B	False
Answer	
Marks	2
Unit	2

Id	87
Question	RAM memory can not be rewritten
A	True
B	False
Answer	
Marks	2
Unit	2

Id	88
Question	How is the speed of operation of conventional relay system as compared to digital controllers?
A	very slow
B	very fast
C	same
D	Almost similar
Answer	
Marks	2
Unit	2

Id	89
Question	The capability of convention relay systems for complex operations is ____ that of the PLCs .
A	poor than
B	excellent than
C	as good as
D	unpredictable as
Answer	
Marks	2
Unit	2

Id	90
Question	How is the noise immunity of PLCs to electrical noises as compared to that of conventional relay controllers?
A	poor
B	excellent
C	unpredictable
D	None of above
Answer	
Marks	2
Unit	2

Id	91
Question	_____ of PLCs can be done in very little time as compared to conventional relay systems.
A	Programming
B	Installation
C	Commissioning
D	All of the above
Answer	
Marks	2
Unit	2

Id	92
Question	PLC can be _____ in plant to change the sequence of operation.
A	only programmed
B	only reprogrammed
C	programmed and reprogrammed
D	able to give a set point
Answer	
Marks	2
Unit	2

Id	93
Question	The PLC is used in _____.
A	machine tools
B	automated assembly equipment
C	moulding and extrusion machines
D	all of above
Answer	
Marks	2
Unit	2

Id	94
Question	Which of the following can be the output of PLC?
A	Relay coils
B	Solenoids
C	Lamps
D	All of above
Answer	
Marks	2
Unit	2

Id	95
Question	Which of the following can be the input of PLC?
A	Relay contacts
B	Limit switches
C	Push butttons
D	All of above
Answer	
Marks	2
Unit	2

Id	96
Question	Which of the following cannot be an input that is given to the PLC?
A	Manual switches
B	Relays
C	Sensors
D	None of above
Answer	
Marks	2
Unit	2

Id	97
Question	Lamp is output device of PLC
A	True
B	False
Answer	
Marks	2
Unit	2

Id	98
Question	Temperature switch is not input device
A	True
B	False
Answer	
Marks	2
Unit	2

Id	99
Question	Printer can not be connected to PLC
A	True
B	False
Answer	
Marks	2
Unit	2

Id	100
Question	Timer function is available in ladder programming
A	True
B	False
Answer	
Marks	2
Unit	2

Id	101
Question	What is the full form of SCADA?
A	Supervisory Control and Document Acquisition
B	Supervisory Column and Data Assessment
C	Supervisory Column and Data Assessment
D	Supervisory Control and Data Acquisition
Answer	
Marks	2
Unit	3

Id	102
Question	DCS is a _____
A	Distributed Control System
B	Data Control System
C	Data Column System
D	Distributed Column System
Answer	
Marks	2
Unit	3

Id	103
Question	The control in SCADA is _____
A	Online control
B	Direct control
C	Supervisory control
D	Automatic control
Answer	
Marks	2
Unit	3

Id	104
Question	When did the SCADA start?
A	1980s
B	1990s
C	1970s
D	1960s
Answer	
Marks	2
Unit	3

Id	105
Question	How many levels are present in a complex SCADA system?
A	3
B	4
C	5
D	6
Answer	
Marks	2
Unit	3

Id	106
Question	In a digital control system, the resolution refers to in the analog-to-digital conversion portion of-----
A	how determined the designer was
B	the number of active bits
C	the analog signal range
D	none of these
Answer	
Marks	2
Unit	3

Id	107
Question	_____ system is the ON-OFF controller.
A	Discontinuous
B	Digital
C	Non-linear
D	Linear
Answer	
Marks	2
Unit	3

Id	108
Question	In centralized control system controller is mounted in
A	Control room
B	Plant
C	Transmitter
D	None of above
Answer	
Marks	2
Unit	3

Id	109
Question	In distributed control system controller is mounted in
A	Control room
B	Junction box
C	Transmitter
D	None of above
Answer	
Marks	2
Unit	3

Id	110
Question	DCS enhances reliability
A	True
B	False
Answer	
Marks	2
Unit	3

Id	111
Question	All process control loops can be monitored at a time in
A	Overview Display
B	Detail Display
C	Group Display
D	Trend Display
Answer	
Marks	2
Unit	3

Id	112
Question	Historical data can be monitored at a time in
A	Overview Display
B	Detail Display
C	Group Display
D	Trend Display
Answer	
Marks	2
Unit	3

Id	113
Question	All parameters of any process control loop can be monitored at a time in
A	Overview Display
B	Detail Display
C	Group Display
D	Trend Display
Answer	
Marks	2
Unit	3

Id	114
Question	Certain Group of process control loops can be monitored at a time in
A	Overview Display
B	Detail Display
C	Group Display
D	Trend Display
Answer	
Marks	2
Unit	3

Id	115
Question	DCS can combine PLC and SCADA systems
A	True
B	False
Answer	
Marks	2
Unit	3

Id	116
Question	Honeywell is manufacturer of DCS
A	True
B	False
Answer	
Marks	2
Unit	3

Id	117
Question	Controllers in DCS are termed as – controller files
A	True
B	False
Answer	
Marks	2
Unit	3

Id	118
Question	Fieldbus is communication media in DCS
A	True
B	False
Answer	
Marks	2
Unit	3

Id	119
Question	SCADA is normally part of DCS
A	True
B	False
Answer	
Marks	2
Unit	3

Id	120
Question	Rules for communication in DCS are known as - protocols
A	True
B	False
Answer	
Marks	2
Unit	3

Id	121
Question	Transmitter in DCS comprises sensor as well as controller
A	True
B	False
Answer	
Marks	2
Unit	3

Id	122
Question	In modern DCS wireless sensors are used
A	True
B	False
Answer	
Marks	2
Unit	3

Id	123
Question	Set point adjustment can be done in
A	Overview Display
B	Detail Display
C	Group Display
D	Trend Display
Answer	
Marks	2
Unit	3

Id	124
Question	Which display mode is easy for monitoring?
A	Overview Display
B	Graphic Display
C	Group Display
D	Trend Display
Answer	
Marks	2
Unit	3

Id	125
Question	Which display mode is used for monitoring critical loops?
A	Overview Display
B	Graphic Display
C	Group Display
D	Trend Display
Answer	
Marks	2
Unit	3

Id	126
Question	PV means process variable
A	True
B	False
Answer	
Marks	2
Unit	3

Id	127
Question	SP means set point
A	True
B	False
Answer	
Marks	2
Unit	3

Id	128
Question	Redundancy is essential in process control to ensure reliability and safety
A	True
B	False
Answer	
Marks	2
Unit	3

Id	129
Question	In DCS , controllers are far away from plant
A	True
B	False
Answer	
Marks	2
Unit	3

Id	130
Question	HMI refers to
A	Human Machine Interface
B	Human Machine Indicator
C	Human Machine Integrator
D	None of above
Answer	
Marks	2
Unit	3

Id	131
Question	MMI refers to-
A	Man Machine Interface
B	Man Machine Indicator
C	Man Machine Integrator
D	None of above
Answer	
Marks	2
Unit	3

Id	132
Question	For large geographical area control----- -----is used
A	PLC
B	DCS
C	SCADA
D	DDC
Answer	
Marks	2
Unit	3

Id	133
Question	For packaging control plant -----is used
A	PLC
B	DCS
C	SCADA
D	DDC
Answer	
Marks	2
Unit	3

Id	134
Question	In chemical process control industries----- -----is used
A	PLC
B	DCS
C	SCADA
D	DDC
Answer	
Marks	2
Unit	3

Id	135
Question	In airport traffic control----- is used
A	PLC
B	DCS
C	SCADA
D	DDC
Answer	
Marks	2
Unit	3

Id	136
Question	In wind energy plants -----is used
A	PLC
B	DCS
C	SCADA
D	DDC
Answer	
Marks	2
Unit	3

Id	137
Question	In automatic vehical parking application----- -----is used
A	PLC
B	DCS
C	SCADA
D	DDC
Answer	
Marks	2
Unit	3

Id	138
Question	In ----- digital computer is used for control purpose
A	PLC
B	DCS
C	SCADA
D	DDC
Answer	
Marks	2
Unit	3

Id	139
Question	In textile mills -----is used
A	PLC
B	DCS
C	SCADA
D	DDC
Answer	
Marks	2
Unit	3

Id	140
Question	DDC stands for – direct digital control
A	True
B	False
Answer	
Marks	2
Unit	3

Id	141
Question	Optical fibres are used in DCS for loss-free communication
A	True
B	False
Answer	
Marks	2
Unit	3

Id	142
Question	Microwave wireless communication is used mostly in humanless plants
A	True
B	False
Answer	
Marks	2
Unit	3

Id	143
Question	Transmitters are mounted at central processing area
A	True
B	False
Answer	
Marks	2
Unit	3

Id	144
Question	Operators consoles are mounted at local processing area
A	True
B	False
Answer	
Marks	2
Unit	3

Id	145
Question	Sensors are mounted on level_____ of DCS
A	0
B	1
C	2
D	3
Answer	
Marks	2
Unit	3

Id	146
Question	Central processing area contains-
A	workstations
B	sensors
C	transmitters
D	valves
Answer	
Marks	2
Unit	3

Id	147
Question	Local processing area contains-
A	Workstations
B	DAS
C	Transmitters
D	Displays
Answer	
Marks	2
Unit	3

Id	148
Question	Controller files contains-
A	PID programs
B	DAS
C	Transmitters
D	Sensors
Answer	
Marks	2
Unit	3

Id	149
Question	In DCS, controllers are mounted on the process itself
A	True
B	False
Answer	
Marks	2
Unit	3

Id	150
Question	Transducers are mounted on level_____ of DCS
A	0
B	1
C	2
D	3
Answer	
Marks	2
Unit	3