

BE-II
Electronics and Telecommunication

Sample Multiple choice Questions

1. Name of Subject: Mechatronics (Elective -II)

2. Subject Code:67819

3. Sem: VIII

Id	1
Question	Process of replacing non computer system with actual hardware is known as
A	Modeling
B	Proto-typing
C	Deployment
D	All of these
Answer	B. Proto-typing
Marks	2
Unit	1

Id	2
Question	The closeness of measured value to true value is known as
A	Stability
B	Accuracy
C	Response
D	All of the these
Answer	B. Accuracy
Marks	2
Unit	1

Id	3
Question	Change in Output signal with respect to input signal is known as
A	Stability
B	Accuracy
C	Response
D	All of the these
Answer	A. Stability
Marks	2
Unit	1

Id	4
Question	Refrigerator temperature control is a example of _____
A	Close loop system
B	Open Loop system
C	Partial Stable system
D	None of the above
Answer	A. Close loop system
Marks	2
Unit	1

Id	5
Question	Variation of output for a given input over a period of time is known as _____
A	Drift
B	Impedance
C	Hysteresis
D	Compensation
Answer	A. Drift
Marks	2
Unit	1

Id	6
Question	A bearing material possess
A	High compressive strength
B	Low coefficient of friction
C	High thermal conductivity
D	All of above
Answer	D. All of above
Marks	2
Unit	2

Id	7
Question	Which of these is an Actuator
A	Hydraulic
B	Pneumatic
C	Electrical
D	All of these
Answer	D. All of these
Marks	2
Unit	2

Id	8
Question	_____ actuator take electrical energy from DC or AC and turn it into mechanical energy
A	Mechanical
B	Hydraulic
C	Electrical
D	Pneumatic
Answer	C. Electrical
Marks	2
Unit	2

Id	9
Question	No-load speed of which of the following motor is highest
A	Differentially compound motor
B	Cumulative compound motor
C	Series Motor
D	Shunt Motor
Answer	C. Series Motor
Marks	2
Unit	2

Id	10
Question	An induction motor is identical to
A	D.C. compound motor
B	D.C. series motor
C	Synchronous motor
D	Asynchronous motor
Answer	D. Asynchronous motor
Marks	2
Unit	2

Id	11
Question	At zero in an induction motor
A	Motor runs as a generator
B	Motor does not run
C	The motor runs an at synchronous speed
D	Slip produced is zero
Answer	D. Motor does not run
Marks	2
Unit	2

Id	12
Question	ON/OFF controller is found in many house-hold appliances such as
A	Refrigerator system
B	Heating system
C	Conditioning system
D	All of above
Answer	D. All of above
Marks	2
Unit	3

Id	13
Question	which of this is true for proportional controller
A	A proportional gain increases, the offset error decreases
B	A proportional gain increases, the offset error increases
C	For increasing gain, the close loop time constant becomes larger
D	For increasing gain, the system response slows down
Answer	A. A proportional gain increases, the offset error decreases
Marks	2
Unit	3

Id	14
Question	A proportional controller has gain of 5 and an offset of 20%, determine controller output with an error of 2%.
A	20%
B	30%
C	40%
D	50%
Answer	B. 30%
Marks	2
Unit	3

Id	15
Question	In Pneumatic controller control action is due to
A	Liquid
B	Air
C	Electricity
D	None of these
Answer	B. Air
Marks	2
Unit	3

Id	16
Question	In proportional controller offset occurs mainly due to
A	Constant load
B	Proportional constant
C	Changing load
D	None of these
Answer	C. Changing load
Marks	2
Unit	3

Id	17
Question	Which is the type of DC motor
A	Series
B	Shunt
C	Compound
D	All of these
Answer	D. All of these
Marks	2
Unit	3

Id	18
Question	The derivative control action is typically used when controlling, but rarely used when controlling
A	Temperature, Flow
B	Flow, Level
C	pH, Temperature
D	Level, Temperature
Answer	A. Temperature, Flow
Marks	2
Unit	3

Id	19
Question	Reset control action is often expressed in units of:
A	Percent
B	Seconds per rate
C	Minutes
D	Repeats per minute
Answer	D. Repeats per minute
Marks	2
Unit	3

Id	20
Question	Which control system does not have a stability problem?
A	Open loop system
B	Closed loop system
C	Both a. and b.
D	None of the above
Answer	A, Open loop system
Marks	2
Unit	3

Id	21
Question	The acronym PLC stands for
A	Pressure Load Controller
B	Programmable Logic Controller
C	Pneumatic Logic Capstan
D	PID Loop Controller
Answer	B. Programmable Logic Controller
Marks	2
Unit	4

Id	22
Question	The PLC is used in _____.
A	Machine tools
B	Automated assembly equipment
C	Moulding and extrusion machines
D	All of the above
Answer	D, All of the above
Marks	2
Unit	4

Id	23
Question	PLC stands for
A	Programmable Logic Controller
B	Programmable Level Controller
C	Programable Line Controller
D	Programmable Logic Comparator
Answer	A, Programmable Logic Controller
Marks	2
Unit	4

Id	24
Question	Data acquisition is the process in which, physical variables from the real world are_____
A	Converted into electrical signals
B	Modified and converted into a digital format for processing
C	Both A. and B
D	None of the above
Answer	C, Both A. and B
Marks	2
Unit	1

Id	25
Question	<p>Identify the problem in this motor control PLC program:</p>
A	Coil
B	Start contact
C	Seal-in contact
D	Stop contact
Answer	C, Seal-in contact
Marks	2
Unit	4

Id	26
Question	What is the largest integer number that a PLC counter function can reach if it uses a 16 bit register?
A	32,768
B	65,535
C	65,536
D	65,537
Answer	B, 65,535
Marks	2
Unit	4

Id	27
Question	Communicating the decision as an action signal to the outputs is function of which ----
A	CPU
B	I/O Units
C	Memory Unit
D	Programming Device
Answer	A, CPU
Marks	2
Unit	4

Id	28
Question	Actual Programming of PLC is usually achieved by
A	Pushing Keys
B	A keyboard
C	Both (A) & (B)
D	None of Above
Answer	C, Both (A) & (B)
Marks	2
Unit	4

Id	29
Question	When the PLC processor is in the program mode
A	It executes its scan cycle
B	It does not execute its scan cycle
C	Solve logic in its program
D	None of Above
Answer	A, It executes its scan cycle
Marks	2
Unit	4

Id	30
Question	Solenoids, lamps, motors are connected to_____
A	Analog output
B	Digital output
C	Analog input
D	Digital input
Answer	B, Digital output
Marks	2
Unit	4