University of Mumbai
Online Examination 2020

Program: TE Mechanical Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester VI

Course Code: MEDLO6023 and Course Name: Industrial Automation

Time: 1 hour   Max. Marks: 50

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

Q1.	In this type of Automation, the sequence of processing operations is fixed by the equipment configuration.
Option A:	Flexible Automation
Option B:	Programmable Automation
Option C:	Fixed Automation
Option D:	Mechanization
Q2.	These systems can be operated using pressurized oil as the active power source.
Option A:	Mechanical systems
Option B:	Pneumatic systems
Option C:	Hydraulic systems
Option D:	Electrical systems
Q3.	What is the advantage of using Hydraulic actuators?
Option A:	Medium is freely available
Option B:	Least cost
Option C:	Self-lubricated & self-cooled
Option D:	Requires return lines
Q4.	Following is a temperature measurement device
Option A:	RTD
Option B:	Potentiometer
Option C:	Load cell
Option D:	LVDT
Q5.	PLC system can make use of following sensor for taking feedback.
Option A:	Inductive sensor
Option B:	Pilot valve
Option C:	Time delay valve
Option D:	pressure gauge

Q6.	For large capacity as well as speed, which type of drive can be preferred?
Option A:	Pneumatic
Option B:	Hydraulic
Option C:	Electric
Option D:	Electro-pneumatic
Q7.	What is the first or lowest level in levels of Automation.
Option A:	Machine level
Option B:	Device level
Option C:	Plant level
Option D:	Cell level
Q8.	The process of following pre-determined sequence of operations with little or no human intervention using specialized equipment and devices is called as
Option A:	Mechanization
Option B:	Simple operation
Option C:	Manual Operation
Option D:	Automation
Q9.	The valve which can be used for giving delay in the process
Option A:	3/2 Valve
Option B:	AND valve
Option C:	Shuttle valve
Option D:	Time delay valve
Q10.	the Amplifier which is usually installed at the receiver end to amplify the signal to detect by the receiver is called as
Option A:	Booster amplifier
Option B:	Pre-amplifier
Option C:	In-line Amplifier
Option D:	Receiver
Q11.	When PLC connections are used instead of electrical connections, the order of operations to be performed can be interchanged by
Option A:	changing hardwired connections
Option B:	changing sequence of program
Option C:	changing component valves of the system
Option D:	changing sensors of the system
Q12.	For assembly of components, which type of drive should be used?
Option A:	Pneumatic
Option B:	Hydraulic
Option C:	Electric
Option D:	Hydro-Pneumatic

Q13.	In this type of Automation, the production equipment is so designed that to change the sequence of operation using program for different product configuration
Option A:	Flexible Automation
Option B:	Programmable Automation
Option C:	Fixed Automation
Option D:	Mechanization
Q14.	The equipment which is used for horizontal movement of material in a facility is called as
Option A:	Hoist
Option B:	Crain
Option C:	Pulley
Option D:	Chain block
Q15.	Input to OR valve can be given by
Option A:	Two 4/2 Valve
Option B:	Two 2/2 Valve
Option C:	Two 5/2 Valve
Option D:	One AND valve
Q16.	The long form of LVDT is
Option A:	Linear Variable differential Transformer
Option B:	Linear Variable differential Transducer
Option C:	Linear Variety of differential Transformer
Option D:	Non-linear type Variable differential Transducer
Q17.	Speed control of actuators in PLC system can be achieved by using
Option A:	Timer & Timer contact
Option B:	Flow control valve
Option C:	Coil & contact in series
Option D:	Two contacts in series
Q18.	For strength and silent operations, which type of drive is used?
Option A:	Hydraulic
Option B:	Electric
Option C:	Pneumatic
Option D:	Electro-pneumatic
Q19.	PLC cannot perform
Option A:	Timing
Option B:	Thinking
Option C:	Sequencing
Option D:	Counting
Q20.	Following is not a Rail guided vehicle.

Option A:	Monorail
Option B:	Walkie trucks
Option C:	Conveyors
Option D:	Roller Conveyors
Q21.	The biggest disadvantage of Hydraulic system over Pneumatic system is
Option A:	It needs return lines
Option B:	It gives noisy operation
Option C:	No problem of leakages
Option D:	It needs FRL Unit
Q22.	What is the unit of Time which we mention in Timer function?
Option A:	millisecond
Option B:	seconds
Option C:	minute
Option D:	microseconds
Q23.	Which ports of 5/3 valves are Output ports?
Option A:	1 & 3
Option B:	1 & 5
Option C:	2 & 4
Option D:	3 & 5
Q24.	Out of two inputs to Time delay valve, one is given from Air service unit & other is given from following.
Option A:	Flow control valve
Option B:	Pilot valve/ Limit switch
Option C:	Pressure relief valve
Option D:	final directional control valve
Q25.	Delay in Electro-pneumatic system can be achieved by using
Option A:	Time Delay Valve
Option B:	Uni-directional Flow control valve
Option C:	Time relay & Time delay pick up switch
Option D:	Timer & Timer contact