Program: BE Electrical Engineering

Curriculum Scheme: Revised 2016

Examination: Final Year Semester VII

Course Code: **EEDLO7033**   Course Name: Industrial controller

Time: 1hour   Max. Marks: 50

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

Q1.	The test book of PID deals with
Option A:	Gain constants
Option B:	Time constants
Option C:	Both gain constant and time constant
Option D:	Either gain constant or time constant
Q2.	The controller which works satisfactorily for the steady state error reduction is
Option A:	P controller
Option B:	I controller
Option C:	D controller
Option D:	PID controller
Q3.	The controller known as predictive controller is
Option A:	P controller
Option B:	PI controller
Option C:	D controller
Option D:	PID controller
Q4.	An I controller reduces the steady state error to zero but
Option A:	It disturb the transient response
Option B:	It reduces the over shoot
Option C:	It changes the damping factor of the system
Option D:	All the options are correct
Q5.	A large proportional band
Option A:	Means slow response
Option B:	Can handle large range of error
Option C:	Means not a good p controller
Option D:	Means slow response and Can handle large range of error
Q6.	Which is not a closed loop PID tuning method
Option A:	Quarter amplitude decay
Option B:	Reaction curve method

Option C:	Oscillation method
Option D:	None of these
Q7.	In process reaction curve method of PID tuning
Option A:	System is in open loop
Option B:	System is in closed loop
Option C:	System is in unity feedback
Option D:	System is in shut down mode
Q8.	In quarter amplitude decay PID tuning the relation between the ultimate gain and proportional gain is
Option A:	Kp=Ku
Option B:	Kp=0.5 Ku
Option C:	Kp=0.4 Ku
Option D:	Kp=10Ku
Q9.	During the PID tuning using sustained oscillation method
Option A:	System is of first order model and working with Kp only
Option B:	System is of second order model and working with Kp only
Option C:	System is of first order model and working in open loop
Option D:	System can be modeled in any order and open loop or closed loop
Q10.	What is the form of Fuzzy logic?
Option A:	Two-valued logic
Option B:	Crisp set logic
Option C:	Many-valued logic
Option D:	Binary set logic
Q11.	In Membership function graph x-axis represents?
Option A:	Many-valued logic
Option B:	degrees of membership in the [0, 1] interval
Option C:	degrees of discourse
Option D:	Universe of membership
Q12.	The vertical line of ladder diagram is known as ---------------- and the horizontal line is known as --------------
Option A:	Rail and rung
Option B:	Rung and rail
Option C:	Power and ground
Option D:	+ and -
Q13.	By maintaining an energized ladder relay circuit after a push button is released -------------------------function(s) is/are performed
Option A:	Latching
Option B	An interlocking
Option C:	Both latching and interlocking

Option D:	Stop
Q14.	A personal password is stored in the ---------------------- file
Option A:	System function
Option B:	Subroutine
Option C:	Reserved
Option D:	Program
Q15.	Word address include-------
Option A:	Counters
Option B:	Controls
Option C:	Timers
Option D:	All the options are correct
Q16.	MOV instruction require the following number of inputs from programmer
Option A:	1
Option B:	2
Option C:	3
Option D:	4
Q17.	Following is the task not performed by programming unit
Option A:	Uploading
Option B:	Downloading
Option C:	Forcing input
Option D:	Executing
Q18.	The results of division instruction is stored in
Option A:	S:0, S:1
Option B:	S:10, S:11
Option C:	S:12, S:13
Option D:	S:13, S:14
Q19.	How many counter elements are there in the data file of Allen Bradly SLC500 PLC
Option A:	100
Option B:	84
Option C:	256
Option D:	16
Q20.	An instruction always used with a Latch instruction is
Option A:	END
Option B:	Unlatch
Option C:	RES
Option D:	WAIT
Q21.	The numbers operated on by arithmetic instructions are taken from which of the following source

Option A:	A specific memory address
Option B:	Timers
Option C:	Counters
Option D:	All the options are correct
Q22.	The numbers to be compared by compare instruction can be from
Option A:	Timer
Option B:	Counter
Option C:	Specific memory
Option D:	All of the options are correct
Q23.	The counter reset instruction is used to clear the accumulated value of the ----------- to zero
Option A:	Up counter
Option B:	Down counter
Option C:	Both up and down counter
Option D:	None of the given option
Q24.	Jump instruction must be accompanied with
Option A:	Return
Option B:	Reset
Option C:	Label
Option D:	End
Q25.	Bit shift instruction require following from programmer
Option A:	Control setting
Option B:	Bit address
Option C:	Length of array
Option D:	None of the given option

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Question	Correct Option
Q1.	C
Q2.	A
Q3.	C
Q4	D
Q5	D
Q6	B
Q7	A
Q8.	B
Q9.	B
Q10.	C
Q11.	D
Q12.	A
Q13.	C
Q14.	A
Q15.	D
Q16.	B

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