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VALUE ADDED COURSES 2021-2022

Department of Electronics and Communication Engineering 21ECE01- Smart Industrial Safety Solutions

MARK SHEET

		MARK SHEET				
Sl. No	Register Number	Student Name	Mark			
1	18TC1201	ABITHA V	88			
2	18TC1202	AGALYA B	96			
3	18TC1203	ANITHA N	92			
4	18TC1204	FOUSIA BEGAM Y	92			
5	18TC1205	JOTHILAKSHMI A	96			
6	18TC1206	KAMARUNISHA H	ISHA H 96			
7	18TC1207					
8	18TC1208					
9	18TC1209	NASIRA BANU M	88			
10	18TC1210	PAVITHRA S	88			
11	18TC1211	PRIYADARSINI D	88			
12	18TC1212	RAJALAKSHMI M	88			
13	18TC1213	RAJESWARI P	96			
14	18TC1214	SANGARI A	92			
15	18TC1215	SANGEETHA K	92			
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VALUE ADDED COURSE 2021-2022

Department of Electronics and communication Engineering

21ECE01-Smart Industrial Safety Solutions

NAME: SANGARI.A

CLASS: IV/ECE

DATE: 20/08/2021

- 1. Which technology is commonly used for real-time monitoring of industrial equipment?
 - A) RFID
 - BYTOT
 - C) Bluetooth
 - D) Wi-Fi
- What does PPE stand for in industrial safety?
 - A) Personal Protection Equipment
 - B) Professional Protection Equipment
 - Personal Protective Equipment
 - D) Protective Personal Equipment
- 3. Which of the following is a common hazard in industrial environments?
 - A) Noise
 - B) Slippery floors
 - C) Chemical exposure
 - DNAll of the above
- 4. Which standard is widely used for occupational health and safety management systems?
 - A) ISO 9001
 - B) ISO 14001
 - enso 45001
 - D) ISO 50001
- 5. What does HAZOP stand for?
 - A) Hazardous Operations
 - B) Hazard and Operability Study
 - C) Hazardous Optimization
 - D) Hazard Operation Plan
- 6. Which device is used to detect the presence of toxic gases in an industrial setting?
 - A) Smoke detector
 - B) Gas analyzer
 - C) Carbon monoxide detector
 - D) Fire alarm

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Technology

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	· · · · · · · · · · · · · · · · · · ·	ety management system (SMS)?
7. WI	hat is the main purpose of a sair	Cty management of series (
A)	To increase production efficien	iicy
B)	To manage employee schedule	S 11 lele ministra
es	To systematically manage safe	ety and nearth risks
8. W	hich technology can be used to	provide real-time location tracking of employees in
ha	azardous areas?	
41,000) GPS	
	TRFID	
) Wi-Fi	
) Bluetooth	
o 11	That is the primary benefit of pr	edictive maintenance in industrial safety?
9. W	() Reducing energy consumption	n
A	Preventing unexpected equip	ment failures
75	y Preventing unexpected equip	
C) Improving employee morale	
) Increasing production speed	
10 1	VILLE time of DDE would be me	ost appropriate for protecting against airborne particles?
10. V	which type of FFE would be mi	Son affect
	A) Hard hat	
	3) Safety goggles	
	Respirator	
Ι	D) Ear plugs	
11 7	Which of the following is a key	feature of smart PPE?
11.	Which of the following is a may	
1	A) Lightweight design	oring .
4	B) Connectivity for data monitor	ning
(C) Low cost	
	D) Disposable materials	
12.	What is the role of machine lea	ming in industrial safety.
	A) To manage financial transac	ctions
,	B) To analyze safety data and I	oredict potential nazarus
	C) To automate production pro	cesses
	D) To provide employee training	ng
		s
13.	Which of the following is NO	Ta component of a safety management system?
	A) Risk assessment	
	B) Hazard analysis	
	e) Financial auditing	
	D) Incident investigation	
		of an IoT sensor in an industrial setting?
14.	. What is the primary function of	of an IoT sensor in an industrial setting?
_	A) To improve employee prod	nuctivity
110	B) To monitor and collect data	a on equipment and environmental conditions Dr. S. SEENUVASAMU
/ Com	01	DI. G. ODDINGID

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- C) To enhance communication between employees
- D) To reduce energy consumption

15	Which of the following standards focuses specifically on fi	re safety?
13.	Willelf of the	

- A) ISO 9001
- BYNFPA 70E
- C) OSHA 1910
- D) ISO 45001
- 16. What does SCADA stand for?
 - A) Supervisory Control and Data Acquisition
 - B) Safety Control and Data Analysis
 - C) System Control and Data Application
 - D) Supervisory Control and Data Administration
- 17. Which type of maintenance involves regular inspections and servicing to prevent equipment failure?
 - A) Reactive maintenance
 - B) Preventive maintenance
 - C) Corrective maintenance
 - D) Predictive maintenance
- 18. Which wearable device can be used to monitor vital signs of workers in real-time?
 - A) Smart helmet
 - B) Smartwatch
 - C) Smart glasses
 - D) Smart vest
- 19. Which technology helps in creating digital twins for industrial safety applications?
 - A) Augmented reality
 - B) Virtual reality
 - (IoT)
 - D) Blockchain
- 20. What is a primary goal of safety analytics?
 - A) To increase production speed
 - B) To reduce operational costs
 - () To predict and prevent safety incidents
 - D) To enhance employee benefits
- 21. What does LOTO stand for in industrial safety?

A) Lockout-Tagout

AAKCO Line of Trade Operations of Time Operations

D) Dockbut-Time out

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- 22. Which of the following best describes a confined space in industrial settings?
 - A) Any small room
 - B) An area with limited entry and exit
 - C) A high-traffic area
 - D) An area without lighting
- 23. What is a common use of drones in industrial safety?
 - A) Delivering packages
 - B) Aerial inspections and monitoring
 - C) Enhancing employee communication
 - D) Reducing energy consumption
- 24. What does FMEA stand for?
 - A) Failure Modes and Effects Analysis
 - B) Fault Management and Equipment Assessment
 - C) Facility Management and Efficiency Analysis
 - D) Failure Management and Efficiency Assessment
- 25. Which of the following is essential for effective incident investigation?
 - A) Blaming the employees involved
 - B) Identifying root causes
 - C) Minimizing documentation
 - D) Ignoring minor incidents



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Department of Electronics and communication Engineering

21ECE01-Smart Industrial Safety Solutions

NAME:

CLASS:

DATE:

Multiple-Choice Questions

- 1. Which technology is commonly used for real-time monitoring of industrial equipment?
 - A) RFID
 - B) IoT
 - C) Bluetooth
 - D) Wi-Fi

Answer: B) IoT

- 2. What does PPE stand for in industrial safety?
 - A) Personal Protection Equipment
 - B) Professional Protection Equipment
 - C) Personal Protective Equipment
 - D) Protective Personal Equipment

Answer: C) Personal Protective Equipment

- 3. Which of the following is a common hazard in industrial environments?
 - A) Noise
- B) Slippery floors
- C) Chemical exposure
- D) All of the above

Answer: D) All of the above

- 4. Which standard is widely used for occupational health and safety management systems?
- A) ISO 9001
- B) ISO 14001
- C) ISO 45001
- D) ISO 50001

Answer: C) ISO 45001

- 5. What does HAZOP stand for?
- A) Hazardous Operations
- B) Hazard and Operability Study

Bolond

C) Hazardous Optimization

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D) Hazard Operation Plan

Answer: B) Hazard and Operability Study

- 6. Which device is used to detect the presence of toxic gases in an industrial setting?
 - A) Smoke detector
 - B) Gas analyzer
 - C) Carbon monoxide detector
 - D) Fire alarm

Answer: B) Gas analyser

- 7. What is the main purpose of a safety management system (SMS)?
 - A) To increase production efficiency
 - B) To manage employee schedules
 - C) To systematically manage safety and health risks
 - D) To manage financial accounts

Answer: C) To systematically manage safety and health risks

- 8. Which technology can be used to provide real-time location tracking of employees in hazardous areas?
 - A) GPS
 - B) RFID
 - C) Wi-Fi
 - D) Bluetooth

Answer: B) RFID

- 9. What is the primary benefit of predictive maintenance in industrial safety?
 - A) Reducing energy consumption
 - B) Preventing unexpected equipment failures
 - C) Improving employee morale
 - D) Increasing production speed

Answer: B) Preventing unexpected equipment failures

- 10. Which type of PPE would be most appropriate for protecting against airborne particles?
 - A) Hard hat
 - B) Safety goggles
 - C) Respirator
 - D) Ear plugs

Answer: C) Respirator

- 11. Which of the following is a key feature of smart PPE?
 - A) Lightweight design
 - B) Connectivity for data monitoring
 - C) Low cost
 - D) Disposable materials

Answer: B) Connectivity for daya monitoring

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- 12. What is the role of machine learning in industrial safety?
 - A) To manage financial transactions
 - B) To analyze safety data and predict potential hazards
 - C) To automate production processes
 - D) To provide employee training

Answer: B) To analyze safety data and predict potential hazards

- 13. Which of the following is NOT a component of a safety management system?
 - A) Risk assessment
 - B) Hazard analysis
 - C) Financial auditing
 - D) Incident investigation

Answer: C) Financial auditing

- 14. What is the primary function of an IoT sensor in an industrial setting?
 - A) To improve employee productivity
 - B) To monitor and collect data on equipment and environmental conditions
 - C) To enhance communication between employees
 - D) To reduce energy consumption

Answer: B) To monitor and collect data on equipment and environmental conditions

- 15. Which of the following standards focuses specifically on fire safety?
 - A) ISO 9001
 - B) NFPA 70E
 - C) OSHA 1910
 - D) ISO 45001

Answer: B) NFPA 70E

- 16. What does SCADA stand for?
 - A) Supervisory Control and Data Acquisition
 - B) Safety Control and Data Analysis
 - C) System Control and Data Application
 - D) Supervisory Control and Data Administration

Answer: A) Supervisory Control and Data Acquisition

- 17. Which type of maintenance involves regular inspections and servicing to prevent equipment failure?
 - A) Reactive maintenance
 - B) Preventive maintenance
 - C) Corrective maintenance
 - D) Predictive maintenance

Answer: B) Preventive maintenance

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- 18. Which wearable device can be used to monitor vital signs of workers in real-time?
 - A) Smart helmet
 - B) Smartwatch
 - C) Smart glasses
 - D) Smart vest

Answer: B) Smartwatch

- 19. Which technology helps in creating digital twins for industrial safety applications?
 - A) Augmented reality
 - B) Virtual reality
 - C) Internet of Things (IoT)
 - D) Blockchain

Answer: C) Internet of Things (IoT)

- 20. What is a primary goal of safety analytics?
 - A) To increase production speed
 - B) To reduce operational costs
 - C) To predict and prevent safety incidents
 - D) To enhance employee benefits

Answer: C) To predict and prevent safety incidents

- 21. What does LOTO stand for in industrial safety?
 - A) Lockout-Tagout
 - B) Line of Trade Operations
 - C) Loss of Time Operations
 - D) Lockout-Time out

Answer: A) Lockout-Tagout

- 22. Which of the following best describes a confined space in industrial settings?
 - A) Any small room
 - B) An area with limited entry and exit
 - C) A high-traffic area
 - D) An area without lighting

Answer: B) An area with limited entry and exit

- 23. What is a common use of drones in industrial safety?
 - A) Delivering packages
 - B) Aerial inspections and monitoring
 - C) Enhancing employee communication
 - D) Reducing energy consumption

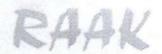
Answer: B) Aerial inspections and monitoring

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- 24. What does FMEA stand for?
 - A) Failure Modes and Effects Analysis
 - B) Fault Management and Equipment Assessment
 - C) Facility Management and Efficiency Analysis
 - D) Failure Management and Efficiency Assessment

Answer: A) Failure Modes and Effects Analysis

- 25. Which of the following is essential for effective incident investigation?
 - A) Blaming the employees involved
 - B) Identifying root causes
 - C) Minimizing documentation
 - D) Ignoring minor incidents

Answer: B) Identifying root causes

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Year......... Department... Ecs.... has successfully Completed the Value added course.

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VALUE ADDED COURSES 2021-2022

Department of Electronics and Communication Engineering

21ECE02- MATLAB Programming MARK SHEET

Sl. No	Register Number	Student Name	Mark	
1	19TC1101	ABIRAMI S	88	
2	19TC1102	BENINAL G	96	
3	19TC1103	DINESH KUMAR V	92	
4	19TC1104	GAUTHAM S	92	
5	19TC1105	GOVINDARAJ K	96	
6	19TC1106	I.KARTHESWARAN	96	
7	19TC1107	I.MUTHURAMAN	84	
9 19TC1109 k		KALAIVANAN M	96 88 88	
		KISHORE RAJAN N		
		NARAYANAN B		
11	19TC1112	RAJALAKSHMI S	88	
12	19TC1113	RESMINA FARVIN M	88	
13	19TC1114	S.JEEVANANDAM	96	
14	19TC1115	SATHISH N	92	
15	19TC1116	SOORIYA D	92	
16	19TC1117	SUGANYA M	88	
17	19TC1118	YOGAA SUPARNA K P	96	

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Department of Electronics and communication Engineering 21ECE02- MAT LAB Programming

NAME:

CLASS:

DATE:

- 1. What does MATLAB stand for?
 - A) Matrix Laboratory
 - B) Mathematics Laboratory
 - C) Math and Logic Application
 - D) Matrix and Logic Application

Answer: A) Matrix Laboratory

- 2. Which command is used to clear all variables from the workspace in MATLAB?

 - B) clear
 - C) clc
 - D) clf

Answer: B) clear

- 3. Which function is used to create a 2x2 identity matrix in MATLAB?
 - A) identity(2)
 - B) eye(2)
 - C) id(2)
 - D) ones(2)

Answer: B) eye(2)

- 4. How do you comment a single line in MATLAB?
 - A) //
 - B) ##
 - C) %%
 - D) %

Answer: D) %

5. What is the output of the following code: A = [1, 2, 3]; B = A';?

(ecyno)

- A) [1, 2, 3]
- B) [1; 2; 3]
- C) [3, 2, 1]
- D) [1, 3; 2, 1; 3, 2]

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Answer: B) [1; 2; 3]

- 6. Which command is used to plot data in MATLAB?
 - A) plotdata()
 - B) graph()
 - C) plot()
 - D) plotline()

Answer: C) plot()

- 7. What is the command to read data from a CSV file in MATLAB?
 - A) readcsv()
 - B) csvread()
 - C) read.csv()
 - D) importesv()

Answer: B) csvread()

- 8. Which command is used to find the size of a matrix in MATLAB?
 - A) length()
 - B) dim()
 - C) size()
 - D) shape()

Answer: C) size()

9. What is the output of sum([1, 2, 3, 4]) in MATLAB?

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- A) 10
- B) [10]
- C) 24
- D) [1, 2, 3, 4]

Answer: A) 10

- 10. Which command generates a 3x3 matrix of random numbers between 0 and 1 in MATLAB?
 - A) randmatrix(3)
 - B) rand(3)
 - C) random(3)
 - D) randi([0,1],3,3)

Answer: B) rand(3)

- 11. How do you create a row vector with values from 1 to 10 in steps of 2 in MATLAB? 10 College of
 - A) 1:10:2
 - B) [1, 2, 3, ...,
 - C) 1:2:10
 - D) [1 2 3 ... 10]

Answer: C) 1:2\10

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- 12. What is the command to transpose a matrix in MATLAB?
 - A) transpose()
 - B) T()
 - C) .transpose
 - D) .'

Answer: D) .'

- 13. Which command is used to create a new figure window in MATLAB?
 - A) figure()
 - B) newfig()
 - C) fig()
 - D) plotwindow()

Answer: A) figure()

- 14. What is the purpose of the hold on command in MATLAB plotting?
 - A) To clear the current figure
 - B) To hold the current plot so that new plots are added to it
 - C) To pause the execution
 - D) To save the current plot

Answer: B) To hold the current plot so that new plots are added to it

- 15. Which function is used to solve a system of linear equations in MATLAB?
 - A) solve()
 - B) linsolve()
 - C) lin equations()
 - D) solve linear()

Answer: B) linsolve()

- 16. How do you access the element in the second row and third column of matrix A in MATLAB?
 - A) A[2, 3]
 - B) A(3, 2)
 - C) A(2, 3)
 - D) A[3, 2]

Answer: C) A(2, 3)

- 17. Which command is used to display text in the Command Window in MATLAB?
 - A) echo
 - B) display
 - C) print
 - D) disp

Answer: Didisp

lisp

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- 18. What is the result of A . * B where A and B are matrices of the same size in MATLAB?
 - A) Matrix multiplication
 - B) Element-wise multiplication
 - C) Division of matrices
 - D) Subtraction of matrices

Answer: B) Element-wise multiplication

- 19. Which command is used to create a 3D plot in MATLAB?
 - A) plot3()
 - B) plot 3D()
 - C) plot()
 - D) plot3D()

Answer: A) plot3()

- 20. How do you save a variable A to a file named data.mat in MATLAB?
 - A) save('data.mat', A)
 - B) save('data.mat')
 - C) save A 'data.mat'
 - D) save('data.mat', 'A')

Answer: D) save('data.mat', 'A')

- 21. Which function is used to calculate the eigenvalues of a matrix in MATLAB?
 - A) eig()
 - B) eigen()
 - C) evals()
 - D) eigenvalues()

Answer: A) eig()

- 22. What does the clc command do in MATLAB?
 - A) Clears the Command Window
 - B) Clears the workspace
 - C) Closes all figures
 - D) Clears the current figure

Answer: A) Clears the Command Window

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23. Which command is used to create a script file in MATLAB?

A) newscript

B) script

C) edit

D) createscript

Answer: C) edit

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- 24. How do you call a function named myFunction with input x in MATLAB?
 - A) myFunction(x)
 - B) myFunction x
 - C) call myFunction(x)
 - D) myFunction

Answer: A) myFunction(x)

- 25. Which function is used to create a logarithmic plot in MATLAB?
 - A) logplot()
 - B) semilogx()
 - C) loglog()
 - D) logplotx()

Answer: C) loglog()

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Department of Electronics and communication Engineering

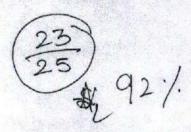
21ECE02- MAT LAB Programming

NAME: GAUTHAM.S

CLASS: III / ECE

DATE: 20/08/2021

- What does MATLAB stand for?
 - Ay Matrix Laboratory
 - B) Mathematics Laboratory
 - C) Math and Logic Application
 - D) Matrix and Logic Application



- 2. Which command is used to clear all variables from the workspace in MATLAB?
 - A) clearvars
 - Byclear
 - C) clc
 - D) clf
- 3. Which function is used to create a 2x2 identity matrix in MATLAB?
 - A) identity(2)
 - B) eye(2)
 - C) id(2)
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 - C) %%
 - D17%
- 5. What is the output of the following code: A = [1, 2, 3]; B = A';?
 - A) [1, 2, 3]
 - B) [1; 2; 3]
 - C)[3, 2, 1]
 - D) [1, 3; 2, 1; 3, 2]

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6. Which command is used to pl	ot data in MATLAB?	
A) plotdata()		
B) graph()		
e) plot()		
D) plotline()		
		rt AD2
7. What is the command to read	data from a CSV file in MA	(LAD)
A) readcsv()		
B)csvread()		
C) read.csv()		
D) importesv()		
		TT AR?
8. Which command is used to f	find the size of a matrix in MA	ILAD.
A) length()		
B) dim()		
e) size()		
D) shape()		
	e verti ABS	
9. What is the output of sum ([1, 2, 3, 4]) in MAILAB	
A)10		
B) [10]		
C) 24		
D) [1, 2, 3, 4]		
D) [., -, -,]		nhers between 0 and 1 in
10. Which command generate	es a 3x3 matrix of random nur	Hoers between a
MATLAB?		
A) randmatrix(3)	J	
B) rand(3)		
C) random(3)		
D) randi($[0,1],3,3$)		
D) Iana ([0,-1,-,-)		10 in stone of 2 in MATLAB?
11 How do you create a row	v vector with values from 1 to	10 in steps of 2 in MATLAB?
A) 1:10:2		
B) [1, 2, 3,, 10]		
e) 1:2:10		
D) [1 2 3 10]		
	1 . 2/4 [[AD2
12 What is the command to	transpose a matrix in MATL	AD:
A) transpose()		
B) T()		0.
C) transpose		
DO.		Dr. S. SEENUVASAMURTHI, M.E., Ph.C.
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ANK CO.		Dr. S. SEENUVASAIN PRINCIPAL RAAK College of Engineering & Technolog RAAK College of Engineering & Technolog RAAK College of Engineering & Technolog RAAK College of Engineering & Technolog
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RAAK College		RAAK College of Engineering & Technology No.1, Muthupillai Palayam Road,



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13. Which command is used to create a	new figure window in MATLAB?
A) figure()	
B) newfig()	
C) fig()	
D) plotwindow()	
14. What is the purpose of the hold o	n command in MATLAB plotting?
A) To clear the current figure B) To hold the current plot so that	new plots are added to it
C) To pause the execution	
D) To save the current plot	
D) 10 save are carrier	att AB?
15. Which function is used to solve a	system of linear equations in MATLAB?
A) solve()	
B) linsolve()	
C) lin_equations()	
D) solve_linear()	
to Handa you access the element i	n the second row and third column of matrix A in
MATLAB?	
A) A[2, 3]	
B) A(3, 2)	
C)(A(2, 3)	
D) A[3, 2]	
1. dien	lay text in the Command Window in MATLAB?
17. Which command is used to disp	lay text in the com-
A) echo	
B) display	
C) print	
Dittisp	
	set the same size in MATLAB?
18 What is the result of A .* B W	here A and B are matrices of the same size in MATLAB?
A) Matrix multiplication	
BYElement-wise multiplication	
C) Division of matrices	
D) Subtraction of matrices	
19. Which command is used to cre	eate a 3D plot in MATLAB?
19. Which command is used to ord	
A) plot3()	1
B) plot_3D()	A STANTON
C) plot() D) plot3D()	
D) plocs E()	Dr. S. SEENUVASAMURTHI, M.E., Ph.C.
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20. How do you save a variable A to a file	named data.mat in MATLAB?
20. How do you save a variable A to a me	
A) save('data.mat', A)	
B) save('data.mat')	
C) save A 'data.mat'	
D) save('data.mat', 'A')	
21. Which function is used to calculate th	ne eigenvalues of a matrix in MATLAB?
21. Which function is used to calculate the	ic cibon
A) eig()	
B) eigen()	
C) evals()	
D) eigenvalues()	
22. What does the clc command do in M	MATLAB?
22. What does the ere command Window	
A) Clears the Command window	
B) Clears the workspace	
C) Closes all figures	
D) Clears the current figure	
23. Which command is used to create a	script file in MATLAB?
23. Which command is used to create a	
A) newscript	
B) script	
Ø) edit	
D) createscript	
	AATI AB2
24 Ham do you call a function named	myFunction with input x in MATLAB?
A) myFunction(x)	
myrunction(x)	
B) myFunction x	
C) call myFunction(x)	
D) myFunction	
25. Which function is used to create a	logarithmic plot in MATLAB?
A) logplot()	
B) semilogx()	
C) loglog()	
D) logplotx()	
The second second	
1 PA	
ST THAT	Dr. S. SEENUV

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Year...!!..... Department...Ec.E.... has successfully Completed the Value added course.

COURSE

TITLE: . MAT. LAB. PROS. RAMMING.....

DURATION: 9/8/21...to.13/8/21.

COURSE



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VALUE ADDED COURSES 2021-2022

Department of Information Technology

21IT03 – ARDUINO PROGRAMMING MARK SHEET

Sl. No	Register Number	Student Name	Mark	
1	20TC0501	AKASH M	88	
2	20TC0502	AKASH M	96	
3	20TC0503	ANKANI LEELA SAI VARMA	92	
4	20TC0504	AYISHA BEEVI H	92	
5	20TC0505	BALAJI S	96	
6	20TC0506	BHARATHI K	96	
7 20TC0507 8 20TC0508 9 20TC0509 10 20TC0510		FARIDH KHAN J	84	
		PRAVIN R	96	
		PURUSHOTHAMAN D	88	
		RAJESWARI R	88	
11	20TC0512	SATHEESH KUMAR A	88	
12	20TC0513	SHARMILA S	88	
13 20TC0514		SRI HARI B	96	
14	20TC0515	SWATHI S	92	
15	20TC0516	THAYUMANAVAR S	92	

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21ECE03 - ARDUNIO PROGRAMMING

NAME:

CLASS:

DATE:

- 1. What is Arduino?
 - A) A type of operating system
 - B) A single-board microcontroller
 - C) A programming language
 - D) A computer hardware manufacturer

Answer: B) A single-board microcontroller

- 2. . Which programming language is primarily used to program Arduino?
 - A) Python
 - B) Java
 - C) C++
 - D) JavaScript

Answer: C) C++

- 3. What function must be included in an Arduino sketch to run code repeatedly?
 - A) setup()
 - B) loop()
 - C) start()
 - D) init()

Answer: B) loop()

- 4. Which Arduino function is used to set the data rate for serial communication?
 - A) Serial.begin()
 - B) Serial.start()
 - C) Serial.init()
 - D) Serial.rate()

Answer: A) Serial.begin()

5. Which Arduino board has built-in WiFi capabilities?

chnolo

- A) Arduino Uno
- B) Arduino Nano
- C) Arduino Mega ollege of
- D) Arduino MKR1000

Answer: D) Archino MKR1000

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A) wait()

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2	AN ISO 9001:2013 Certified Williams
6.	What is the purpose of the setup() function in an Arduino sketch?
0.	A) To initialize variables and settings
	B) To run code repeatedly
	C) To handle interrupts
	D) To display output on a screen
	Answer: A) To initialize variables and settings
_	Which pin on the Arduino Uno is typically used for PWM (Pulse Width Modulation)?
7.	
	A) Pin 13
	B) Pin A0
	C) Pin 9
	D) Pin 2
	Answer: C) Pin 9
0	What is the typical operating voltage of an Arduino Uno board?
8.	
	A) 3.3V
	B) 5V
	C) 9V
	D) 12V
	Answer: B) 5V
9	. Which function would you use to read an analog input on an Arduino?
,	A) analogRead()
	B) digitalRead()
	C) analogWrite()
	D) digitalWrite()
	Answer: A) analogRead()
1	0. Which command is used to turn on an LED connected to pin 13?
	A) digitalWrite(13, LOW)
	B) analogWrite(13, HIGH)
	C) digitalWrite(13, HIGH)
	D) analog Write(13, LOW)
	Answer: C) digitalWrite(13, HIGH)
	/No
	11. How many digital I/O pins are available on the Arduino Uno?
	A) 10
	B) 12 PRINCIPAL PRINCIPAL RIPERING & Technology
	D112
	C) 14 College of Engineering and Road, No.1, Muthupillal Palayam Road, No.1, Muthupillal Post,
	D) 16 Answer: C) 1 Sulthanpet Post, Puducherry - 605 110
	12. Which Arduino function pauses the program for a specified time in milliseconds?
	12. Willen Ardunio Pouros



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B) pause()

C) delay()

D) sleep()

Answer: C) delay()

13. What is the maximum current per I/O pin on the Arduino Uno?

A) 20mA

B) 30mA

C) 40mA

D) 50mA

Answer: C) 40Ma

14. Which function is used to write a PWM signal to a pin?

A) pwmWrite()

B) analogWrite()

C) digitalWrite()

D) pwmSignal()

Answer: B) analogWrite()

15. What is the purpose of the pinMode() function?

A) To set the initial value of a pin

B) To configure a pin as an input or output

C) To start serial communication

D) To read the state of a pin

Answer: B) To configure a pin as an input or output

Olonnos

16. Which of the following is a valid baud rate for serial communication in Arduino?

A) 115200

B) 57600

C) 9600

D) All of the above

Answer: D) All of the above

17. What is the default baud rate used in most Arduino serial communication examples?

A) 9600

B) 4800

C) 14400

D) 19200

Answer: A) 9600

RTHI, M.E., Ph.C. Dr. S. SEENU

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College of 18. Which Arduino function is used to write a character or a string to the serial port? 605 110

A) Serial.read()

B) Serial.println()

C) Serial.input()

D) Serial.write()





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Answer: B) Serial.println()

19.	What	type	of memory	is	used to	store	Arduino	sketches?
-----	------	------	-----------	----	---------	-------	---------	-----------

- A) SRAM
- B) EEPROM
- C) Flash
- D) DRAM

Answer: C) Flash

20. Which library is commonly used to interface with LCD displays?

- A) Wire
- B) LiquidCrystal
- C) EEPROM
- D) Servo

Answer: B) LiquidCrystal

21. What is the purpose of the Arduino IDE?

- A) To create graphical interfaces
- B) To write, compile, and upload sketches to the Arduino board
- C) To simulate Arduino projects
- D) To design PCB layouts

Answer: B) To write, compile, and upload sketches to the Arduino board

22. Which function would you use to read a digital input on an Arduino?

- A) analogRead()
- B) digitalRead()
- C) analogWrite()
- D) digitalWrite()

Answer: B) digitalRead()

23. Which Arduino library is used for controlling servos?

- A) Servo.h
- B) Motor.h
- C) PWM.h
- D) ServoControl.h

Answer: A) Servo.h

24. What is the maximum number of analog inputs on an Arduino Uno?

A) 4

B) 6

C) 8

D) 10

D) 10

Answer: B) 6

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25. Which Arduino function is used to initialize a serial communication at 9600 baud rate?





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- A) Serial.write(9600)
- B) Serial.init(9600)
- C) Serial.begin(9600)
- D) Serial.start(9600)

Answer: C) Serial.begin(9600



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Department of Electronics and communication Engineering

21ECE03 - ARDUNIO PROGRAMMING

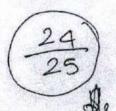
NAME: SRIHARI.B

CLASS: IL/ECE

DATE: 20/08/2021

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1	W/hat i	s Arduino?	?
1.	Wilat I	3 / II duisio.	1

- A) A type of operating system
- B) A single-board microcontroller
- C) A programming language
- D) A computer hardware manufacturer



- 2. Which programming language is primarily used to program Arduino?
 - A) Python
 - B) Java
 - erc++
 - D) JavaScript
- 3. What function must be included in an Arduino sketch to run code repeatedly?
 - A) setup()
 - Byloop()
 - C) start()
 - D) init()
- 4. Which Arduino function is used to set the data rate for serial communication?
 - A) Serial.begin()
 - B) Serial.start()
 - C) Serial.init()
 - D) Serial.rate()
- 5. Which Arduino board has built-in WiFi capabilities?
 - A) Arduino Uno
 - B) Arduino Nano
 - C) Arduino Mega
 - D) Arduino MKR1000
- 6. What is the purpose of the setup() function in an Arduino sketch?
 - A) To initialize variables and settings
 - B) To run code repeatedly
 - C) To handle interrupts
 - D) To display output on a screen

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The sales	Uno is typically used for PWM (Pulse Width Modulation)?
Which pin on the Arduino	Uno is typically used for 1 will (1 also
A) Pin 13	
B) Pin A0	
e) Pin 9	
D) Pin 2	
D) FIII 2	
	sing voltage of an Arduino Uno board?
8. What is the typical opera	ting voltage of an Arduino Uno board?
A) 3.3V	
BYDV	
C) 9V	
D) 12V	
a un'i Contian would v	ou use to read an analog input on an Arduino?
9. Which function would y	00 000
AllanalogRead()	
B) digitalRead()	
C) analogWrite()	
D) digitalWrite()	
The complete little	d to turn on an LED connected to pin 13?
10. Which command is use	1 to turn on an DEB comme
A) digital Write (13, LO	W) — A the second of the secon
B) analogWrite(13, HIC	jH)
erdigitalWrite(13, HIC	jH)
D) analogWrite(13, LC	W)
11 How many digital I/O	pins are available on the Arduino Uno?
A) 10	
D) 12	
B) 12	
QY14	
D) 16	1.0
10 Which Arduino functi	on pauses the program for a specified time in milliseconds?
12. Which Ardumo runes	
A) wait()	
B) pause()	
e) delay()	
D) sleep()	
to vin the movimum	n current per I/O pin on the Arduino Uno?
13. What is the maximum	I vanishing in the second of t
A) 20mA	
B) 30mA	
C) 40mA	
D) 50mA	
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	o a nin?
14. Which function is used to write a PWM signal t	o a piii:
A) pwmWrite()	
B) analog Write()	
C) digitalWrite()	
D) pwmSignal()	
15. What is the purpose of the pinMode() function	?
A T A The A MITTER VALUE OF A DIST	
B) To configure a pin as an input or output	
C) To start serial communication	
D) To read the state of a pin	
D) to read the state of a par-	in Arduino?
16. Which of the following is a valid baud rate for	r serial communication in Ardumo.
16. Which of the following is a variable	
A) 115200	
В) 57600	
C) 9600	
DYAll of the above	19
a 1.1 due to used in most At	duino serial communication examples?
17. What is the default baud rate used in most Ar	
A) 9600	
B) 4800	
C) 14400	
D) 19200	
1 Aito o ol	haracter or a string to the serial port?
18. Which Arduino function is used to write a cl	mandetes of a second
A) Serial.read()	
B) Serial.println()	
C) Serial.input()	
D) Serial.write()	
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19. What type of memory is used to store Ardu	ino sketelies:
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B) EEPROM	
e) Flash	
D) DRAM	
	or con livelage?
20. Which library is commonly used to interfa	ce with LCD displays:
A) Wire	
B) Liquid Crystal	
C) EEPROM	
C) EEFRONI	
D) Servo	800
21. What is the purpose of the Arduino IDE?	Tham
To create graphical interfaces	A CONTRACT ME DIE
A) To create graphical interrupts	es to the Arduino board. SEENUVASAMURTHI, M.E., Ph.C.
gering & B To write, compile, and upload sketche	PRINCIPAL PRINCIPAL
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- C) To simulate Arduino projects
- D) To design PCB layouts

D) Serial.start(9600)

22 Which function would you	use to read a digital input on an Arduino?	
A) analogRead()		
B) digitalRead()		
C) analogWrite()		
D) digitalWrite()		
D) digitalo		
23. Which Arduino library is	used for controlling servos?	
A)/Servo.h		
B) Motor.h	The second second second second	
C) PWM.h		
D) ServoControl.h		
and the second party party	mber of analog inputs on an Arduino Uno?	
	moor or anarog - r	
A) 4		
BJ/6		
C) 8		
D) 10		
		. ocoo bond rate?
25 Which Arduing function	is used to initialize a serial communication a	t 9600 baud rate:
A) Serial.write(9600)		
B) Serial.init(9600)		
Serial.begin(9600)		
) Jonates 1		



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SCORE: 98

COURSE

TITLE: ARDUNIO PROGRAMMING



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DURATION: 9/8/21 to 13/8-21

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