

S.NO	TOPICS	QUESTIONS	A	B	C	D	ANSWERS
1	Basic components of robot wrist configurations	Which joint on a robot are we most concerned with when it comes to end of arm tooling?	Base	Wrist	Elbow	Shoulder	C
		End effectors can be classified into two categories which are	elbows and wrists	grippers and end of arm tooling	grippers and wrists	end of arm tooling and elbows	B
		The amount of weight that a robot can lift is called	tonnage	payload	dead lift	horsepower	B
		When a welding torch is placed as an end of arm tooling, what type of programming needs to take place to execute the welding process.	point to point	continuous path	off-line	palletizing	B
		Which joint on a robot are we most concerned with when it comes to end of arm tooling?	base	elbow	wrist	shoulder	C
		The type of end of arm tooling you should use on your robot is not based on	the application	the work envelope of the robot	gripping force	program control	B
2	Motion, Roll, Pitch, Yaw, Sensors	The input/output relationship of a sensor is called which one of the following:	analog	converter	sensitivity	transfer function	C
		All sensors are based on _____ principle	transduction	Transition	Transaction	transfer function	A
		SONAR is based on _____ effect	Zener Effect	Doppler effect	Echo	Gravitational	B
		Which of the following form the basis of Electrical domain?	Current	Resistance	Inductance	All of the above	D
		The sensors are classified on the basis of	Functions	Performance	Output	All of the above	D
3	Laws of robotics	A robot, acting on its own will, partially destroys itself while rescuing a child from an oncoming vehicle. Which of Asimov's robotic laws of behavior are interacting?	Laws I and II	Laws II and III	Laws I	All three laws	D
		Law II of Asimov's Law of Robotics states that _____	A robot will not harm or allow a human to be harmed.	A robot will obey human instructions unless it violates a superseding law.	A robot will protect itself unless it violates a superseding law.	None of the above	B
		One of the greatest and most prolific science fiction writers in history, this man famously created the Three Laws of Robotics in 1941.	Arthur C.Clarke	Douglas Adams	Robert A. Heinlein	Isaac Asimov	D
		a robot can not harm a human being, must obey the orders of humans, must protect itself	Types of robots	law of robotic	Robert A. Heinlein	robot components	B
		Can a robot destroy itself if its existence does harm to the human being?	CAN	CANNOT			A
4	Classification of robot	Which of this is not a type of robot?	Cartesian	Cylindrical	Spherical	Asimo	D
		SCARA robot is very suitable in which kind of operation?	Single operation	Rotary Operation	Assembly Operation	Translatory Operation	C
		Which is not the classification of robot	Cylindrical robot	Revolute robot	Spherical Robot	None of the above	D
		Gantry robot is a type of _____ robot?	Cartesian	Revolute robot	Spherical Robot	None of the above	A
		The turret in the military tank is similar to which configuration of robot?	Spherical robot	Cylindrical	Cartesian	SCARA	A
		Measurement which is close to true value is	accurate	average	precise	error	A

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5	Workspace, Accuracy, Resolution Repeatability of robot	A measurement which on repetition gives same or nearly same result is called	accurate measurement	average measurement	precise measurement	estimated measurement	C
		The number of ways in which a robot arm can move is known as	Degree of freedom	Degree of movement	Degree of Flexibility	Degree of arc	A
		Systematic errors occur due to	overuse of instruments	careless usage of instruments	both A and B	human sight	C
6	Power transmission system: Rotary to rotary motion	Which type of actuator is used to produce torque?	Linear	Translational	Rotational	sectional	C
		Components such as gear trains, belts and pulley, sprockets and chains are associated with _____ conversion?	Rotary to Rotary	Linear to Linear	Rotary to Linear	Linear to Rotary	A
		Backlash is associated with _____?	Pulley	Gears	Harmonic Gears	Screw actuator	B
		Can harmonic drives be used for actuating the _____	End Effectors	Manipulator	Links	Base	A
7	Power transmission system: Rotary to Linear motion	Which type of actuator is used to produce to and fro motion?	Linear	Translational	Rotational	sectional	A
		Which of the following is associated with rotary to linear motion?	Cams	Gears	Harmonic Gears	Belt	A
		The fact that a conductor carries more current on the surface as compared to core, is known as	skin effect	corona	permeability	unsymmetrical fault.	A
		Why is an idler gear used in gear trains?	To obtain minimum centre distance between driving and driven shaft	To have required direction of rotation	Both a. and b.	None of the above	B.
8	Harmonics drives	What is a major advantage of Harmonic Drive?	High gear reduction	Higher Speed	Less torque	None of the above	A
		Reduction ratio is from _____	:01	30:1	25:1	320:1	B
		What is not a major advantage of Harmonic Drive?	Backlash	Light weight	High gear reduction	Higher Speed	D
		Which of the following is flexible in Harmonic Drive?	Inner toothed line	Outer toothed Spline	Wave generator	None of the above	B

