These are sample MCQs to indicate pattern, may or may not appear in examination

University of Mumbai

Online Examination 2020

Program: BE Automobile Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester VI

Course Code: AEDLO6022 and Course Name: Robotics

Time: 1hour Max. Marks: 50

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

		Option A	Option B	Option C	Option D
Q1	The goal of trajectory planning is to describe the reqisiste motion of the manipulator a a time function is generated by	interpolating	cartesian space	joint space	polar co-ordinate
Q2	Axis in a SCARA configuration are	rotary in nature.	parallel to each other	3 parallel and 1 perpendicular	1 parallel and 3 perpenducular
Q3	In Joint-space planning, the path is_____.	Dependent of path	joint dependent	Depends on via points	Independent of path
Q4	Ability of sensor to reproduce the results for same input is known as:	Accuracy	Precision	Resolution	Linearity
Q5	Extracting information from captured and processed image like identify object, finding area etc. are called as_____.	Image analysis	Image processing	Image extraction	Image compression
Q6	Spatial redundant manipulators have _____.	More than 3DOF	Less than 6DOF	Less than 3DOF	More than 6DOF
Q7	Which type of DC motor has one field winding and it is coupled parallel with armature?	Shunt wound	Series wound	Comulative compund motor	Differentially compound motor

Q8	Ability to give same output repeatedly by keeping input value constant is known as:	Stability	Repeatability	Sensitivity	Accuracy
Q9	In image representation, the stored information is a collection of _____numbers that represent the intensity of light at each pixel sequentially.	Hexadecimal numbers	Octal numbers	Decimal numbers	Binary numbers
Q10	In stereo imaging, the displacement between the locations of the two features in the image plane is called as _____.	Singularity	Non singularity	Disparity	Similarity
Q11	Which of the following is NOT Transducer:	Potentiometer	Photo-Electric cell	Hydraulic cylinder	Thermocouple
Q12	Camera which measures the distance to every scene point within the viewing angle and record it as a two dimensional function are called _____.	Range imaging systems	Capturing System	Compressing system	Viewing system
Q13	Which of the following is robot?	CNC machine	NC machine	Lathe machine	SCARA
Q14	Which motor has similar construction to BLDC motor	Conventional DC motor	Induction motor	Permanent magnet synchronous motor	Totally different construction
Q15	DH transformation matrix is?	4x2	4x3	4x4	4x1
Q16	selection of a single polynomial for the entire joint path depends on the	number of constraints imposed and the type of motion desired.	number of joints and the complexity of motion desired	complexity of the path desired and the joints supporting it	programming of joints and the coordinated of the path
Q17	Which of the following sensor is used to detect nearness to object	Hall effect sensor	Proximity sensor	Light sensor	Optical sensor
Q18	Example of point to point control is_____.	Arc welding	Spray painting	Spot welding	Die casting

Q19	A machine can be called as robot if_____.	If it works without human involvement.	It is be able to respond to stimuli based on the information received from the environment.	It is be able to extract information from the environment.	It responds to programmed commands.
Q20	The biggest challenge in the area of humanoid robots is concerned with____	ballancing and stability	Development of cognitive abilitiy	Facial expression	Arm movement
Q21	What is RFID?	Radio frequency identical technology	Radio frequency identification technology	Right frequency identification technology	Radioactive frequency identical technology
Q22	Activation, direction, intyensity, duration and motivation terms are related to	Auditory control	Motives	Facial expression	Balance and stability
Q23	ZMP can be used for____	Determining whether or not the sole slips on the ground surface.	The ground surface is not flat.	Planning the walking motion on the flat ground with enough friction.	The arms or the hands of a humanoid robot contact the environment.
Q24	Forward kinematics deals with?	Finding Cartesian co-ordinates from angular position	Finding angular co-ordinates from Cartesian coordinate	Finding cylindrical coordinates from spherical coordinate	Finding spherical coordinate from cylindrical co-ordinate
Q25	Articulated robots are also known as?	Anthromorphic	Automatic	Gantry	Intelligent