

Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Week 11

Week 12

- Lecture 23 - Specifications and Programming

- Lecture 24 - VAL programming

- Lecture 24.1 - Experiment With PUMA Robot Using VAL-II

- Week 12 - Lecture Notes

- Quiz : Assignment 12

- Feedback for Week 12

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Assignment 12

The due date for submitting this assignment has passed.

Due on 2021-04-14, 23:59 IST.

As per our records you have not submitted this assignment.

1) Control resolution is the

1 point

- smallest changes that the control system can distinguish
- parameter that defines the ability of a control system to stabilish the system.
- function of K_p (proportional gain) only
- function of K_d (derivative gain) only

No, the answer is incorrect.
Score: 0

Accepted Answers:
smallest changes that the control system can distinguish

2) Accuracy is

1 point

- Independent of the resolution
- one-third of the control resolution
- Half the control resolution
- Two-third of the control resolution

No, the answer is incorrect.
Score: 0

Accepted Answers:
Half the control resolution

3) VAL language is based on

1 point

- FORTRAN language
- BASIC language
- COBOL language
- Assembly language

No, the answer is incorrect.
Score: 0

Accepted Answers:
BASIC language

4) Why are the two commands MOVE and MOVES required

1 point

- To stabilise faster
- To improve the accuracy
- To save energy
- To save time

No, the answer is incorrect.
Score: 0

Accepted Answers:
To save energy

5) While positioning the gripper before moving to grasp an object, the command used is

1 point

- SET
- APPRO
- HERE
- MOVET

No, the answer is incorrect.
Score: 0

Accepted Answers:
APPRO

6) While planning a path to move the end effector from one point to another

1 point

- A straight path is preferred
- A bell shaped curve is preferred
- the least number of joints are moved
- all the joints are actuated to reduce time taken

No, the answer is incorrect.
Score: 0

Accepted Answers:
the least number of joints are moved

7) The closed loop command for closing the gripper is

1 point

- CLOSE
- CLOSET
- CLOSEI 75
- CLOSEI

No, the answer is incorrect.
Score: 0

Accepted Answers:
CLOSEI

8) The simplest method by which a robot communicates with another machine is using

1 point

- The command ON/OFF
- Electric signals
- Mechanical wave signals (like ultrasonic sound wave)
- Proximity sensors

No, the answer is incorrect.
Score: 0

Accepted Answers:
The command ON/OFF

9) An analog signal is converted to digital signal in a proper channel by

1 point

- MODEM
- Using the command ADC
- Using a half wave rectifier
- Using full wave rectifier

No, the answer is incorrect.
Score: 0

Accepted Answers:
Using the command ADC

10) An expert welder can teach arc welding to a robot by

1 point

- Giving appropriate commands to the robot using a suitable Machine language
- Giving appropriate commands to the robot using a suitable assembly language
- Recording the joint movement of the welder using high definition camera
- Lead through teaching using a joystick

No, the answer is incorrect.
Score: 0

Accepted Answers:
Lead through teaching using a joystick