Pragati Engineering College

(Autonomous)

ADB Road, Surampalem, East Godavari Dist. Andhra Pradesh, INDIA – 533 437
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INDUSTRY 4.0

ROBOTICS CLUB

Department of Mechanical Engineering

presents

An Online Quiz on

Current Trends and Future of

Robotics

Date

1st August, 2024

Quiz Link

https://forms.gle/MSuU1vMc3Fjyy9nY7

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(Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada)

(Recognized by UGC Under Sections 2(f) and 12 (B) of UGC act, 1956)

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ROBOTICS CLUB

Date: 31-07-2024

CIRCULAR

It is to inform to all the students of B.Tech II, III and IV Year that the college Robotics Club of Department of ME is conducting an Online Quiz on “Current trends and future of Robotics” on 01-08-2024. Interested students can participate through the link provided below.

Mode : Online through Google Sheets

Link : https://forms.gle/K1Wbzr2Q8fMLu8Wq5

Faculty Coordinator

Copy to:

1) Circulate among students and staff
2) Department Notice Board
3) Department File
4) Principal for Information

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ROBOTICS CLUB

Date: 03-08-2024

REPORT ON

ROBOTICS CLUB EVENT **ONLINE QUIZ** ON **CURRENT TRENDS AND FUTURE OF ROBOTICS**

As part of the Industry 4.0 Clubs, the Robotics Club of Pragati Engineering College conducted an Online Quiz on **Current trends and future of Robotics** on 01-08-2024. A total of 24 students of B.Tech II, III and IV Year have participated in the Quiz.

The quiz aimed to test participants' knowledge on current trends in Robotics and also what part of future holds in Robotics in Industry 4.0. The quiz was conducted online using google forms where participants allowed to answer a series of multiple-choice questions within a specified time limit. The questions were carefully designed to cover a broad range of topics related to current trends of Robotics. Questions focused on the future hold of Robotics.

The online quiz was conducted for a duration of 30 minutes. Participants were required to answer 25 multiple-choice questions within the given time frame. Each correct answer was awarded one point, and there was no negative marking for incorrect responses.

Faculty Coordinator

List of Students participated

S.No.	NAME OF THE STUDENT	ROLL NUMBER	BRANCH	Year and Section
1	GOLLAPALLI VEERA SATYA SUBRAHMANYA SWAMY	22A31A0360	ME	III B
2	VINSY MOYYA	21A31A4289	CSE-AIML	IV B
3	YARRAMNEEDI VINAYAKA	22A31A0396	ME	III B
4	SATHI SNEHA	23A31A0411	ECE	II A
5	D.SRIVEENA	24A31A0403	ECE	II A
6	ARIGELA SURYA KOWSALYA	22A31A04F2	ECE	III C
7	CHITTURI BALA CHANDRA SATYA YASWANTH	23A31A04M2	ECE	II D
8	AVINASH SAI GANGADA	23A35A0316	ME	III B
9	NAMALA SOWBHAGYA LAKSHMI	22A31A04S1	ECE	III E
10	MALYALA SATVIKA ANJANI	22A31A04R5	ECE	III E
11	BATHULA JAMES NAVADEEP	23A31A04M0	ECE	II D
12	VUYYURI SRI VISHNU PRIYA	22A31A04P8	ECE	III E
13	K.N.V SAI MEGHANA	22A31A04E6	ECE	III C
14	PEDDIREDDI GOVARDHAN DATTA	22A31A04W2	ECE	III C
15	BAVIRI MANIKANTA	22A31A0305	ME	III A
16	B.PAVANI	22A31A04D5	ECE	III C
17	I .L.S.CHAKRADHAR	22A31A04T7	ECE	III E
18	CHINMAYE YENDUVA	22A31A04P9	ECE	III E
19	KOWJU SRI HARSHA	22A31A0448	ECE	III A
20	VISHNU VARDHAN ANGARA	22A31A0429	ECE	III A
21	NAKKA SRAVANI	23A35A0402	ECE	III A
22	G NEERAJ SURYA	22A31A0438	ECE	III A
23	RAMNATH BUDI	22A31A0431	ECE	III A
24	SIVAKOTI LAKSHMI SATYA NARAYANA	22A31A0462	ECE	III A

An Online Quiz on Current Trends and Future of Robotics

The Robotics Club of Pragati Engineering College conducting an Online Quiz on **Current Trends and Future of Robotics** on 01-08-2024 for the students of II, III and IV Year.

* Indicates required question

1. Email *

2. NAME OF THE STUDENT *

3. ROLL NUMBER *

4. BRANCH *

Mark only one oval.

- CE
- EEE
- ME
- ECE
- CSE
- IT
- CSE-AIML
- CSE-AI
- CSE-DS
- CSE-CS

5. Year and Section *

Mark only one oval.

- IV A
- IV B
- IV C
- IV D
- IV E
- III A
- III B
- III C
- III D
- III E
- II A
- II B
- II C
- II D
- II E
- IV
- III
- II

6. Which of the following is considered a key trend in the future of robotics? * 1 point

Mark only one oval.

- A) Decrease in automation
- B) Increase in the use of collaborative robots (cobots)
- C) Reduction in AI integration
- D) Less focus on human-robot interaction

7. What technology is essential for enabling autonomous navigation in robots? * 1 point

Mark only one oval.

- A) Virtual Reality (VR)
- B) SLAM (Simultaneous Localization and Mapping)
- C) Blockchain
- D) 3D Printing

8. Which industry is expected to see significant growth in the use of robotics in the next decade? * 1 point

Mark only one oval.

- A) Textile
- B) Agriculture
- C) Furniture
- D) Glass

9. What is the primary function of collaborative robots (cobots)? * 1 point

Mark only one oval.

- A) To replace human workers
- B) To assist human workers
- C) To work independently
- D) To entertain

10. Which of the following is a common application of medical robots? * 1 point

Mark only one oval.

- A) Construction
- B) Inventory management
- C) Surgery assistance
- D) Food delivery

11. What does AI stand for in the context of robotics? * 1 point

Mark only one oval.

- A) Artificial Intelligence
- B) Automated Integration
- C) Applied Information
- D) Advanced Interaction

12. Which robotic concept involves multiple robots working together to complete tasks? * 1 point

Mark only one oval.

- A) Autonomous robotics
- B) Humanoid robotics
- C) Swarm robotics
- D) Telepresence robotics

13. What is a major advantage of using drones in agriculture? * 1 point

Mark only one oval.

- A) Increased labor costs
- B) Enhanced precision farming
- C) Reduced data collection
- D) Slower crop monitoring

14. Which of the following is NOT a typical feature of service robots? * 1 point

Mark only one oval.

- A) Autonomous operation
- B) Human interaction capability
- C) Heavy industrial tasks
- D) Task-specific design

15. What is the primary goal of robot ethics? * 1 point

Mark only one oval.

- A) To ensure robots are cost-effective
- B) To ensure robots perform efficiently
- C) To ensure robots act in morally acceptable ways
- D) To ensure robots are user-friendly

16. Which technology is often used in robotics to mimic human vision? * 1 point

Mark only one oval.

- A) Infrared sensors
- B) Lidar
- C) Computer vision
- D) Ultrasonic sensors

17. What is the primary challenge in developing humanoid robots? * 1 point

Mark only one oval.

- A) Power supply
- B) Aesthetic design
- C) Replicating human movements and interactions
- D) Color selection

18. Which of the following is a key component of robotic surgery systems? * 1 point

Mark only one oval.

- A) Robotic arms
- B) VR headsets
- C) Conveyor belts
- D) Exoskeletons

19. What does the term “robotic process automation” (RPA) refer to? * 1 point

Mark only one oval.

- A) Automating physical tasks
- B) Automating digital processes
- C) Designing robot hardware
- D) Programming robot movements

20. Which of these is a potential future application of robots in space exploration? * 1 point

Mark only one oval.

- A) Space tourism
- B) Building habitats on other planets
- C) Earthquake prediction
- D) Weather forecasting

21. What is one of the main benefits of using AI in robotics? * 1 point

Mark only one oval.

- A) Increased physical strength of robots
- B) Enhanced decision-making capabilities
- C) Reduced energy consumption
- D) Simpler programming requirements

22. What is the focus of the field of human-robot interaction (HRI)? * 1 point

Mark only one oval.

- A) The mechanical design of robots
- B) How humans and robots communicate and work together
- C) The speed of robots
- D) The energy efficiency of robots

23. Which sector is seeing an increase in the use of underwater robots? * 1 point

Mark only one oval.

- A) Mining
- B) Marine research
- C) Aerospace
- D) Textile manufacturing

24. What role do exoskeletons play in the field of robotics? * 1 point

Mark only one oval.

- A) They enhance human physical capabilities
- B) They replace human limbs
- C) They serve as robotic pets
- D) They perform data analysis

25. Which of the following is an example of a social robot? * 1 point

Mark only one oval.

- A) Industrial welding robot
- B) Automated vacuum cleaner
- C) Customer service robot
- D) Delivery drone

26. Which company is known for its advanced robotic dog, Spot? * 1 point

Mark only one oval.

- A) Boston Dynamics
- B) Honda
- C) Toyota
- D) SoftBank Robotics

27. What is the main focus of robotics in the context of Industry 4.0? * 1 point

Mark only one oval.

- A) Improving aesthetic designs
- B) Enhancing automation and data exchange
- C) Reducing the use of AI
- D) Limiting the use of robotics

28. What is a significant trend in the development of robotics for elderly care? * 1 point

Mark only one oval.

- A) Reducing robot size
- B) Increasing robot autonomy
- C) Decreasing interaction capabilities
- D) Limiting AI integration

29. What does the term "robot-as-a-service" (RaaS) mean? * 1 point

Mark only one oval.

- A) Robots used only in service industries
- B) Robots available on a subscription basis
- C) Robots that provide customer service
- D) Robots designed for entertainment

30. Which of the following is a challenge for integrating robots into the workforce? * 1 point

Mark only one oval.

- A) High power consumption
- B) Lack of programming languages
- C) Ethical and legal considerations
- D) Inability to work autonomously