

## Upper-Intermediate Test Version 8

### Automation

Automation is the technology by which a process or procedure is performed with minimal human assistance. Automation or automatic control is the use of various control systems for operating equipment such as machinery, processes in factories, boilers and heat treating ovens, switching on telephone networks, steering and stabilization of ships, aircraft and other applications and vehicles with minimal or reduced human intervention.

Automation covers applications ranging from a household thermostat controlling a boiler, to a large industrial control system with tens of thousands of input measurements and output control signals. In control complexity, it can range from simple on-off control to multi-variable high-level algorithms.

In the simplest type of an automatic control loop, a controller compares a measured value of a process with a desired set value, and processes the resulting error signal to change some input to the process, in such a way that the process stays at its set point despite disturbances. This closed-loop control is an application of negative feedback to a system. The mathematical basis of control theory was begun in the 18th century and advanced rapidly in the 20th.

Automation has been achieved by various means including mechanical, hydraulic, pneumatic, electrical, electronic devices and computers, usually in combination. Complicated systems, such as modern factories, airplanes and ships typically use all these combined techniques. The benefit of automation includes labor savings, savings in electricity costs, savings in material costs, and improvements to quality, accuracy, and precision.

1. *Choose the correct answer:* Match the word “device” with its definition:
  - A) The automatic operation
  - B) A machine designed for a particular purpose
  - C) Measurement system
  - D) A means of communication
  - E) Electric current
2. *Complete the sentence:* Automation covers applications...
  - A) by various means.
  - B) such as modern factories, airplanes and ships.
  - C) ranging from a household thermostat, to a large industrial control system.
  - D) began in the 18th century and advanced rapidly in the 20th.
  - E) the use of various control systems for operating equipment.
3. *Choose the correct answer:* Choose a SYNONYM to the word “assistance”
  - A) Help
  - B) Machinery
  - C) Control
  - D) Automation
  - E) System

4. *Complete the sentence:*

The mathematical basis of control theory was begun in the ... century.

- A) 16th
- B) 18th
- C) 17th
- D) 20th
- E) 15th

5. *Choose the correct answer:* This text is MOSTLY about...

- A) In the simplest type of an automatic control loop, a controller compares a measured value of a process with a desired set value.
- B) Automation has been achieved by various means.
- C) The closed-loop control is an application of negative feedback to a system.
- D) Automation or automatic control is the use of various control systems for operating equipment and processes.
- E) The benefit of automation

6. *Complete the sentence:*

I tried to \_\_\_\_\_ my best on the exam.

- A) make
- B) put
- C) have
- D) do
- E) go

7. *Complete the sentence:*

If Tom \_\_\_ better, he \_\_\_ at home.

- A) will not feel/ will stay
- B) won't feel/ stayed
- C) feeling/ stayed
- D) haven't felt/ have stayed
- E) doesn't feel/ will stay

8. *Complete the sentence:*

I'm sure Jack will lend you some money. I would be very surprised if he \_\_\_\_\_

- A) refuse
- B) refused
- C) will refuse
- D) has refused
- E) had refused

9. *Complete the sentence:*

If he hadn't been wearing his seat belt he \_\_\_\_\_ seriously injured in the accident.

- A) would be
- B) hadn't been
- C) has been
- D) would have been
- E) won't be

10. *Complete the sentence:*

How often \_\_\_\_\_ Mrs. Smith \_\_\_\_\_ to her son?

- A) do/ write
- B) is/ writing
- C) were/ writing
- D) does/ write
- E) was / written

11. *Complete the sentence:*

How many symphonies \_\_\_\_\_ Beethoven \_\_\_\_\_?

- A) did / compose
- B) do / compose
- C) was / composing
- D) is / composed
- E) will / compose

12. *Complete the sentence:*

\_\_\_\_\_ you ever \_\_\_\_\_ to a famous person?

- A) Does, speak
- B) Is, spoken
- C) Are, speaking
- D) Has, spoken
- E) Have, spoken

13. *Complete the sentence:*

The delegation \_\_\_\_\_ at the airport two hours ago.

- A) meet
- B) is met
- C) was met
- D) meeting
- E) meets

14. *Complete the sentence:*

Where's Jack? – He \_\_\_\_\_ home.

- A) should
- B) may gone
- C) must
- D) had to go
- E) might have gone

15. *Complete the sentence:*

They \_\_\_\_\_ finish their work in the next few days.

- A) are going to
- B) was going to
- C) will
- D) are gone
- E) going

16. *Odd words out:*

- A) microscopic
- B) tiny
- C) huge
- D) enormous
- E) little

17. *Choose ANTONYMS to the word: success*

- A) failure
- B) sadness
- C) successful
- D) defeat
- E) maturity

18. *Complete the sentence with the missing words:*

\_\_\_\_\_ Got any plans for the weekend?

19. *Continue the list with TWO MORE words:*

- A) Backdoor
- B) Back-bench
- C) Backbone
- D) \_\_\_\_\_
- E) \_\_\_\_\_

20. Where do you see yourself in five years' time? Write a few sentences about it.