

1. What does NSPE stand for?

- a. National Society of Pipeline Engineers
- b. National Society of Petroleum Engineers
- c. National Society of Professional Engineers
- d. Northern States Power Enterprise

Answer: c

2. For which of the following products are engineers directly involved in the production?

- a. Automobiles
- b. Notebook paper
- c. Bottled water
- d. Smart phones
- e. Laptop computers
- f. Notebook paper
- g. All of the above

Answer: g

3. According to the latest estimates and projection of the U.S. Census Bureau, the world population will reach 9.3 billion people by the year 2050.

- a. True
- b. False

Answer: a

4. The world-wide population of people 65 years of age and older will more than double in the next 25 years.

- a. True
- b. False

Answer: a

5. For which of the following occupations is the job outlook good?

- a. Environmental Engineers
- b. Mechanical Engineers

- c. Electrical and Computer Engineers
- d. All of the above

Answer: d

6. List at least five products in your home, apartment or dorm room that engineers are directly involved in the production of.

- i. _____
- ii. _____
- iii. _____
- iv. _____
- v. _____

7. What does NASA stand for?

- a. North American Space Agency
- b. North American Space Administration
- c. National Aeronautics and Space Administration
- d. National Aero-Space Administration

Answer: c

8. In which of the following fields do engineers work?

- a. Design
- b. Sales
- c. Technical support
- d. Maintenance
- e. Customer service
- f. All of the above

Answer: f

9. List at least five traits of good engineers.

- i. _____
- ii. _____

- iii. _____
- iv. _____
- v. _____

10. Good engineers have good grasp of fundamentals and are analytical, detail oriented, and creative.

a. True

b. False

Answer: a

11. Good engineers don't need strong time-management skills because others usually take care of scheduling.

a. True

b. False

Answer: b

12. Good engineers have good written and oral communication skills.

a. True

b. False

Answer: a

13. Good engineers don't need good "people and team-work skills" since most of their work is done independently in their offices or labs.

a. True

b. False

Answer: b

14. List at least five engineering disciplines.

- i. _____
- ii. _____
- iii. _____
- iv. _____

v. _____

15. What does ABET stand for?

- a. Accreditation Bureau for Engineering and Technology
- b. American Board of Engineers and Technicians
- c. Association for Better Engineers and Technicians
- d. Accreditation Board for Engineering and Technology

Answer: d

16. Most graduating engineering students take a six-hour computer based exam called the FE exam, which stands for

- a. Formal Exercises
- b. Fundamental Exercises
- c. Fundamentals of Engineering
- d. Formal Engineering

Answer: c

17. According to ABET, engineering graduates should be able to

- a. analyze and interpret data
- b. apply knowledge of mathematics
- c. communicate effectively
- d. use the techniques, skills, and modern engineering tools necessary for engineering practice
- f. All of the above

Answer: f

18. Engineers often use computers to model and analyze problems.

a. True

b. False

Answer: a

19. Mechanical engineers are involved in the design, development, testing, and manufacturing machines, robots, tools, gas turbines, internal combustion engines.

a. True

b. False

Answer: a

20. Manufacturing engineers develop, coordinate, and supervise the process of manufacturing all types of products.

a. True

b. False

Answer: a

21. Biomedical engineering combines biology, chemistry, medicine, and engineering to solve a wide range of medical and health-related problems.

a. True

b. False

Answer: a

22. Petroleum engineers apply the laws and principles of chemistry, biology, and engineering to address issues related to water and air pollution control, hazardous waste, waste disposal, and recycling.

a. True

b. False

Answer: b

23. Materials engineers research, develop, and test new materials for various products and engineering applications.

a. True

b. False

Answer: a

24. Which one of the following engineering disciplines is most likely to be involved with providing public infrastructure and services?

a. Mechanical Engineering

b. Civil Engineering

c. Electrical Engineering

d. Chemical Engineering

e. Aerospace Engineering

Answer: b

25. Which one of the following engineering disciplines is most likely to be involved with providing lighting and wiring for buildings?

a. Mechanical Engineering

b. Civil Engineering

c. Electrical Engineering

d. Chemical Engineering

e. Aerospace Engineering

Answer: c

26. Which one of the following engineering disciplines is most likely to be involved with designing a heating, cooling, and ventilation for a building?

a. Mechanical Engineering

b. Civil Engineering

c. Electrical Engineering

d. Chemical Engineering

e. Aerospace Engineering

Answer: a

27. Which one of the following engineering disciplines is most likely to be involved with the design of military aircraft and missiles?

- a. Mechanical Engineering
- b. Civil Engineering
- c. Electrical Engineering
- d. Chemical Engineering
- e. Aerospace Engineering

Answer: e

28. Which one of the following engineering disciplines is most likely to be involved in the pharmaceutical industry?

- a. Mechanical Engineering
- b. Civil Engineering
- c. Electrical Engineering
- d. Chemical Engineering
- e. Aerospace Engineering

Answer: d

29. Good engineers are dedicated to lifelong learning.

- a. True
- b. False

Answer: a

30. In general, the scope of an engineering technologist's work is more application oriented and requires less understanding of mathematics, engineering theories, and scientific concepts that are used in complex designs.

- a. True
- b. False

Answer: a