

(These items were developed by teachers for the Technical Skills Assessment. Below is a sample item for each program standard.)

**Question 1 of 20**

Which tractor component transfers power from the transmission to the rear axles?

- ☐ A) Electro-hydraulic clutch
- ☐ B) Transmission
- ☐ C) Turbocharger
- ☐ D) Power takeoff

**Question 2 of 20**

What should an operator do if there is an unsafe condition on a jobsite?

- ☐ A) Report it to a supervisor.
- ☐ B) Simply avoid it.
- ☐ C) Call OSHA.
- ☐ D) Tell a co-worker.

**Question 3 of 20**

What is the PRIMARY use of a wheel loader?

- ☐ A) Remove/move material
- ☐ B) Dig trenches
- ☐ C) Cut slopes
- ☐ D) Crown a road

#### Question 4 of 20

What does a tachometer gauge indicate?

- ☐ A) Hydraulic pressure
- ☐ B) Hours of operation
- ☐ C) Engine oil pressure
- ☐ D) Engine speed

#### Question 5 of 20

What is the grade of a surface that falls 20 feet for every 1,000 feet of distance?

- ☐ A) 10 percent
- ☐ B) 2 percent
- ☐ C) 1/2 percent
- ☐ D) 20 percent

#### Question 6 of 20

What soil stabilization is used to prevent erosion?

- ☐ A) Do not treat.
- ☐ B) Use safety cones and warning signs.
- ☐ C) Apply covers such as grass seedlings.
- ☐ D) Floor area with water.

#### Question 7 of 20

Which vehicle is COMMONLY used to transport material from a jobsite?

- ☐ A) Dump truck
- ☐ B) Excavator
- ☐ C) Backhoe loader
- ☐ D) Dozer

### Question 8 of 20

What is the basic use of a roller or compactor?

- ☐ A) To create a v-ditch
- ☐ B) To compress and smooth asphalt
- ☐ C) To move dirt
- ☐ D) To dig a trench

### Question 9 of 20

What is a safety rule for operating a scraper?

- ☐ A) Check the stabilizers.
- ☐ B) Wear proper protective equipment.
- ☐ C) Clean tracks.
- ☐ D) Change the push block.

### Question 10 of 20

What type of engine does a crawler-type front-end loader usually have?

- ☐ A) Pneumatic
- ☐ B) Gasoline
- ☐ C) Diesel
- ☐ D) Hydrostatic

### Question 11 of 20

What is the MAJOR purpose of a forklift?

- ☐ A) To stockpile dirt
- ☐ B) To create drainage
- ☐ C) To use as a personal lift
- ☐ D) To lift materials to higher heights

### Question 12 of 20

What machine has a front mounted blade, tracks, and a huge ripper?

- ☐ A) Scraper
- ☐ B) Forklift
- ☐ C) Backhoe
- ☐ D) Dozer

### Question 13 of 20

What are two types of booms on backhoes?

- ☐ A) Crane and rough terrain
- ☐ B) Standard and extendable stick
- ☐ C) Articulated and rigid frame
- ☐ D) Push pull and pneumatic

### Question 14 of 20

What attachment works in conjunction with the bucket and performs work similar to a grapple?

- ☐ A) Ripper
- ☐ B) Breaker
- ☐ C) Screen
- ☐ D) Thumb

### Question 15 of 20

What equipment commonly uses a scarifier?

- ☐ A) Excavator
- ☐ B) Motor grader
- ☐ C) Roller/compactor
- ☐ D) Tandem scraper

### Question 16 of 20

Who helps the motor grader operator during finish grading?

- ☐ A) Pipe crew
- ☐ B) Grade checker
- ☐ C) Foreman
- ☐ D) Safety officer

### Question 17 of 20

What type of soil is dry, lacks nutrients, and is fast-draining?

- ☐ A) Silt
- ☐ B) Loam
- ☐ C) Sand
- ☐ D) Clay

### Question 18 of 20

What type of cost is calculated before construction begins?

- ☐ A) Actual
- ☐ B) Estimated
- ☐ C) Fixed
- ☐ D) Variable

### Question 19 of 20

What is an angle less than 90 degrees called?

- ☐ A) Acute angle
- ☐ B) Adjacent angle
- ☐ C) Right angle
- ☐ D) Straight angle

### Question 20 of 20

What is a side view of a proposed project called?

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- ☐ A) Elevation
- ☐ B) End view
- ☐ C) Lateral scan
- ☐ D) Profile

## Heavy Equipment Operations Sample Test Answer Key

Question	Answer
1.	B
2.	A
3.	A
4.	D
5.	B
6.	C
7.	A
8.	B
9.	B
10.	C
11.	D
12.	D
13.	B
14.	D
15.	B
16.	B
17.	C
18.	B
19.	A
20.	D