

Mississippi Department of Education



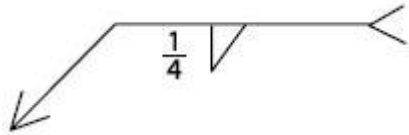
MS-CPAS2 Secondary Practice Assessment/ Assessment Preparatory Guidelines *11352P2-2014 Welding*

General Instructor Preparatory Guidelines

- **STUDENTS SHOULD ONLY TAKE PRACTICE TESTS ONLINE.**
- The practice tests are delivered the **SAME WAY** as the live tests.
- Use the correct curriculum and MS-CPAS2 assessment blueprint located at: <http://www.rcu.msstate.edu/Curriculum/CurriculumDownload.aspx>
 - Teach the correct number of instructional hours per unit.
 - Cover each competency/objective listed in the curriculum/blueprint.
- Use multiple-choice (selected response) assessments in your classroom. Examples are Unit Tests, Quizzes, and Timed Final Practice Exams.
- Take **Assessment 101** (RCU online course) to learn how to form well-constructed assessments for your classroom.
- Review previous MS-CPAS2 year reports to identify class unit performance. Adjust in-class reviews accordingly.
- Students should take the **DEMO MS-CPAS2** *OR* the **PRACTICE MS-CPAS2** to help students prepare for testing day.
- **Only** use this document as a review of the online practice assessment **AFTER** students take the practice assessment online. It is **NOT** meant for use as a study guide or predict student performance on the live test.

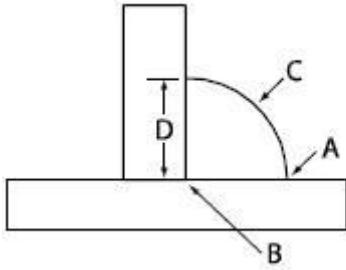
MS-CPAS2 PRACTICE Assessment

1. Which of the following correctly describes the weld symbol illustrated below?



- a. Fillet weld deposited on arrow side, 1/4-in. size
b. Fillet weld deposited on other side, 1/4-in. size
c. Bevel weld deposited on arrow side, 1/4-in.size
d. Bevel weld deposited on other side, 1/4-in. size
2. A thin solid line with zigzags is a/an:
- a. object line.
b. leader line.
c. dimension line.
d. long break line.
3. Items such as drilled hole size, special treatments, and thread fastener size are given in the:
- a. local notes.
b. welding notes.
c. general notes.
d. specification notes.
4. The spacing between increments of an intermittent fillet weld is the:
- a. length.
b. pitch.
c. contour.
d. layout.

5. What part of the weld is shown at Point D in the illustration below?



- a. Toe
 - b. Throat
 - c. Leg
 - d. Face
6. The filter assembly on the shop air line to a plasma arc cutting machine removes:
- a. argon and helium from the air.
 - b. oil and water from the air.
 - c. oxygen and nitrogen from the air.
 - d. ultraviolet and infrared radiation from the air.
7. Two parts of the plasma arc cutting torch and nozzle are the:
- a. electrode and heat shield.
 - b. baffle and rip gauge.
 - c. swirl and micrometer.
 - d. tip and fan.
8. Industrial plasma units can cut carbon steel up to:
- a. 1"
 - b. 3"
 - c. 5"
 - d. 7"

9. What direction of travel is used for cutting with the air-carbon torch in the vertical position?

- a. Horizontal
- b. Upward
- c. Overhead
- d. Downward

10. Flat electrodes are sized by:

- a. voltage.
- b. length.
- c. the width of their widest side.
- d. the area of their cross section.

11. Open root SMAW welds normally have a bevel angle of:

- a. 30 degrees
- b. 22 1/2 degrees
- c. 15 degrees
- d. 10 degrees

12. Some codes do not allow:

- a. stringer beads.
- b. weave beads.
- c. flat beads.
- d. multiple beads.

13. The range of 0" to 1/8" is allowed by code for welding open root V-groove welds for the:

- a. leg.
- b. throat.
- c. root face.
- d. toe.

14. Welding a V-groove weld in the flat position is known as:

- a. a 1G weld
- b. a 2G weld
- c. a 3G weld
- d. a 4G weld

15. When making a open V-groove weld the most difficult part is the:

- a. overlap.
- b. bead.
- c. root pass.
- d. keyhole.

16. When preparing to practice welding on V-butt groove welds with backing, the welding surface must be:

- a. wood.
- b. nonflammable.
- c. ungrounded.
- d. steel.

17. A container that is sealed airtight is said to be:

- a. explosive.
- b. hermetically sealed.
- c. factory sealed.
- d. safe.

18. Cooling the metal with water is only done on:

- a. tack welds.
- b. on the job welds.
- c. practice coupons.
- d. horizontal welds.

19. The crusty substance that forms on the weld is:

- a. spatter.
- b. slag.
- c. arc flash.
- d. flux.

20. The point where one weld stops and another begins is a:

- a. blend.
- b. retrace.
- c. restart.
- d. weave.

21. The work area should be free of dirt, scrap metal, grease and:

- a. electrodes.
- b. welding lead.
- c. oil.
- d. ground clamp.

22. How many major types of porosity are there in welding?

- a. 3
- b. 4
- c. 5
- d. 6

23. Porosity in welds is mostly caused by:

- a. using the wrong electrodes.
- b. too much heat.
- c. not enough heat.
- d. contamination.

24. The exposed surface of the weld is known as the:

- a. weld root.
- b. weld toe.
- c. weld angle.
- d. weld face.

25. The most difficult part of making an open V butt weld is the:

- a. root.
- b. bead.
- c. overlap.
- d. keyhole.

26. Which of the following is best for removing moisture from a plate before welding?

- a. Sandblasting
- b. Grinding
- c. Plasma arc cutting
- d. An oxyfuel torch

27. Practicing open v-butt welds on a plate will prepare a welder to make the more difficult welds, such as:

- a. pipe.
- b. flat.
- c. vertical.
- d. horizontal.

28. The type of bend test that is focused on the first bead welded on the test plate is the:

- a. face bend.
- b. side bend.
- c. root bend.
- d. cold bend.

29. The weld made in an opening in a part is a:

- a. fillet.
- b. groove.
- c. flange.
- d. flare.

- 30. What is the proper electrode for making a root pass on a mild steel v-groove plate?**
- a. 7024
 - b. 7018
 - c. 6010
 - d. 309
- 31. When practicing open root V-groove plate, it will prepare the welder to make more difficult:**
- a. horizontal welds
 - b. flat welds
 - c. vertical welds
 - d. pipe welds
- 32. When welding vertical stringer beads on a V-groove joint in the vertical position, keep the electrode at what degree push angle?**
- a. 0 to 10
 - b. 10 to 20
 - c. 20 to 30
 - d. 30 to 40
- 33. All flux-cored wires are considered to be low hydrogen because the wire must be kept:**
- a. cool.
 - b. hot.
 - c. dry.
 - d. wet.
- 34. Flux-cored arc welding (FCAW) uses an electric arc to melt a flux core that is:**
- a. concave shaped.
 - b. convex shaped.
 - c. square shaped.
 - d. tubular shaped.

35. Flux-cored arc welding gives off:

- a. gamma rays and X-rays.
- b. infrared rays and X-rays.
- c. ultraviolet rays and gamma rays.
- d. ultraviolet rays and infrared rays.

36. How is FCAW shielding provided other than by a gas supplied through the nozzle?

- a. Inside the nozzle
- b. Brush-on metal
- c. Wire heated and dipped in the flux
- d. Flux which is made inside the wire

37. In FCAW, the welder can receive permanent eye damage from:

- a. severe arc flash burns.
- b. standing behind a protective screen.
- c. using a No. 14 filter lens.
- d. using the correct filter lens.

38. In FCAW, the wire feed drive wheels and gun contact tip must be the correct size for the:

- a. cable.
- b. electrode.
- c. gas flow.
- d. weld position.

39. The two major hazards associated with flux-cored arc welding are:

- a. arc flash and roller pinch.
- b. heat and arc flash.
- c. smoke and noise.
- d. wire lash and heat.

40. A semi-automatic system of welding is the:

- a. MIG welder.
- b. TIG welder.
- c. gas torch.
- d. shield-arc welder.

41. The power source for GMAW welding must be:

- a. constant voltage.
- b. constant current.
- c. dropping voltage.
- d. HFAC.

42. The flow meter in MOST MIG welders is stated in cfh, which means:

- a. constant feed per hour.
- b. constant feet per hour.
- c. cubic feed per hour.
- d. cubic feet per hour.

43. One advantage of welding with the gas metal arc welder is that the welds are:

- a. cleaner.
- b. easier to locate.
- c. larger.
- d. longer.

44. Using the GMAW process, the point at which one weld bead stops and another bead starts is a:

- a. blend.
- b. weave.
- c. restart.
- d. reapply.

45. Using the GMAW process, what causes the lower piece of metal to separate from the upper piece after plug welding?

- a. High amperage
- b. Insufficient penetration
- c. Low gas pressure
- d. Low wire speed

46. When using GMAW, what has a greater effect on weld penetration than voltage or travel speed?

- a. Gun position
- b. Amperage
- c. Arc length
- d. Speed

47. Using the FCAW process, the depth that melting extends into the base metal is:

- a. deposition.
- b. flow ability.
- c. fusion.
- d. penetration.

48. Using the FCAW process, when overhead welding, welders should position their bodies to protect themselves from:

- a. high-intensity light.
- b. falling dirt.
- c. dripping molten metal.
- d. slag.

49. A flat position FCAW open V-groove weld is acceptable, if it has complete fusion at the toes of the weld and a smooth flat:

- a. crater.
- b. transition.
- c. cross section.
- d. overlap.

50. When making vertical FCAW open V-groove welds with weave beads, which weave pattern should be used?

- a. Circular
- b. Square
- c. Zigzag
- d. Crescent

MS-CPAS2
PRACTICE Assessment
Answer Key

Answer Key

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

Question	Answer
26	D
27	A
28	C
29	B
30	C
31	D
32	A
33	C
34	D
35	D
36	D
37	A
38	B
39	B
40	A
41	A
42	D
43	A
44	C
45	B
46	A
47	D
48	C
49	B
50	C