



SOLDER PASTE PRINTING (DVD-34C) v.2

This test consists of twenty multiple-choice questions. All questions are from the video: *Solder Paste Printing (DVD-34C)*.

Each question has only one *most* correct answer. Circle the letter corresponding to your selection for each test item. If you wish to change an answer, erase your choice completely.

You should read through the questions and answer those you are sure of first. After your first pass through the test, then go back and answer the questions that you were not sure of. If two answers appear to be correct, pick the answer that seems to be the most correct response.

When you are finished, check to make sure you have answered all of the questions. Turn in the test materials to the instructor.

The passing grade for this test is 70% (14 correct answers or better).

Good luck!

SOLDER PASTE PRINTING (DVD-34C) v.2

Name _____ Date _____

- 1. In the surface mount assembly process, solder paste printing is the**
 - a. 1st step
 - b. 2nd step
 - c. 3rd step
 - d. 4th step

- 2. The metallized areas where surface mount components are attached are called**
 - a. circuits
 - b. traces
 - c. lands
 - d. holes

- 3. The openings in a stencil are called**
 - a. lands
 - b. apertures
 - c. plated through holes
 - d. traces

- 4. The surface finish of a circuit board may contain**
 - a. bare copper
 - b. solder
 - c. flash gold
 - d. all of the above

- 5. The critical factor in controlling the amount of solder applied to the lands is the**
 - a. style of the squeegee
 - b. nature of the solder paste
 - c. thickness of the stencil
 - d. shape of the circuit board

- 6. Stencils are typically “stepped down” for**
 - a. chip components
 - b. axial components
 - c. radial components
 - d. fine pitch components

SOLDER PASTE PRINTING (DVD-34C) v.2

- 7. If the solder paste is not properly stirred**
 - a. there will be uneven coverage across the lands
 - b. the flux will not activate
 - c. the solder will not reflow
 - d. all of the above

- 8. The quality of solder paste on the stencil can degrade rapidly from**
 - a. temperature
 - b. humidity
 - c. air flow across the stencil
 - d. all of the above

- 9. If the squeegee blade is too soft, there will likely be**
 - a. solder bridging
 - b. scooping
 - c. short circuits
 - d. too much solder paste

- 10. A snugger system**
 - a. keeps the circuit board snug against the rails
 - b. provides additional hold down for the circuit board
 - c. keeps the stencil snug against the circuit board
 - d. keeps the squeegee snug against the stencil

- 11. SMEMA is a**
 - a. standard for the electrical and mechanical interfacing of equipment
 - b. standard for solder joint acceptability
 - c. solder paste dispensing system
 - d. surface mount electrical mirror assembly

- 12. When a circuit board has large cutouts that make vacuum hold down ineffective**
 - a. special stencils may be required
 - b. a light weight squeegee may be required
 - c. a dedicated work holder may be required
 - d. all of the above

- 13. An electronic vision system is used to**
 - a. align the circuit board position relative to the stencil openings
 - b. adjust the angle of the squeegee blades
 - c. dispense the solder paste accurately onto the stencil
 - d. clean the stencil in between cycles

- 14. The distance between the circuit board and the stencil is called the**
- a. snugger distance
 - b. snap-off distance
 - c. downstop distance
 - d. fiducial distance
- 15. The three dimensional verification process checks for**
- a. proper coverage of solder paste on the lands
 - b. slumping
 - c. solder paste deposit height
 - d. all of the above
- 16. On semi-automatic printers, squeegee stroke length is set**
- a. 2 inches greater than the pattern on the stencil – both front and back
 - b. 1 ½ inches greater than the pattern on the stencil – both front and back
 - c. 1 inch greater than the pattern on the stencil – both front and back
 - d. ½ inch greater than the pattern on the stencil – both front and back
- 17. A printing cycle is performed on mylar film when**
- a. the viscosity of the solder paste needs to be checked
 - b. manual alignment is required
 - c. squeegee pressure needs to be adjusted
 - d. all of the above
- 18. If the stencil is not regularly cleaned**
- a. the apertures will clog and solder paste won't go through
 - b. the circuit board will become contaminated
 - c. the squeegee blades will degrade
 - d. the vision system will not function properly
- 19. Safety glasses and rubber gloves are worn when cleaning the printer because of**
- a. electrical hazards
 - b. mechanical hazards
 - c. the hazardous nature of solder paste and cleaning solvents
 - d. all of the above
- 20. At the completion of a job, the operator should check for**
- a. edge nicks on the squeegee blade
 - b. dents in the stencil pattern area
 - c. solder paste or debris on tooling pins and board supports
 - d. all of the above