**DV162\_55\_PAS\_On 3D Printers**

**Possible Answers Sheet**

Q1. What is a 3D printer?

Ans: New style of printer which we use for printing in three dimensions layer by layer is called a 3D printer.

Q2. 3D printer that prints in \_\_\_\_\_\_\_\_\_\_\_\_ dimensions.

Ans. three.

Q3. We often refer to 3D printers as a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Ans. Additive manufacturing.

Q4. What do we do to create a 3D model?

Ans. We’re creating layers upon layers to finally create the 3D model that you see in the final output.

Q5. What is additive manufacturing?

Ans: When we start manufacturing with nothing and start adding layer by layer until we get the final product is called additive manufacturing.

Q6. What are 3D printers being used for?

Ans: 3D printers being used to quickly create the objects or prototypes.

Q7. What is a very common type of 3D printing?

Ans: Filament printing is a very common type of 3D printing.

Q8. What does FDM stand for?

Ans. Fused Deposition Modeling.

Q9. Explain filament printing?

Ans. We start with melting the filament and placing it in very fine layers to create the 3D object. The print head will use the filament to print one layer on the object, move up a bit, print the next layer, and so on.

Q10. What are the advantages of using this type of 3D printer?

Ans: Have a very large print bed, can manage the filament very easily, does not make a mess, easily disposes over.

Q11. How does the filament printer create 3D objects?

Ans. The filament from back goes all the way to the top of the printer, where it connects with the printhead. And as it’s melted, it’s able to create the 3D object.

Q12. How does an SLA printer differ from a filament printer?

Ans. Because it uses simply resin instead of filament.

Q13. What does an SLA printer stand for?

Ans. Stereolithography.

Q14. SLA Printer is often referred to as\_\_\_\_\_\_\_\_\_\_\_\_\_.

Ans. Resin Printer.

Q15. How does SLA printers work?

Ans. In SLA printers liquid resin is used that sits on the bottom of this printer, and the object that you’re printing is attached to a build platform that moves up and down. This build platform moves down into the liquid resin, where a light, usually an ultraviolet light or a laser, is used to Harden this resin to create another layer at the bottom of this object and so on.

Q16. There’s \_\_\_\_\_\_\_\_\_\_that sits on the bottom of this SLA printer, and the object that you’re printing is attached to a \_\_\_\_\_\_\_\_\_\_\_that moves up and down.

Ans. liquid resin, build platform.

Q17. What is the biggest challenge with resin printing?

Ans: The biggest challenge with resin printing tends to revolve around how we manage this liquid resin.

Q18. You have to use\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so that you don’t injure yourself when working with the resin.

Ans. Protective Gear.

Q19. What should you do with leftover resin?

Ans: Dispose off and take a hazardous materials facility in your area.

Q20. What do we refer to as the large surface used for 3D printing?

Ans: We refer to this large surface as a Print bed.

Q21. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a flat surface, and it usually is either adhesive on the bottom with your filament printing or adhesive on the top, so that you’re able to connect it to the build platform with resin printing.

Ans. Print bed.

Q22. What needs to be done to the print bed to ensure a successful print?

Ans: Everything needs to be level, clean and let stay till complete.

Q23. What is the print bed for filament printing?

Ans: Something that is a relatively sticky surface or makes it very difficult for that object to move that is used to print on, is considered to be the print bed.

Q24. What is the print bed typically made of?

Ans: Created from something that is relatively sticky or makes it very difficult for that object to move.

Q25. Are there different options for print beds?

Ans: There are a lot of different options for print beds, and you can find some that are very large and some that are more compact.

Q26. What is the print bed in resin printing?

Ans: The print bed is the very small area at the bottom of this printer where the light is able to harden the resin.