# Sample Puzzle Questions

1. From following, the alternative name for RP is _____

(A) Additive Manufacturing
(B) Layer Manufacturing
(C) Direct CAD Manufacturing
(D) All of the above

2. Which of the following is not Liquid-based RP system?

(A) Stereolithography Apparatus (SLA)
(B) Laminated Object Manufacturing (LOM)
(C) Solid Ground Curing (SGC)
(D) Solid Object Ultraviolet-Laser Printer (SOUP)

3. Which of the following is not subtractive process?

(A) Milling
(B) Stereo-lithography
(C) Sawing
(D) EDM
4. Choose the correct sequence to generate prototype.

(A) 3D CAD data - CAD solid model - STL file - RP prototype
(B) CAD solid model - 3D CAD data - RP prototype - STL file
(C) STL file - 3D CAD data - CAD solid model - RP prototype
(D) 3D CAD data - STL file - CAD solid model - RP prototype
5. Full form of STL is _____.

(A) Straight-lithography
(B) Streto-lithography
(C) Stereo-lithography
(D) Straight-lipsography
6. What is the full name of SLS?

(A) Selective Laser Simulator
(B) Sintering Laser Simulator
(C) Selective Laser Sintering
(D) Stereolithography Laser Sintering

7. Process of converting STL file model in to layers is called_____in RP.

(A) chopping
(B) slicing
(C) cutting
(D) trimming
8. Which of the following aspects is mainly concerned with molding the final shape around the basic skeleton?
Functional aspect
Operational aspect
Aesthetic aspect
None of these

9. The STL files translate the part geometry from a CAD system to_____.

(A) CNC machine
(B) CMM machine
(C) RP machine
(D) CAPP machine

10. In the _____ process, one starts with a single block of solid material larger than the final size of the desired object and material is removed until the desired shape is reached.

(A) Subtractive process
(B) Additive process
(C) Formative process
(D) All of above

11. Which of the following addresses the need to design a product for safety?
Soft-Hard Review
Effect Analysis
Experimental design
None of these

12. Full form of FDM is_____.

(A) Fixed Development Modelling
(B) Fusion Development Modelling
(C) Fused Deposition Modelling
(D) Focused Deposition Modelling

13. The process of obtaining a geometric CAD model from 3D points acquired by scanning/digitizing existing parts/products is best known as:
Forward Engineering
Backward Engineering
Reverse Engineering
Product Engineering

14. In the entire reverse engineering process for product design, which one is the first step?

(A) CAD model updating
(B) CAD modeling
(C) Data pre-processing
(D) Data capturing

15. Which of the following RP system is not developed by 3D systems?

(A) Selective Laser Sintering (SLS)
(B) Multi-Jet Modeling System (MJM)
(C) Paper Lamination Technology (PLT)
(D) Stereolithography Apparatus (SLA)

16. Which of the following is used as base material in Stereolithography (SLA) process?

(A) Thermoplastics , Metals powders
(B) Thermoplastics , Eutectic metals.
(C) Photopolymer

(D) Titanium alloys

17. What is the third step in Reverse Engineering?

Digitization of the object
Creation of CAD model
Prototype
None of these

18. Which of the following advantage does not possess by the rapid prototyping process over the traditional prototyping process?

(A) It consumes less time
(B) Gives better quality
(C) Reduces product launch time
(D) It's cheaper

19. Which kind of laser is used to cut the sheets in LOM?
Ruby Laser
Carbon Dioxide Laser
He-Ne Laser
None of these

20. STL file format is represented by interaction of _____.

(A) lines and hexagons
(B) lines and rectangles
(C) lines and triangles
(D) lines and circles

21. Which among the following processes, is most important part of product development?
Packaging
Purchasing
Engineering Design Process
Marketing

22. Which material can be efficiently used as a support material?

(A) ABS
(B) PLA
(C) Nylon
(D) INF

23. Which file format cannot be converted into STL file format?

(A) .prt
(B) .sld
(C) .dwg
(D) .stp

24. STL files contains _____.

(A) mass properties of the model
(B) geometrical data
(C) drawing data
(D) all of the above

25. To meet the customer's demand in today's market, we need:

Rapid Manufacturing
Conventional Manufacturing
Unconditional Manufacturing
None of these

26. Which of the following is least important in design during rapid prototyping?

(A) Machine size
(B) Tolerance
(C) Material
(D) CAD software

27. Which of the following is not an example of additive manufacturing?

(A) Fused-deposition-modeling
(B) Electron beam machining
(C) SLS
(D) Injection molding

28. Additive manufacturing is generally a _____ process.
1D
2D
2.5D
3D

29. Which of the process is available in colors?

(A) SLA
(B) FDM
(C) MJM
(D) 3D Printer

30. Which of the following is one of the design process steps?

(A) Build
(B) Concept
(C) Pre-processing
(D) Transfer to machine

31. Direct Tooling is technically equivalent to:
Direct Costing
Direct Manufacturing
Indirect Production
None of these

32. Post processing in Fused Deposition Modeling in comparison to Stereolithography
Apparatus is:

Lower

Higher

Equivalent

Can't say

33. The cost which takes to build one component with all costs included is known as:

Product Cost

Part Cost

Production Cost

Fixed Cost

34. A field of technology that deals with a combination of real world and the data generated from computer.

a) ML

b) AI

c) AR

d) IoT

35. Technologies that completely involve a user inside a synthetic environment.

a) AR

b) VR

c) AI

d) ML

36. Technologies that allow the user to see the real world, with virtual objects composited in the real world.

a) AR

b) VR

c) AI

d) SR

37. Laminated Object Manufacturing (LOM) is developed by_____.

(A)     Stratasys
(B)     CAM-LEM
(C)     Kira Corporation
(D)     Cubic Technologies

38. Which of the following is used as base material in Selective laser sintering (SLS)?

(A)     Photopolymer
(B)     Thermoplastics, Metal powders
(C)     Titanium alloys
(D)     Various materials

39. Which material gives finest surface finish in RP?

(A)     ABS
(B)     PLA
(C)     Nylon
(D)     INF

40. In 4D printing, which one is the fourth dimension?

(A)     Time
(B)     Material
(C)     Sound
(D)     Light