|  |  |
| --- | --- |
| Sr. No | Name |
| 1 | Parab Prasad Mangesh |
| 2 | Sinha Medhavi |
| 3 | Dhanawade Tanmaay Pritam |
| 4 | Aditya Kumar Sanjay Jha |
| 5 | Mayur Gajanan Naik |
| 6 | Tirth Manish Kamdar |
| 7 | Karan shamugasundar |
| 8 | LALITESH SHARMA |

Every student has to attempt 4 questions as per serial number. E.g. Serial number 1 will attempt question 1,9,17 and 25 similarly Serial number 2 attempt Question 2,10,18 and 26…and so on

1. Explain the working of the 3D printer with a suitable diagram
2. Explain how g-code is from AutoCAD design in step-by-step manner
3. What is the most popular material for 3D printing and state its properties
4. Explain the working of hot-end in FDM
5. Explain the working of heated bed in FDM
6. Explain the working of the SLA printer
7. Explain the working of the DLP printer
8. Explain the working of the SLS printer
9. What is the effect of Nozzle sizes on 3D printing
10. Write a short note on YHT rules
11. Explain different CURA settings for FDM machine
12. Differentiate between ABS and PLA
13. Compare SLS and DLP
14. Explain 3D printing in detail
15. Explain the Types of 3D printers
16. Compare different 3D printers
17. Write a short note on Selective Laser Sintering (SLS)
18. Write a short note on Selective laser melting (SLM)
19. Write a short note on Laminated object manufacturing (LOM)
20. Write a short note on Digital Beam Melting (EBM)
21. Name different 3D printer parts
22. Explain assembly of Extruder
23. Write detailed note on 3D Printing Materials: PLA, ABS, PVA, Flexible
24. Explain 3D Printer assembly
25. Explain Effects of different printer temperature settings while 3D Printing
26. Explain Effects of different extrusion rates
27. What is Driver boards in 3D printing
28. Explain Arduino Mega based 3D printer
29. Write a short note on Power supply for 3D printer, Stepper motors and drivers
30. Explain all Sensors used with 3D printers
31. Write a short note on Slicing software: Cura, Repetier, Slic3r, MakerBot Print
32. Explain 3D design software: AutoCAD, Solidworks, ThinkerCAD, FreeCAD, SketchUp