

| Option D: | Revolving joint |
| :--- | :--- |
|  |  |
| Q4. | In order to use circular interpolation for programming, how many points need to lie along the circle? |
| Option A: | 2 |
| Option B: | 3 |
| Option C: | 4 |
| Option D: | 6 |
|  |  |
| Q5. | In AGVs, the magnetic field produced by the cable induces an alternating voltage in a pair of coils often in <br> the |
| Option A: | Powered wheel assembly |
| Option B: | Steered wheel assembly |
| Option C: | Unpowered wheel assembly |
| Option D: | Castor wheel assembly |
|  |  |
| Q6. | During introducing robotics into a firm, It is important that management provide continous support and <br> encoragement during <br> period. |
| Option A: | Study |
| Option B: | Application |
| Option C: | Startup |
| Option D: | installation |
|  |  |
| Q7. | In presence of robots, greater responsibility for the overall process may lead to _ <br> stress. |
| Option A: | Less |
| Option B: | Greater |
| Option C: | Same |
| Option D: | Variable |
|  |  |
| Q8. | What is full form of SCARA? |
| Option A: | Selective Compliance Assembly Robot Arm |


| Option B: | Selective Complex Assembly Robotic Arm |
| :---: | :---: |
| Option C: | Selective Complex Assesmbly Robotic Armor |
| Option D: | Selective Compliance Angular Robot Arm |
| Q9. | In DH parameter "a" denotes |
| Option A: | Link twist |
| Option B: | Link length |
| Option C: | Link offset |
| Option D: | Joint angle |
|  |  |
| Q10. | AML programming language was introduced by |
| Option A: | Microsoft |
| Option B: | Google |
| Option C: | IBM |
| Option D: | Macintosh |
|  |  |
| Q11. | $\qquad$ are means to high density hands free buffering of materials in distribution and manufacturing environments. |
| Option A: | Flexible system |
| Option B: | Automated guided vehicles |
| Option C: | Conveyors |
| Option D: | Automated storage and retrival system |
|  |  |
| Q12. | The operation that consists of a sequence of work elements that are performed over and over is called |
| Option A: | Toxic operations |
| Option B: | Difficult operations |
| Option C: | Repetitive operations |
| Option D: | Critical operations |
|  |  |
| Q13. | Future robots will be mobile, able to move under their own power and ___ systems. |


| Option A: | Navigation systems |
| :---: | :---: |
| Option B: | Engines |
| Option C: | Tyers |
| Option D: | Susspension systems |
|  |  |
| Q14. | is inclined to leak oil which is a nuisance. |
| Option A: | Pneumatic drive system |
| Option B: | Hydraulic drive system |
| Option C: | Electric drive system |
| Option D: | Geared system |
|  |  |
| Q15. | To describe the $\qquad$ of the tool with respect to the base frame it is necessary to know and formulate the body attached co-ordinate frame along the joint axis for each links in the manipulator chain of the robot. |
| Option A: | Position and orientation |
| Option B: | Dynamics |
| Option C: | Range and Proximity |
| Option D: | Jerk |
|  |  |
| Q16. | $\qquad$ programming language was developed by General Electric company to control two robot at the same time. |
| Option A: | HELP |
| Option B: | VAL |
| Option C: | AML |
| Option D: | RAIL |
|  |  |
| Q17. | In AS/RS ___ are the unit load containers used to hold the inventory items. |
| Option A: | Storage structure |
| Option B: | Bay |
| Option C: | Storage module |
| Option D: | Asile unit |


|  |  |
| :---: | :---: |
| Q18. | For spray coating which configuration of robot is best? |
| Option A: | Polar configuration |
| Option B: | Cylindrical configuration |
| Option C: | SCARA |
| Option D: | Jointed arm |
| Q19. | Tasks in future will require higher levels of intelligence and ___ capabilities form the robot. |
| Option A: | Decision making |
| Option B: | Project management |
| Option C: | Decision tree |
| Option D: | Simple |
| Q20. | Any vision system apart from capturing images does two very important thing and these are |
| Option A: | Image extraction and compression |
| Option B: | Image processing and image analysis |
| Option C: | Image capture and compression |
| Option D: | Image capture and storage |
| Q21. | is used to find joint angle given the end effector position. |
| Option A: | Inverse kinematics |
| Option B: | Forward kinematics |
| Option C: | Inverse dynamics |
| Option D: | Forward dynamics |
| Q22. | During inspection which sensor is mostly used by inspection robots? |
| Option A: | Tectile sensor |
| Option B: | Vision sensor |
| Option C: | Laser sensor |
| Option D: | Infrared sensor |


| Q23. | Training in the $\qquad$ of robots is intended for engineers and managers who are responsible for implementing robot projects in the company. |
| :---: | :---: |
| Option A: | Awareness |
| Option B: | Justification |
| Option C: | Operations and maintenance |
| Option D: | Safety |
|  |  |
| Q24. | These are used today for simple transactions such as deposits and withdrawls. |
| Option A: | Flexible Tellers |
| Option B: | Automatic tellers |
| Option C: | Fixed tellers |
| Option D: | Soft tellers |
|  |  |
| Q25. | $\qquad$ programming uses an english like language to establish the logic and sequence of the work cycle. |
| Option A: | Lead through programming |
| Option B: | Powered lead through programming |
| Option C: | Manual lead through programming |
| Option D: | Textual programming |

