

# National Testing Agency

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## Computer Aided Design and Computer Aided Manufacturing

<b>Group Number :</b>	1
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## Computer Aided Design and Computer Aided Manufacturing-1

<b>Section Id :</b>	603489238
<b>Section Number :</b>	1

<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	50
<b>Number of Questions to be attempted :</b>	50
<b>Section Marks :</b>	100
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	603489466
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 1 Question Id : 60348912279 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 2 Wrong Marks : 0**

Modem CAD systems are based on:

1. ICG
2. GCI
3. GIF
4. IFG

**Options :**

- 60348946495. 1
- 60348946496. 2
- 60348946497. 3
- 60348946498. 4

**Question Number : 2 Question Id : 60348912280 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 2 Wrong Marks : 0**

The software that is used to provide the users with various functions to perform geometric modelling and construction is known as

1. Operating software
2. Graphics software
3. Application software
4. Programming software

**Options :**

60348946499. 1

60348946500. 2

60348946501. 3

60348946502. 4

**Question Number : 3 Question Id : 60348912281 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Which two disciplines are tied by a common database?

1. Documentation and geometric modeling
2. CAD and CAM
3. Drafting and documentation
4. None of the mentioned

**Options :**

60348946503. 1

60348946504. 2

60348946505. 3

60348946506. 4

**Question Number : 4 Question Id : 60348912282 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

The linking of computer with a communication system is called

1. Networking
2. Pairing
3. Interlocking
4. Assembling

**Options :**

60348946507. 1

60348946508. 2

60348946509. 3

60348946510. 4

**Question Number : 5 Question Id : 60348912283 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

NC contouring is an example of

1. Continuous path positioning
2. Point-to-point positioning
3. Absolute positioning
4. Incremental positioning

**Options :**

60348946511. 1

60348946512. 2

60348946513. 3

60348946514. 4

**Question Number : 6 Question Id : 60348912284 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Mouse is a \_\_\_\_\_ type of input device.

1. Graphical
2. Text
3. Locating
4. All of these

**Options :**

60348946515. 1

60348946516. 2

60348946517. 3

60348946518. 4

**Question Number : 7 Question Id : 60348912285 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Which one is best suited for use with the paper of large size and for complex drawings in Computer-Aided Design?

1. Dot-Matrix printer
2. Laser printer
3. Pen plotter
4. Ink-Jet printer

**Options :**

60348946519. 1

60348946520. 2

60348946521. 3

60348946522. 4

**Question Number : 8 Question Id : 60348912286 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

CIM relies on

1. Open loop system
2. Closed loop system
3. Direct loop system
4. None of these

**Options :**

60348946523. 1

60348946524. 2

60348946525. 3

60348946526. 4

**Question Number : 9 Question Id : 60348912287 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Flexible manufacturing systems and cells are generally applied in which one of the following areas

1. High variety and low volume production
2. Low variety
3. Low volume
4. Mass production

**Options :**

60348946527. 1

60348946528. 2

60348946529. 3

60348946530. 4

**Question Number : 10 Question Id : 60348912288 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

In the following geometric modelling techniques which is not three dimensional modelling?

1. Wire frame modelling
2. Drafting
3. Surface Modelling
4. Solid Modelling

**Options :**

60348946531. 1

60348946532. 2

60348946533. 3

60348946534. 4

**Question Number : 11 Question Id : 60348912289 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

From the following which is the main components of Flexible manufacturing system(FMS)

1. Main frame computer
2. Automated guided vehicle
3. Material handling system
4. All of these

**Options :**

60348946535. 1

60348946536. 2

60348946537. 3

60348946538. 4

**Question Number : 12 Question Id : 60348912290 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

M.30 Stands for

1. End of the Program
2. End of Block
3. End of Tape Rewind
4. Coolant On/Off

**Options :**

60348946539. 1

60348946540. 2

60348946541. 3

60348946542. 4

**Question Number : 13 Question Id : 60348912291 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Who formulated the SIX ground rules to be considered in designing graphics software?

1. New man and sproull
2. Schaffer G
3. Fitzgerald W
4. Krouse and Lerro

**Options :**

60348946543. 1

60348946544. 2

60348946545. 3

60348946546. 4

**Question Number : 14 Question Id : 60348912292 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**



CNC drilling machine is considered to be a

1. Point-to-point Controlled Machine
2. Straight line controlled machine
3. Continuous path controlled machine
4. Servo-controlled machine

**Options :**

60348946547. 1

60348946548. 2

60348946549. 3

60348946550. 4

**Question Number : 15 Question Id : 60348912293 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

When every entity of a geometric model remains parallel to its initial position, the transformation is called as

1. Scaling
2. Translation
3. Rotation
4. Mirror

**Options :**

60348946551. 1

60348946552. 2

60348946553. 3

60348946554. 4

**Question Number : 16 Question Id : 60348912294 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Which is the format for prototyping machine file?

1. .prt
2. .stl
3. .slt
4. .iges

**Options :**

60348946555. 1

60348946556. 2

60348946557. 3

60348946558. 4

**Question Number : 17 Question Id : 60348912295 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Which of the following are ways of representing 3D Objects?

1. Wire models
2. Surface Models
3. Solid Models
4. All of these.

**Options :**

60348946559. 1

60348946560. 2

60348946561. 3

60348946562. 4

**Question Number : 18 Question Id : 60348912296 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Color raster display uses three electron guns, namely:

1. Red, green and blue
2. Red, green and yellow
3. White, blue and black
4. Red, black and white

**Options :**

60348946563. 1

60348946564. 2

60348946565. 3

60348946566. 4

**Question Number : 19 Question Id : 60348912297 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Which materials-processing technology gives the advantage of precision, accuracy and optimum use of cutting tools, which maximise their life and higher labour productivity?

1. Flexible manufacturing systems (FMS)
2. Computer-integrated manufacturing (CIM)
3. NC (and CNC) machine tools
4. Industrial robots

**Options :**

60348946567. 1

60348946568. 2

60348946569. 3

60348946570. 4

**Question Number : 20 Question Id : 60348912298 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Point-to-point systems are used for \_\_\_\_\_

1. Reaming
2. Parting
3. Grooving
4. Facing

**Options :**

60348946571. 1

60348946572. 2

60348946573. 3

60348946574. 4

**Question Number : 21 Question Id : 60348912299 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

The main objective(s) of Industrial robot is to

1. To minimise the labour requirement
2. To increase productivity
3. To enhance the life of production machines
4. All of these

**Options :**

60348946575. 1

60348946576. 2

60348946577. 3

60348946578. 4

**Question Number : 22 Question Id : 60348912300 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

CAPP stand for

1. Computer aided product planning
2. Computer aided process planning
3. Computer aided productive planning
4. Computer aided product process

**Options :**

60348946579. 1

60348946580. 2

60348946581. 3

60348946582. 4

**Question Number : 23 Question Id : 60348912301 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Which of the following is not a programming language for computer-controlled robot?

1. AMU
2. VAL
3. RAIL
4. HELP

**Options :**

60348946583. 1

60348946584. 2

60348946585. 3

60348946586. 4

**Question Number : 24 Question Id : 60348912302 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

In a graphical system, the array of pixels in the picture are stored in

1. Memory
2. Frame buffer
3. Processor
4. None of these

**Options :**

60348946587. 1

60348946588. 2

60348946589. 3

60348946590. 4

**Question Number : 25 Question Id : 60348912303 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Locating devices are classified as

1. Text input device
2. Graphic device
3. All of these
4. None of these

**Options :**

60348946591. 1

60348946592. 2

60348946593. 3

60348946594. 4

**Question Number : 26 Question Id : 60348912304 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

The primary output device in a graphics system is

1. Scanner
2. Monitor
3. Printer
4. All of these

**Options :**

60348946595. 1

60348946596. 2

60348946597. 3

60348946598. 4

**Question Number : 27 Question Id : 60348912305 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

A potentiometric device that contains sets of variable registers which feed signals that indicate the device position to the computer is known as

1. Track ball
2. Mouse
3. Joystick
4. All of these

**Options :**

60348946599. 1

60348946600. 2

60348946601. 3

60348946602. 4

**Question Number : 28 Question Id : 60348912306 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Which of the following is application of robot?

1. Welding
2. Machine loading & unloading
3. Both of these
4. None of these

**Options :**

60348946603. 1

60348946604. 2

60348946605. 3

60348946606. 4

**Question Number : 29 Question Id : 60348912307 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

The repeatability of NC machine depends on

1. Control loop errors
2. Mechanical errors
3. Electrical errors
4. None of these

**Options :**

60348946607. 1

60348946608. 2

60348946609. 3

60348946610. 4

**Question Number : 30 Question Id : 60348912308 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**



Trackball is

1. Two-dimensional positioning device
2. Three- dimensional positioning device
3. Pointing device
4. None of these

**Options :**

60348946611. 1

60348946612. 2

60348946613. 3

60348946614. 4

**Question Number : 31 Question Id : 60348912309 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Which of the following types of mouse is a battery-powered device that transmits data using wireless technology such as radio waves or infrared light waves?

1. Mechanical Mouse
2. Optical Mouse
3. Cordless Mouse
4. Trackball

**Options :**

60348946615. 1

60348946616. 2

60348946617. 3

60348946618. 4

**Question Number : 32 Question Id : 60348912310 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

The operation of CRT is based on concept of energizing an electron beam that strikes the

\_\_\_\_ coating

1. Ceramic
2. Phosphor
3. Bronze
4. None of these

**Options :**

60348946619. 1

60348946620. 2

60348946621. 3

60348946622. 4

**Question Number : 33 Question Id : 60348912311 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

DNC stand for

1. Direct numerical complaint
2. Direct note control
3. Direct numerical control
4. None of these

**Options :**

60348946623. 1

60348946624. 2

60348946625. 3

60348946626. 4

**Question Number : 34 Question Id : 60348912312 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Expansion of LED is

1. Light Energy Diode
2. Light Energy Die
3. Light Emitting Diode
4. Light Emitting Die

**Options :**

60348946627. 1

60348946628. 2

60348946629. 3

60348946630. 4

**Question Number : 35 Question Id : 60348912313 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

What is advantage of FMS?

1. Reduced manufacturing cost
2. Greater labour productivity
3. Increased system reliability
4. All of these

**Options :**

60348946631. 1

60348946632. 2

60348946633. 3

60348946634. 4

**Question Number : 36 Question Id : 60348912314 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Which one of the following is rapid prototyping techniques?

1. Stereolithography
2. Laminated object manufacturing
3. 3D inkjet printing
4. All of these

**Options :**

60348946635. 1

60348946636. 2

60348946637. 3

60348946638. 4

**Question Number : 37 Question Id : 60348912315 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Which one is not in CAD software?

1. Auto CAD
2. Solid works
3. Fusion 360
4. Pro - E

**Options :**

60348946639. 1

60348946640. 2

60348946641. 3

60348946642. 4

**Question Number : 38 Question Id : 60348912316 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

The Joystick ----- stick that moves the graphic cursor in the direction the stick is moved.

1. Parallel
2. Horizontal
3. Straight
4. Vertical

**Options :**

60348946643. 1

60348946644. 2

60348946645. 3

60348946646. 4

**Question Number : 39 Question Id : 60348912317 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Typical resolution of laser printer is \_\_\_\_\_.

1. 200 dpi
2. 300 dpi
3. 75 dpi
4. 100 dpi

**Options :**

60348946647. 1

60348946648. 2

60348946649. 3

60348946650. 4

**Question Number : 40 Question Id : 60348912318 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Laser Printers belongs to

1. Line Printer
2. Page Printer
3. Band Printer
4. Dot Matrix Printer

**Options :**

60348946651. 1

60348946652. 2

60348946653. 3

60348946654. 4

**Question Number : 41 Question Id : 60348912319 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

During the execution of a CNC part program block NO20 GO2 X45.0 Y25.0 R5.0 the type of tool motion will be

1. Circular Interpolation – clockwise
2. Circular Interpolation – counterclockwise
3. Linear Interpolation
4. Rapid feed

**Options :**

60348946655. 1

60348946656. 2

60348946657. 3

60348946658. 4

**Question Number : 42 Question Id : 60348912320 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

CAD/CAM is the relationship between

1. Science and engineering
2. Manufacturing and marketing
3. Design and manufacturing
4. Design and marketing

**Options :**

60348946659. 1

60348946660. 2

60348946661. 3

60348946662. 4

**Question Number : 43 Question Id : 60348912321 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Numerical control \_\_\_\_\_

1. Applies only to milling machines
2. is a method for producing exact number of parts per hour
3. is a method for controlling by means of set of instructions
4. None of the mentioned

**Options :**

60348946663. 1

60348946664. 2

60348946665. 3

60348946666. 4

**Question Number : 44 Question Id : 60348912322 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

In computer aided manufacturing, the elements of CIM system are

1. Automated
2. Optimized
3. Integrated
4. All of these

**Options :**

60348946667. 1

60348946668. 2

60348946669. 3

60348946670. 4

**Question Number : 45 Question Id : 60348912323 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

What does GUI Stand for?

1. Graphic User Instruction
2. Ground User Interface
3. General User Instruction
4. Graphical User Interface

**Options :**

60348946671. 1

60348946672. 2

60348946673. 3

60348946674. 4

**Question Number : 46 Question Id : 60348912324 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**



B-Rep and C-Rep are methods of

1. Solid Modelling
2. Surface Modelling
3. Wireframe Modelling
4. 2D Modelling

**Options :**

60348946675. 1

60348946676. 2

60348946677. 3

60348946678. 4

**Question Number : 47 Question Id : 60348912325 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

From following, which modeller defines model without mass properties

1. Wire frame
2. Primitive
3. B-Rep
4. CSG

**Options :**

60348946679. 1

60348946680. 2

60348946681. 3

60348946682. 4

**Question Number : 48 Question Id : 60348912326 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

When encountering bottlenecks in a process, the AGV generally responds in what manner?

1. Fixes the problem causing the bottleneck
2. Reroutes materials to alternative workstations
3. Halts the process and sounds an alarm
4. None of these

**Options :**

60348946683. 1

60348946684. 2

60348946685. 3

60348946686. 4

**Question Number : 49 Question Id : 60348912327 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

What is the name of a system which brings together several technologies into a coherent system?

1. Automated integration systems
2. Portable manufacturing systems
3. Flexible manufacturing systems
4. Focused integration systems

**Options :**

60348946687. 1

60348946688. 2

60348946689. 3

60348946690. 4

**Question Number : 50 Question Id : 60348912328 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 2 Wrong Marks : 0**

Management information systems (MIS) is

1. create and share documents that support day-to-day office activities
2. process business transactions
3. capture and reproduce the knowledge of an expert problem solver
4. use the transaction data to produce information needed by managers to run the business

**Options :**

60348946691. 1

60348946692. 2

60348946693. 3

60348946694. 4