Question no.2

1. Hermite curve:

P1: the starting point of the hermite curve

T1: the tangent point of the starting point

P2: the ending point of the hermite curve

T2: the tangent point of the ending point

Hermite curve is a spline where every piece is a third degree polynomial defined in hermite form.

1. APT language:
2. APT is a three dimensional NC programming language
3. APT is not only a language, it is a computer program that process APT statements to calculate the corresponding cuter positions and generate the machine tool control command.
4. Types of statements in APT:
   1. Control statement
   2. Motion command
   3. Post processor statement
   4. Auxiliary statement
5. Advantages of group technology:
6. Time saving
7. Low cost
8. Good productivity
9. Good quality
10. Automation

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Question no.3

1. Kinematic analysis:

Kinematic analysis is a process of measuring the kinematic quantities that describe motion.

In engineering, kinematic analysis is used to find the range of movement for a given mechanism.

1. What are the function of post – processor in FEM module?

The post – processor is a section of a program that convert XYZ coordinates for the tool move into a format suitable for a particular router or machine tool.

1. State the advantages of FMS (Flexible manufacturing system)
2. Large variety of same product
3. Profitable investment
4. Low labour cost
5. Speed production
6. Requires limited inventory
7. Flexible system

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Question no.4:

1. What is computer aided process planning?
2. CAPP is the linkage between CAD and CAM
3. Process planning in manufacturing also refer to the planning of use of blanks, spare parts, packaging material, user instruction (manual) etc.
4. Write Euler – Poincare formula used in solid modelling.

Euler operator allows for atomic modification of a B –rep model in a manner that keeps the following equation (known as euler-poincare formula) satisfied:

H = genus manifold