



**Department of Mechanical Engineering**

**ME8094- Computer Integrated Manufacturing Systems**

**Unit III - MCQ Bank**

1. Cellular manufacturing is also known as\_\_\_\_\_.

- A. Manufacturing Technology
- B. Production Technology
- C. Group Technology**
- D. None of the above

Answer (C)

2. In a simple and visual method of Cell design, the priorities in classifying may be in the order

- A. Rotational or non rotational – Material – Size – Shape**
- B. Material – Rotational or non rotational – Size – Shape
- C. Size – Rotational or non rotational – Material – Shape
- D. Shape – Rotational or non rotational – Material – Size

Answer (A)

3. In Opitz system, 2<sup>nd</sup> digit indicates

- A. Type and Shape
- B. External shape and external shape elements**
- C. External plane surface finishing
- D. Auxiliary hole and gear teeth

Answer (B)

4. In cell formation using production flow analysis, the following process will be left out of the analysis

- A. Grinding
- B. Milling**

C. Drilling

**D. Gear cutting**

Answer (D)

5. Which of the following technique of grouping does not consider the design and shape aspect?

A. A simple and visual method of cell design

B. Family formation by classification and codification

**C. Cell formation using Production Flow Analysis**

D. All of the above

E. Answer (C)

6. The following is basically a material flow simplification technique.

A. A simple and visual method of cell design

B. Family formation by classification and codification

**C. Cell formation using Production Flow Analysis**

D. All of the above

Answer (C)

7. Which layout is mostly used for the batch type of production?

A. Product layout

B. Process layout

**C. In line layout**

D. None of the above

Answer (C)

8. In which layout manufacturing is done according to machine arrangement?

A. GT layout

B. Product layout

**C. Process layout**

D. Hybrid layout

E. Answer (C)

9. From the following in which type of GT code chain-type structure is used?

- A. Poly code
- B. Hybrid code
- C. None of the above

10. From the following in which type of GT code tree-type structure is used?

- A. Hybrid code
- B. Mono code**
- C. Poly code
- D. None of the above
- E. Answer (B)

11. Which system uses computers at lower-level strategies?

- A. Variant CAPP**
- B. Generative CAPP
- C. Hybrid CAPP
- D. All of the above

Answer (A)

12. Which system uses computers at higher level strategies?

- A. Variant CAPP
- B. Retrieval CAPP
- C. Generative CAPP**
- D. All of the above

Answer (C)



13. CAPP is called\_\_\_\_\_.
- A. Computer Aided Product Processing
  - B. Computer Alternate Product Processing
  - C. Computer Aided Processing Planning**
  - D. Computer Alternate Processing Planning
  - E. Answer (C)

14. “Space available in vertical and horizontal directions is most effectively utilized” is known as principle of
- A. Cubic space utilization**
  - B. Flexibility
  - C. Flow
  - D. Minimum distance

Answer (A)

15. If all the processing equipment and machines are arranged according to the sequence of operations of a product the layout is known as
- A. Product layout**
  - B. Process layout
  - C. Fixed-position layout
  - D. GT layout

16. The following type of layout is preferred to manufacture a standard product in large quantity
- A. Product layout**
  - B. Process layout
  - C. Fixed-position layout
  - D. GT layout

17. The following type of layout is preferred for low volume production of non-standard products

- A. Product layout
- B. Process layout**
- C. Fixed-position layout
- D. GT layout

18. In ship manufacturing, the type of layout preferred is

- A. Product layout
- B. Process layout
- C. Fixed-position layout**
- D. GT layout

19. Which of the following is not a design attribute?

- A. Major dimensions
- B. Length/diameter ratio
- C. Tolerances
- D. Machine tools**

18. Which of the following is not a design attribute?

- A. Major process
- B. Operation sequence
- C. Basic internal shape
- D. Annual production

22. Parts in the figure has similar\_\_\_\_\_.

- (A) Design attributes**
- (B) Manufacturing attributes

Answer (A)

23. Which of the following is not the advantage of Group Technology

- A. Ease of operation
- B. Lower capital cost**
- C. Reduced duplication of work
- D. Better tool handling & production control

Answer

24. Which of the following is not the method of part family formation?

- A. Visual inspection method
- B. Automatic product sorting**
- C. Parts classification & coding
- D. Production flow analysis

25. Choose the right sequence for Production Flow Analysis.

- A. PFA Chart - Data Collection - Sortation of process plans
- B. Data collection - PFA chart - Sortation of process plans
- C. Sortation of process plans - Data collection - PFA chart
- D. Data collection - Sortation of process plans - PFA chart**

26. Chain type coding structure is also known as\_\_\_\_\_.

- A. Poly code**
- B. Mono code
- C. Hybrid code
- D. Miscellaneous code

27. Hierarchical type coding structure is also known as\_\_\_\_\_.

- A. Poly code
- B. Mono code**
- C. Hybrid code

D. miscellaneous code

28. In which type of coding structure every digit is independent?

**A. Chain type coding structure**

B. Hierarchical structure

C. Hybrid coding structure

D. Random coding structure

29. In which type of coding structure every successive digit is dependent upon the preceding digit?

A. Chain type coding structure

**B. Hierarchical structure**

C. Hybrid coding structure

D. Random coding structure

30. The first five digits of the Opitz classification system are \_\_\_\_\_.

**A. Form code**

B. Secondary code

C. Supplementary code

D. Stationary code

31. The middle four digits of the Opitz classification system are \_\_\_\_\_.

A. Form code

B. Secondary code

**C. Supplementary code**

D. Stationary code

32. The last four digits of the Opitz classification system are \_\_\_\_\_.

A. Form code

**B. Secondary code**

- C. Supplementary code
  - D. Stationary code
33. Form code of the Opitz system is for\_\_\_\_\_.

- A. Design attributes**
- B. Manufacturing attributes
- C. Production operation type & sequence
- D. Maintenance flow

Answer (A)

34. Supplementary code of the Opitz system is for\_\_\_\_\_.

- A. Design attributes
- B. Manufacturing attributes**
- C. Production operation type & sequence
- D. Maintenance flow

35. Secondary code of the Opitz system is for\_\_\_\_\_.

- A. Design attributes
- B. Manufacturing attributes
- C. Production operation type & sequence**
- D. Maintenance flow

36. Digit 1 in Opitz system is for\_\_\_\_\_.

- A. Part class**
- B. Main shape
- C. Rotational machining
- D. Plane surface machining

37. Digit 2 in Opitz system is for\_\_\_\_\_.



A. Part class

**B. Main shape**

C. Rotational machining

D. Plane surface machining

38. Digit 3 in Opitz system is for\_\_\_\_\_.

A. Part class

B. Main shape

**C. Rotational machining**

D. Plane surface machining

39. Digit 4 in Opitz system is for\_\_\_\_\_.

A. Part class

B. Main shape

C. Rotational machining

**D. Plane surface machining**

40. Digit 5 in Opitz system is for\_\_\_\_\_.

A. Rotational machining

B. Plane surface machining

**C. Additional holes, teeth and forming**

D. Main shape

41. Generate Opitz code for the part given in the figure.

A. 14120

B. 11400

C. 15100

D. 11051

Answer

42. TNO has developed\_\_\_\_\_.

- A. OPITZ classification system
- B. MICLASS classification system**
- C. CODE system
- D. CONCEPT system

43. Opitz classification system is made of:

- A. 8 digits
- B. 11 digits
- C. 13 digits**
- D. 16 digits

44. MIClass classification system is made of:

- A. 6 digits
- B. 8 digits
- C. 10 digits
- D. 12 digits**

45. is\_\_\_\_\_.

- (A) Product type layout
- (B) Process type layout**
- (C) GT layout
- (D) Fixed-position layout

Answer (B)

46. is\_\_\_\_\_.

- (A) Product type layout
- (B) Process type layout
- (C) GT layout**
- (D) Fixed-position layout

Answer (C)

47. Is the \_\_\_\_\_ Machine cell.

- (A) **Single**
- (B) Multi
- (C) Inline
- (D) Outline

Answer (A)

48. Which of the following is not the input of process planning?

- A. Production type data
- B. Raw material data
- C. Facilities data
- D. Part program data**

49. Use computers for storage and retrieval of the data for the process plans is?

- A. Lower-level strategies**
- B. Intermediate strategies
- C. Higher-level strategies
- D. Morden-level strategies

50. Use computers to automatically generate process plans is?

- A. Lower-level strategies
- B. Intermediate strategies
- C. Higher-level strategies**
- D. Morden-level strategies