Q.26 Difference between water jet and laser beam machining.

Q.27 Write a short note on Diffusion process.

Q.28 Explain the principle of the Abrasive Jet Machining.

Q.29 What is forming process with its application.

Q.30 Explain the principle of welding.

Q.31 Write the advantage and disadvantages of electro discharge forming.

Q.32 What is WEDM, write its parameter.

Q.33 Difference between conventional and unconventional process.

Q.34 Write the working of electron beam machining with its advantage.

Q.35 What is manufacturing process how it is importance in our general life.

SECTION-D

Note: Long answer questions. Attempt any two questions out of three Questions. (2x10=20)

Q.36 Explain Abrasive Flow Machining with its principle, working, application, advantage and disadvantage.

Q.37 Write a short note on :

a) Cladding b) Metalizing

Q.38 Explain any one high energy forming process with its principle, working and application.

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3rd Sem. Branch : Mechtronics

Sub.: Non Conventional Manufacturing Process / Manufacturing Processes I

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (10x1=10)

Q.1 Non conventional machining can also be called as.

a) Contact b) Non contact

c) Partial contact d) Half Contact

Q.2 Plates are used to define which of the following parameter in chemical machining.

a) Area to be exposed

b) Area not to be exposed

c) Volume to be exposed

d) None of them.

Q.3 Electrode gap in ECM is generally ranged from

a) 0.5 to 0.9 mm b) 1.1 to 1.2 mm

c) 0.1 to 0.2 mm d) 3.1 to 4.2 mm

Q.4 Which of the following is the main advantage of using the electromagnetic forming.

a) High speed

b) Low maintenance

c) Applicable to all material

d) No spring back

Q.5 In AJM which of the following material are used as abrasive grains.

a) AI_2O_3 b) Sic

c) Glass beads d) All of them

Q.6 Electrolyte used in ECM must Posses.

a) Low electrical conductivity

b) Low chemical stability

c) High electrical conductivity

d) None of them

Q.7 Diffusion is the result of.

a) Random motion of particle

b) Concentration gradient

c) K.E. of particle

d) All of the above.

Q.8 IN AJM work piece material of removed by which of the following means.

a) Vaporization b) Electroplating

c) Mechanical Abrasion d) Corrosion

Q.9 What is the key element of WJM for material removal.

a) Tool holder b) Work piece

c) Water jet d) Power Source

Q.10 What is the general power rating of the hydraulic pump used in WJM.

a) 10KW b) 20KW

c) 30KW d) 40KW

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Define welding.

Q.12 Expand IBM.

Q.13 Write one limitation of the AJM.

Q.14 Give one parameter of the EDM.

Q.15 What is Diffusion.

Q.16 Enlist the name of parts used in explosive welding.

Q.17 Full form of WEDM.

Q.18 Write two application of cladding.

Q.19 Write name any two advanced manufacturing process.

Q.20 Define Conventional Machaning.

SECTION-C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen Questions. (12x5=60)

Q.21 Give the limitation of conventional manufacturing process.

Q.22 What is welding, write in detail of Explosive Welding.

Q.23 Write about electromagnetic forming with its application.

Q.24 Explain the process parameter used in EDM.

Q.25 What is the need of the conventional manufacturing process.