Advanced Manufacturing Processes

PHASE III. QUIZ and SHORT QUESTIONS BASED ON WEB LECTURES AND PRESENTATIONS:

MODULE 1:

Self-assessment short questions/ Quiz:

Fill in the right words and complete the sentences:

1. Manufacturing is considered as the___________ of system containing input (raw materials) and output as the __________
2. Product design consists of translating the _______ of customer into ________ oriented design.
3. Purchasing involves procuring the ________ material at ________ price and ________ time.
4. The manufacturing history dates back to period between __________________
5. The CNC machines and robotics began growth from _______________ onwards.
6. In the present scenario the success of manufacturing depends upon _______, _______ and __________.
7. The advanced manufacturing processes mainly grew after the _______________.
8. Manufacturing is divided into ________________________ broad stages.
9. Some examples of metal forming processes are _____________________
10. Metal removal processes consists of _________ processes using _________ to remove ________ material.
11. Some examples of rapid manufacturing processes are __________________________
12. Metal casting involves: Pouring _________ into a ________ having the required shaped _________ and then allowing it to solidify.
13. Metal forming is defined as a _____________ process that induces change in shape under the _____________.

14. Metal forming is of two basic types; namely _____________ and_____________.
15. Re-crystalline temperature is the temperature at which _______ starts and _______ starts forming.
16. The re-crystalline temperature is defined generally in the range of _______of the material.
17. Cold forming is performed by heating the metal ________ its re-crystalline temperature.
18. Hot forming is generally performed by heating the metal ______ its re-crystalline temperature.
19. Welding is defined as the process of __________ two or more __________ components through the application of heat.
20. In rapid manufacturing, using an additive approach by ________ of energy and/or materials; _________ the RM machines fabricate plastic, wood, ceramic and metal powders to form physical objects.
Module 1: Answers to short/ Quiz Questions

1. Heart, Finished product
2. Voice, Quality
3. Right, Right, Right
4. 5000-4000 B.C.
5. 1960
6. Quality, Cost and Lead-time
7. Second world war.
8. SIX
9. Forging, Rolling, Extrusion and Sheet metal forming
10. Machining, tools, unwanted/ excess.
11. Stereo-lithography, Selective laser sintering, Fused deposition modeling and laminated object manufacturing
12. molten metal, mold, cavity
13. Bulk deformation, applied force.
14. Hot forming and Cold forming
15. Nucleation, new grains,
16. (0.3-0.5) times the Melting point.
17. Below
18. Above
19. Joining, similar or dissimilar metallic/ material.
20. Sequential delivery, layer by layer