SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR

ROLL No: | | | | | | | | | | | | |

Total number of pages:[2]

Total number of questions: 06

B.Tech. || ME || 4th Sem

Manufacturing Processes-II

Subject Code: BTME-405

Paper ID: (for office use)

Time allowed: 3 Hrs **Max Marks: 60**

Important Instructions:

- **All questions are compulsory**
- **Assume any missing data**
- **Additional instructions, if any**

PART A (2×10)

Q. 1. Short-Answer Questions: All COs

(a) Why gray C.I does not need any lubrication during machining?
(b) Differentiate between direct and indirect extrusion.
(c) List four rolling defects.
(d) Differentiate between punching and blanking.
(e) What do you understand by tool signature?
(f) What is oblique cutting?
(g) What is the briquetting operation?
(h) Give two examples of using carbide tools.
(i)Define machinability.
(j) Write two applications of deep drawing.

PART B (8×5)

Q. 2. Draw the geometry of single point cutting tool and explain its principle angles. Also explain the importance of tool angles. CO1

OR

Explain the mechanism of chip formation. Discuss various types of chip formed during metal cutting. CO1

Q. 3. What is high velocity forming? Describe the basic principle of high velocity forming methods and discuss its merits and demerits. CO2

OR

With neat sketch explain the principle of explosive forming and also write its advantages, disadvantages and applications. CO2

Q. 4. With the help of neat diagram describe tube drawing processes. Write its applications also. CO3

OR

What is powder metallurgy? Discuss the various methods of powder manufacturing. CO3

Q. 5. Draw the geometry of milling cutter and also explain its principle angles. CO1

OR

Classify different types of cutting fluids or coolants and also write their characteristics. CO1

Q. 6. What is indexing? Enlist indexing methods and explain them. CO4

OR

What is centreless grinding? Explain the types of centreless grinding. State its advantages and disadvantages. CO4