Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐

Total No. of Pages: 02
Total No. of Questions: 09

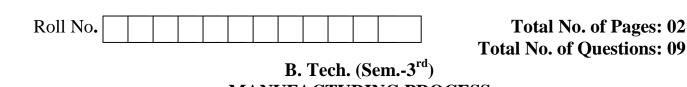B. Tech. (Sem.-3rd)
MANUFACTURING PROCESS
Subject Code: BTAE-304
Paper ID: A1149

Time: 3 Hrs.   Max. Marks: 60

INSTRUCTIONS TO CANDIDATE:

1. **Section –A, is Compulsory.**

2. **Attempt any four questions from Section-B.**

3. **Attempt any two questions from Section-C.**

Section –A   (10x2=20)

Q.1.

(a)   What is the use of a gating systems in casting process?

(b)   Why does the shell mould casting gets its name?

(c)   What does "Plasma" refer to in plasma arc welding process?

(d)   Under what condition, spatter gets formed in welding process?

(e)   What is the basic difference between drawing and deep drawing process?

(f)   Give two Practical examples of products formed through the spinning process.

(g)   What is the purpose of coolants during the machining process?

(h)   Discuss the function performed by indexing .

(i)   What are the main applications of abrasive flow machining process?

(j)   What is the main advantage of chemical machining process?

Section –B   (4x5=20)

Q2.   Discuss the underlying principle and applications of projection welding.

Q3.   What is electroslag welding? Discuss its underlying principle and main

applications.

Q4.   Discuss the basic principle and general procedure involved in plastic

moulding. What is the main benefit of this process.

Q5. With a neat and labeled diagram explain the geometry of a single point cutting tools. Discuss briefly the significance of each cutting tool angle.

Q6. Discuss the underlying principle general procedure and main applications of the extrusion process.

Section –C   (10x2=20)

Q7. Discuss the working principle, applications and main Limitations of the electric discharge machining process.

Q8. List the main defects that can appear during the casting process, Discuss their causes and remedies.

Q9. Discuss the purpose, characteristics and applications of the main types of grinding processes.

-----END-----