

B.Tech III Year II Semester (R15) Regular Examinations May/June 2018

METAL FORMING PROCESS

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

1 Answer the following: (10 X 02 = 20 Marks)

- (a) Define stress.
- (b) What is meant by true strain?
- (c) Give the theory of rolling.
- (d) Write a short note on smith forging.
- (e) Write about basic extrusion process.
- (f) Give a short note wire drawing.
- (g) Write about stamping.
- (h) List the types of defects in sheet metal operation.
- (i) Give a short note on thermo forming.
- (j) What is meant by rapid prototyping?

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 With a proper sketch, explain hot working process with its merits and demerits.

OR

3 Describe cold working process and compare it with hot working process.

UNIT – II

4 Describe and classify the types of rolling mills with the necessary sketches.

OR

5 Define forging and explain any two types of forging process with the necessary sketches.

UNIT – III

6 Explain forward and backward extrusion process with the proper sketches.

OR

7 Describe the wire drawing process with a neat sketch.

UNIT – IV

8 Explain blanking and piercing process with the proper sketches.

OR

9 Define drawing and explain cup and tube drawing process with proper sketches.

UNIT – V

10 Explain fused deposition modeling process with a neat sketch.

OR

11 Explain high energy rate forming methods with the proper sketches.
