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BIME-009

B.Tech. – VIEP – MECHANICAL ENGINEERING (BTMEVI)

Term-End Examination

00093 **December, 2018**

BIME-009 : PRODUCTION TECHNOLOGY – I

Time : 3 hours *Maximum Marks : 70*

Note : *Answer any **five** questions. All questions carry equal marks.*

1. (a) What do you mean by green sand ? Briefly explain the properties of green sand. 7

   (b) Explain the method of determining the moisture content in moulding sand. 7

2. (a) What is master pattern ? Briefly explain pattern allowances with neat sketches. 7

   (b) Explain the process of resistance spot welding with neat sketch. 7

3. (a) Distinguish between drop forging and press forging processes with reference to the process and products obtained. 7

(b) Explain the process of ultrasonic welding with neat sketch. Also give its advantages and disadvantages. 7

4. (a) Name any seven types of welding defects. Write their causes and remedies. 7

(b) What do you mean by forgeability ? Explain the upset forging with neat sketch. 7

5. (a) What are the different types of extrusion processes ? Explain any one method with neat sketch. 7

(b) Explain deep drawing process with neat sketch. 7

6. (a) What are the different types of plastic moulding processes ? Explain any one of them with neat sketch. 7

(b) Explain how a grinding wheel is specified. 7

7. Write short notes on any ***four*** of the following : $4 \times 3\frac{1}{2} = 14$

(a) Casting Defects

(b) High Velocity Forming

(c) Cold Spinning

(d) Forging Die Materials

(e) Rolling Mill

(f) Soldering