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C09–M–105/C09–RAC–**105**

# 3043

## BOARD DIPLOMA EXAMINATION, (C–09)

## APRIL/MAY—2015

## DME—FIRST YEAR EXAMINATION

WORKSHOP TECHNOLOGY

*Time* : 3 hours ] [ *Total Marks* : 80

**PART—A** 3×10=30

***Instructions*** : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

**1.** Define *(a)* metal forming and *(b)* metal cutting.

**2.** List out the common types of planes used in woodworking.

**3.** Draw a neat sketch of twist drill and name its parts.

**4.** Draw a sketch of swage block.

**5.** Write any six shearing operations used in sheet metals work.

**6.** List out any six types of patterns used in foundry.

**7.** Define *(a)* porosity and *(b)* plasticity.

**8.** Write the advantages of shell moulding.

**9.** State the difference between boring and counter boring.

**10.** State the advantages of hot working of metals.

## PART—B

10×5=50

***Instructions*** : (1) Answer *any* **five** questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

**11.** Draw wooden jack plane and metal jack plane and label its parts.

**12.** Explain the working of combination set with the help of a neat sketch.

**13.** Draw a neat sketch of steam hammer and explain its working.

**14.** Explain any two fastening methods used in sheet metal work with neat sketch.

**15.** Explain investment casting and write its advantages and disadvantages.

**16.** *(a)* List out the various operations performed on drilling machine.

*(b)* Draw a neat sketch of radial drilling machine and label the parts.

**17.** Describe a power hacksaw with a neat sketch and state the advantages of power hacksaw.

**18.** List out the various cold working processes and explain cold extrusions with neat sketch.

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