Q.19 How do you estimate the amount of plastic needed for a mould? (CO6)

Q.20 What is one pre-moulding technique? (CO5)

Q.21 Why is CAD useful for designing moulds? (CO10)

Q.22 What are some common methods for maintaining moulds? (CO7)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Describe the process of injection moulding and its main advantages. (CO2)

Q.24 Explain the key design parameters that affect mould performance, such as cooling channels and sizes. (CO5)

Q.25 Discuss the best practices for maintaining safety and efficiency in moulding operations. (CO7)

(Note : Course outcome/CO is for office use only)

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3rd Year / Advance Diploma in Tool & Die Making

Subject:- Tool Design - III (Plastic Moulds)

Time : 3Hrs. M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 What is the main purpose of a mould? (CO4)

a) To cool plastic b) To shape plastic

c) To heat plastic d) To clean plastic

Q.2 Which type of plastic can be reshaped by heating? (CO1)

a) Thermoplasting b) Thermosetting

c) Composite d) Rubber

Q.3 What is the function of the ejection system in mould? (CO4)

a) To hold the mould together

b) To remove the finished part

c) To cool the mould

d) To inject plastic

Q.4 Which process uses a heated screw to inject plastic into a mould? (CO5)

a) Blow moulding
b) Compression moulding
c) Injection moulding
d) Rotational moulding

Q.5 The main advantage of using plastic in manufacturing is : (CO6)

a) It is heavy
b) It is costly
c) It is lightweight and durable
d) It cannot be recycled

Q.6 Which component in a mould helps to maintain temperature? (CO7)

a) Ejector pin b) Cooling system
c) Sprue d) Heater

SECTION-B

Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)

Q.7 The _____ is used to create the shape of the product in a mould. (CO4)

Q.8 Moulds are usually made from materials that can withstand ____ temperatures. (CO8)

Q.9 A _____ is needed to hold the plastic during the cooling phase. (CO5)

Q.10 Safety glasses and gloves are examples of _____ equipment. (CO7)

Q.11 The process of removing excess plastic after moulding is called _____. (CO5)

Q.12 The part of the mould that injects plastic is called the _____ (CO1)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 What are the key parts of an injection moulding machine? (CO2)

Q.14 Explain the difference between thermoplastics and thermosetting plastics. (CO1)

Q.15 Describe how a compression mould works. (CO3)

Q.16 What factors should be considered when designing a mould? (CO4)

Q.17 What is the blow moulding process used for? (CO2)

Q.18 Why is safety important in moulding operations? (CO7)