

- Q.26 Explain importance of stretching and orientation in extrusion.
- Q.27 Explain breakdown maintenance.
- Q.28 Explain materials used in calendering.
- Q.29 Explain hot stamping process.
- Q.30 Discuss Extruder performance and their curves.
- Q.31 Explain pad printing.
- Q.32 Give five defects of extrusion process.
- Q.33 Give four troubleshoots of calendering process.
- Q.34 Discuss objective of maintenance.
- Q.35 Give advantages of twin screw extruder.

#### **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain with diagram extrusion process for sheet and filaments.
- Q.37 Explain:
- Screen printing process.
  - Various types of screw used in plastic extrusion
- Q.38 Write short note on :
- Heating and cooling system of calendering process.
  - Flexographic printing

No. of Printed Pages : 4  
Roll No. ....

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### **Plastic Engineering** **Subject:- Plastic Processing Techniques - I**

Time : 3Hrs.

M.M. : 100

#### **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Dimensional distortion in a plastic object after molding is known as \_\_\_\_\_.
- Slippage
  - Flash
  - Warpage
  - Leakage
- Q.2 In extrusion process, cross section of product at any point is \_\_\_\_\_.
- Irregular
  - Different
  - Non Uniform
  - Same
- Q.3 \_\_\_\_\_ also serves as filter for the melt.
- Screen Pack
  - Screw
  - Barrel
  - Choke ring
- Q.4 Name the printing process in which finished part look like metal is \_\_\_\_\_?
- Screen Printing
  - Rotogravure
  - Pad printing
  - Electroplating

- Q.5 A die can have one or more \_\_\_\_\_ through which the melt can flow  
 a) Cores                    b) Cavities  
 c) Orifices                d) Core pins
- Q.6 Injection moulding machine is used mainly for materials  
 a) Thermoplastic            b) Thermoset  
 c) Rubbers                 d) Composites
- Q.7 The plastic material is passed in to the mould through \_\_\_\_\_ from the nozzle of the screw.  
 a) Barrel                    b) Hopper  
 c) Sprue                    d) Gate
- Q.8 Condition monitoring is the basis for \_\_\_\_\_ maintenance  
 a) Breakdown              b) Predictive  
 c) Corrective              d) Operational
- Q.9 The process involved in converting rubber into thin sheet or coating it on fabric is called \_\_\_\_\_.  
 a) Extrusion                b) Calendering  
 c) Mastication             d) Vulcanisation
- Q.10 What type of maintenance is most effective?  
 a) Routine                  b) Preventive  
 c) Corrective                d) Operational

## SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Give two applications of rotational moulding.
- Q.12 \_\_\_\_\_ is the steel rod that moves forward pushing the mold, when the mold opens.
- Q.13 Name two products made by Compression moulding.
- Q.14 \_\_\_\_\_ die used in wire and cable coating
- Q.15 L/D ratio stands for \_\_\_\_\_.
- Q.16 Define breaker plate.
- Q.17 Define preventive maintenance.
- Q.18 Name three types of calender rolls used in calendering process.
- Q.19 \_\_\_\_\_ maintenance is a regular period planned maintenance, which eliminates breakdown.
- Q.20 Give two applications of flexographic printing.

## SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Discuss installation and commissioning of extruder.
- Q.22 Explain Compression ratio and its importance.
- Q.23 What is preventive maintenance?
- Q.24 Explain die swell.
- Q.25 Discuss cutting devices used in extrusion.