

## **SECTION-D**

No. of Printed Pages : 4

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Roll No. ....

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

**Q.23 Explain:**

- a) Limiting Oxygen Index
- b) Dielectric Constant

**Q.24 Explain with neat sketch, various types of pendulum impact test with standard and specifications.**

**Q.25 Discuss :**

- a) Creep & stress relaxation
- b) Rockwell-Hardness test.

Time : 3 Hrs.

M.M. : 60

## **SECTION-A**

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

**Q.1** The ability of the material to withstand tensile force, without breaking , is known as \_\_\_\_\_.

- a) Yield strength
- b) Tensile strength
- c) Compressive Strength
- d) Creep Strength

**Q.2** The temperature at which plastics begin to become softer and defer under a load is known as \_\_\_\_\_.

- a) Softening Point
- b) Melting point
- c) Eutectic point
- d) Heat distortion point

**Q.3** What is the attribute of a material which resists the flow of electricity known?

- a) Conductivity
- b) thermoelectricity
- c) Dielectric strength
- d) Resistivity

- Q.4 The tendency of a deformed solid to regain its actual proportions instantly upon unloading known as \_\_\_\_\_.  
a) Perfectly elastic      b) Delayed elasticity  
c) Inelastic effect      d) Plasticity
- Q.5 The permanent mode of deformation of a material known as \_\_\_\_\_.  
a) Elasticity  
b) Plasticity  
c) Slip deformation  
d) Twinning deformation
- Q.6 ASTM D 1238 is the standard for \_\_\_\_\_ test.  
a) Tensile test      b) Flexural test  
c) Flame test      d) MFI

### SECTION-B

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

- Q.7 Expand ASTM.
- Q.8 ASTM D792 is the standard test number for \_\_\_\_\_ test.
- Q.9 Izod and charpy test are used for \_\_\_\_\_ property of plastics
- Q.10 Name two short term mechanical properties.
- Q.11 MFI stands for \_\_\_\_\_.
- Q.12 Name the test used for checking the impact strength of plastic films.

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### SECTION-C

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

- Q.13 Explain surface and volume resistivity test for plastic.
- Q.14 Explain test for finding water absorption in plastic samples.
- Q.15 Explain test for hest deflection temperature
- Q.16 Discuss light transmittance test.
- Q.17 Discuss flame test for identification of plastic
- Q.18 Explain Gloss test for plastics.
- Q.19 Explain smoke density test for plastics
- Q.20 Explain flexural or fatigue bending test for plastics.
- Q.21 Discuss abrasion resistance test for plastics
- Q.22 Discuss Environmental stress Cracking resistance test for plastics.

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