

Government Institute of Printing Technology, Mumbai.

Sample Paper

Course: Gravure Printing Process
Duration: 03Hours

Code: M501
Marks: 80

Instructions to candidates:

1. Attempt all questions and illustrate your answers with neat sketches wherever necessary.
 2. Figures to the right indicate full marks.
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Q1) Attempt any 5 (20marks)

- a) Write 2 functions of impression roller and write names of 2 elastomers used in impression roller.
- b) Name any eight substrates printed by gravure printing process.
- c) Draw schematic diagram of gravure image carrier and name the parts.
- d) Compare gravure printing process with flexography process.
- e) Name the different units of gravure printing machine and write parts of each unit.
- f) Write role of chrome plating on image carrier of gravure of 2 printing.
- g) Write the different reasons of doctor blade wear and tear.

Q2) Attempt any 2 (12 marks)

- a) Write one cause and one remedy for any three problems related to gravure process.
- b) Write 2 properties each of any three metals used in gravure cylinder making.
- c) Describe electromechanical engraving process of gravure cylinder making.

Q3) Attempt any 2 (12marks)

- a) Write 4 characteristics of laser engraving process.
- b) Draw schematic diagram of doctor blade holder and write its function.
- c) Draw different wraps diagram with advantages.

Q4) Attempt any 2 (12 marks)

- a) Explain any one method of registration in gravure process.
- b) Name the different type of unwinding and winding systems and explain working.
- c) Write the ingredient in gravure inks with their function.

Q5) Attempt any 2 (12 marks)

- a) Write in sequence, steps of chemical engraving process.
- b) Explain three qualities required in gravure impression roller.
- c) Name the different types of gravure printing and draw schematic diagram of any one type.

Q6) Attempt any 2 (12 marks)

- a) What is contact angle and draw schematic diagram of it. Also explain its importance.
- b) Name the different type of screens and angles with schematic diagram in gravure process.
- c) Explain different ink test carried in gravure printing process.
- d) What is ESA systems explain with schematic diagram of it?