



THE KENYA POLYTECHNIC UNIVERSITY COLLEGE

**GRAPHIC ARTS DEPARTMENT
DIPLOMA IN PRINTING TECHNOLOGY
END OF YEAR I EXAMINATIONS
NOVEMBER 2007
MACHINE PRINTING & SURFACE PREPARATIONS
3 HOURS**

INSTRUCTIONS TO CANDIDATES:

Answer any FIVE questions.

All questions carry equal marks and the maximum marks for each part of a question are as shown.

This paper consists of 2 printed pages

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1. (a) Distinguish between the principles of lithography and screen printing process. (8 marks)
(b) State THREE factors that determine the quality of a screen printed image. (6 marks)
(c) State THREE advantages and THREE disadvantages of using electrophotography process over the conventional printing processes. (6 marks)
2. (a) Explain the functions of a three-point register system on a sheet fed press. (4 marks)
(b) With the aid of diagrams, describe the construction of THREE types of grippers used on sheet fed presses. (16 marks)
3. Outline the procedure of setting a sheet feeder of a printing press. (20 marks)
4. Explain the operation of the FOUR insertion systems on a sheet fed press. (20 marks)
5. (a) Define “plate graining”. (2 marks)
(b) State THREE reasons for graining a lithographic plate. (3 marks)
(c) Using a diagram discuss the process of anodizing a lithographic plate. (15 marks)
6. (a) Outline the procedure of producing a relief plate for flexographic printing. (12 marks)
(b) State FOUR reasons for the back exposure of flexographic plate. (4 marks)
(c) Draw a labeled single layer flexographic plate. (4 marks)
7. Discuss the conventional method of processing the gravure printing cylinder using carbon tissue. (20 marks)