FIGURES
Punjab lighting Aids Limited
Improvement projects -2005
He has described the various magnetic detection system
used by different workers and stated that detection of
magnetism is simple, quick and reliable and provide a useful
means of differentiating single component magnetic toners
from all other types.
He compared bulk toners with fused toners deposits both
by physically and chemically finger marks on both corners
of the leading edge indentation marks are same by visual
examination.
Work of various workers was explained with pyrolysis GC
offer a sensitive and relatively straight forward means of
distinguishing photocopy.
Documents
There are two types of color photocopier machines
available at the present time single color machine and full
color machine
Due to presence of large portion of carbon black FTIR is
now preferred technique for extracting data highly
absorbing sample compound to conventional IR spectra
Differences between liquid and dry toners can be seen quite
readily by SEM. Fine discrimination of the surface possible
using Scanning Electron Microscopy.
The type of information that can obtained from a
description provided by one company of its dry toner.
Punjab lighting Aids Limited
Improvement projects - 2005
He has described the various magnets used by different workers and stated that magnetism is simple, quick and reliable means of differentiating single component from all other types. The compared bulk toners with fused, physically and chemically, finger marks on headed nails of the loading edge indentation marks are examined by visual examination.

Fig. 5

Work of various workers was explained and separately described on machine. The type of information is described here is an example by one company of a dry tenor.

Fig. 6
Punjab lighting Aids Limited
Improvement projects -2005
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He compared bulk toners with fused physically and chemically and found that leading edge indentation marks are examined.

Work of various workers was explained to offer a sensitive and relatively straight distinguishing photocopy.

Documents There are two types of color photocopy at the present time single color machine machine.
Fig. 9

Types of toner

- Dry toner: 95.2%
- Wet toner: 4.8%

Number of samples = 62
**Toner Fusion Methods**

- Cold pressure: 13%
- Radiant Heat: 4.8%
- Heat and Pressure: 1.6%
- Blotter and air Dry: 80.6%

**Number of samples = 62**

**Splattering Effect of toner**

- All over the Stroke: 28.9%
- Bottom of Stroke: 27.4%
- Bottom and Top of Stroke: 22.8%
- Left side of Stroke: 9.7%
- Left and Right of Stroke: 3.2%
- Left and Bottom of Stroke: 1.6%
- Top of Stroke: 1.6%

**Number of samples = 62**
**Fig. 14**

Presence of trash marks

- Defect marks present: 79.1%
- Defect marks absent: 20.9%

Number of samples = 62

**Fig. 15**

Details of trash marks

- Glass Plate defect marks: 32.3%
- Drum defect marks: 20.9%
- Roller defect marks: 11.2%
- All types of marks: 14.6%
- Both Glass and Drum defect marks: 8.1%
- Both Glass and Roller defect marks: 6.5%
- Both Drum and Roller Defct marks: 3.2%
- No trash marks: 3.2%

Number of samples = 62
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Fig. 16
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Fig. 19
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Fig. 20
Fig. 38

Fig. 39
Fig. 68

Fig. 69
Fig. 71

Fig. 72
Fig. 74

Fig. 75
Fig. 76

09/05/19 14:52 R.C./SRIF.P.U.CIB.
Y: 4 scans, 2.0cm-1, flat, smooth, abex

Fig. 77

09/05/19 15:48 R.C./SRIF.P.U.CIB.
Y: 4 scans, 2.0cm-1, flat, smooth, abex
Fig. 80

Fig. 81
Fig. 82

Fig. 83
Fig. 88
Admission to the workshop basis.

It has been proposed to and discussion of six papers, leaving the afternoon.

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Fig. 111
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Work of various workers was offer a sensitive and relatively distinguishing photocopy.

**Fig. 116**

**Fig. 117**

**Fig. 118**
He has described the various methods used by different workers and states that magnetism is simple, quick, and reliable means of differentiating single components from all other types. He compared bulk toners with fused toners and found that the leading edge indentation marks examination is effective.

Work of various workers was examined to offer a sensitive and relatively straightforward distinguishing photocopy method.
Legends of figures

Fig. 1: Page bearing colour bars designed for collecting colour samples.

Fig. 2: Page bearing colour text material designed for collecting colour samples.

Fig. 3: Scanned images of 1st and 3rd generation of sample no 55.

Fig. 4: New blank file opened along with 1st and 3rd generation images.

Fig. 5: Images of 1st and 3rd generation dragged in new blank file.

Fig. 6: The option ‘Layer’ showing varied opacity opened.

Fig. 7: Image showing flattening or merging of the layers.

Fig. 8a: Appearance of dry toner under Stereomicroscope (4x40X).

Fig. 8b: Appearance of wet toner under Stereomicroscope (4x40X).

Fig. 9: Pie Chart of types of toner used in black photocopied samples.

Fig. 10a: Surface morphology of cold pressure toner fusion method under Stereomicroscope (4x40X).

Fig. 10b: Surface morphology of heat and pressure toner fusion method under Stereomicroscope (4x40X).

Fig. 10c: Surface morphology of radiant heat toner fusion method under Stereomicroscope (4x40X).

Fig. 10d: Surface morphology of blotter of air dry toner fusion method under Stereomicroscope (4x40X).

Fig. 11: Pie chart of fusion methods used in black photocopied samples.

Fig. 12: Pie chart of splattering effect of toner used in black photocopied samples.

Fig. 13a: Splattering of toner at all over the stroke under Stereomicroscope (4x40X).

Fig. 13b: Splattering of toner at bottom of the stroke under Stereomicroscope (4x40X).

Fig. 13c: Splattering of toner at bottom and tope side of the stroke under Stereomicroscope (4x40X).

Fig. 13d: Splattering of toner at left side of stroke under Stereomicroscope (4x40X).

Fig. 13e: Splattering of toner at top side of stroke under Stereomicroscope (4x40X).
Fig. 13f: Splattering of toner at left and right side of the stroke under Stereomicroscope (4x40X).

Fig. 13g: Splattering of toner at left and bottom of stroke under Stereomicroscope (4x40X).

Fig. 13h: No splattering of toner at the stroke under Stereomicroscope (4x40X).

Fig. 14: Pie chart of trash marks produced by black photocopied samples

Fig. 15: Pie chart of details of trash marks in black photocopied documents

Fig. 16: Photocopies showing same glass platen marks at same position on three photocopies.

Fig. 17: Glass platen defect marks produced by different photocopiers on basis of different location, shape and size.

Fig. 18: Photocopies showing same drum defect marks with same shape, size but at different location on the pages

Fig. 19: Presence of same type of roller defect marks on three photocopies

Fig. 20: Presence of residual toner impressions in form of impressions of letters on the photocopy (shown with magnifying mages of the marked area)

Fig. 21: Differentiation of black Photocopies by physical examination

Fig. 22a: Counterfeit protection system (CPS) code produced on coloured sample (code no. II of HP 4600dn) (magnification 4x40X) showing VPS-32”.

Fig. 22b: Counterfeit protection system (CPS) code produced on coloured sample (code no. XXII of HP 2550L) (magnification 4x40X) showing VPS-32”.

Fig. 22c: Counterfeit protection system (CPS) code produced on coloured sample (code no. XXIII of HP 4500) (magnification 4x40X) showing VPS-32”.

Fig. 22d: Counterfeit protection system (CPS) code produced on coloured sample (code no. XXIV of HP 1500) (magnification 4x40X) showing VPS-32”.

Fig. 22e: Counterfeit protection system (CPS) code produced on coloured sample (code no. XXVI of HP 1500) (magnification 4x40X) showing VPS-32”.

Fig. 22f: Counterfeit protection system (CPS) code produced on coloured sample (code no. XXVIII of HP 3800) (magnification 4x40X) showing VPS-32”.

Fig. 23a: Counterfeit protection system (CPS) code produced on coloured sample (code no. III of Canon 2570i) (magnification 4x40X) showing VPS 0.18”.
Fig. 23b:  Counterfeit protection system (CPS) code produced on coloured sample (code no. V of canon 2570i) (magnification 4x40X) showing VPS 0.18”.

Fig. 23c:  Counterfeit protection system (CPS) code produced on coloured sample (code no. XIV of Canon 6085) (magnification 4x40X) showing VPS 0.18”.

Fig. 23d:  Counterfeit protection system (CPS) code produced by coloured sample (code no. XVI of canon 6085) (magnification 4x40X) showing VPS 0.64”.

Fig. 24a:  Counterfeit protection system (CPS) code produced on coloured sample (code no. IV of Xerox DC-12) (magnification 4x40X) showing VPS-0.66”.

Fig. 24b:  Counterfeit protection system (CPS) code produced on coloured sample (code no. VI of Xerox DC-12) (magnification 4x40X) showing VPS-0.66”.

Fig. 24c:  Counterfeit protection system (CPS) code produced on coloured sample (code no. VIII of Xerox DC-12) (magnification 4x40X) showing VPS-0.66”.

Fig. 24d:  Counterfeit protection system (CPS) code produced on coloured sample (code no. IX of Xerox DC-12) (magnification 4x40X) showing VPS-0.66”.

Fig. 24e:  Counterfeit protection system (CPS) code produced by coloured sample (code no. X of Xerox DC-12) (magnification 4x40X) showing VPS-0.66”.

Fig. 24f:  Counterfeit protection system (CPS) code produced by coloured sample (code no. XIII of Xerox DC-12) (magnification 4x40X) showing VPS-0.66”.

Fig. 25a:  Counterfeit protection system (CPS) code produced by coloured sample (code no. VII of Konica 252) (magnification 4x40X) showing VPS-0.32”.

Fig. 25b:  Counterfeit protection system (CPS) code produced by coloured sample (code no. XV of Lixma) (magnification 4x40X) showing VPS-0.48”.

Fig. 26a:  Toner deposit pattern in yellow bar of coloured sample IV of DC-12 under Digital microscope (magnification 132K).

Fig. 26b:  Toner deposit pattern in cyan bar of coloured sample IV of DC-12 under Digital microscope (magnification 132K).

Fig. 26c:  Toner deposit pattern in magenta bar of coloured sample IV of DC-12 under Digital microscope (magnification 132K).

Fig. 26d:  Toner deposit pattern in black bar of coloured sample IV of DC-12 under Digital microscope (magnification 132K).

Fig. 27a:  Toner deposit pattern in yellow bar of coloured sample X of DC-12 under Digital microscope (magnification 132K).

Fig. 27b:  Toner deposit pattern in cyan bar of coloured sample X of DC-12 under Digital microscope (magnification 132K).
Fig. 27c:  Toner deposit pattern in magenta bar of coloured sample X of DC-12 under Digital microscope (magnification 132K).

Fig. 27d:  Toner deposit pattern in black bar of coloured sample X of DC-12 under Digital microscope (magnification 132K).

Fig. 28a:  Toner deposit pattern in yellow bar of coloured sample XI of DC-12 under Digital microscope (magnification 132K).

Fig. 28b:  Toner deposit pattern in cyan bar of coloured sample XI of DC-12 under Digital microscope (magnification 132K).

Fig. 28c:  Toner deposit pattern in magenta bar of coloured sample XI of DC-12 under Digital microscope (magnification 132K).

Fig. 28d:  Toner deposit pattern in black bar of coloured sample XI of DC-12 under Digital microscope (magnification 132K).

Fig. 29a:  Toner deposit pattern in yellow bar of coloured sample III of Canon 2570i under Digital microscope (magnification 132K).

Fig. 29b:  Toner deposit pattern in cyan bar of coloured sample III of Canon 2570i under Digital microscope (magnification 132K).

Fig. 29c:  Toner deposit pattern in magenta bar of coloured sample III of Canon 2570i under Digital microscope (magnification 132K).

Fig. 29d:  Toner deposit pattern in black bar of coloured sample III of Canon 2570i under Digital microscope (magnification 132K).

Fig. 30a:  Toner deposit pattern in yellow bar of coloured sample V of Canon 2570i under Digital microscope (magnification 132K).

Fig. 30b:  Toner deposit pattern in cyan bar of coloured sample V of Canon 2570i under Digital microscope (magnification 132K).

Fig. 30c:  Toner deposit pattern in magenta bar of coloured sample V of Canon 2570i under Digital microscope (magnification 132K).

Fig. 30d:  Toner deposit pattern in black bar of coloured sample V of Canon 2570i under Digital microscope (magnification 132K).

Fig. 31a:  Toner deposit pattern in yellow bar of coloured sample XIV of Canon 6085 under Digital microscope (magnification 132K).

Fig. 31b:  Toner deposit pattern in cyan bar of coloured sample XIV of Canon 6085 under Digital microscope (magnification 132K).
Fig. 31c: Toner deposit pattern in magenta bar of coloured sample XIV of Canon 6085 under Digital microscope (magnification 132K).

Fig. 31d: Toner deposit pattern in black bar of coloured sample XIV of Canon 6085 under Digital microscope (magnification 132K).

Fig. 32a: Toner deposit pattern in yellow bar of coloured sample XXIV of HP 1500 under Digital microscope (magnification 132K).

Fig. 32b: Toner deposit pattern in cyan bar of coloured sample XXIV of HP 1500 under Digital microscope (magnification 132K).

Fig. 32c: Toner deposit pattern in magenta bar of coloured sample XXIV of HP 1500 under Digital microscope (magnification 132K).

Fig. 32d: Toner deposit pattern in black bar of coloured sample XXIV of HP 1500 under Digital microscope (magnification 132K).

Fig. 33a: Toner deposit pattern in yellow bar of coloured sample XXVI of HP 1500 under Digital microscope (magnification 132K).

Fig. 33b: Toner deposit pattern in cyan bar of coloured sample XXVI of HP 1500 under Digital microscope (magnification 132K).

Fig. 33c: Toner deposit pattern in magenta bar of coloured sample XXVI of HP 1500 under Digital microscope (magnification 132K).

Fig. 33d: Toner deposit pattern in black bar of coloured sample XXVI of HP 1500 under Digital microscope (magnification 132K).

Fig. 34a: Toner deposit pattern in yellow bar of coloured sample XXVIII of HP 3800 under Digital microscope (magnification 132K).

Fig. 34b: Toner deposit pattern in cyan bar of coloured sample XXVIII of HP 3800 under Digital microscope (magnification 132K).

Fig. 34c: Toner deposit pattern in magenta bar of coloured sample XXVIII of HP 3800 under Digital microscope (magnification 132K).

Fig. 34d: Toner deposit pattern in black bar of coloured sample XXVIII of HP 3800 under Digital microscope (magnification 132K).

Fig. 35a: SEM image of blotter or air dry toner fusion method at 800X, 15 KV, 10µm, WD 39.

Fig. 35b: SEM image of cold pressure toner fusion method at 800X, 15 KV, 10µm, WD 39.

Fig. 35c: SEM image of heat and pressure toner fusion method at 800X, 15 KV, 10µm, WD 39
Fig. 35d: SEM image of radiant heat toner fusion method at 800X, 15 KV, 10µm, WD 39

Fig. 36: Chromatogram of black raw toners samples (14, 17, 20, 21A, 21B, 22, 23, 24, 25, 26, 27, 28) in both solvent systems Upper Solvent system code B. (Ethyl Acetate: Ethanol: Distilled water) and lower Solvent system code D. (Cyclohexane: Cyclobenzene: Ethanol)

Fig. 37: Chromatogram of processed colour toners (XIII, XIV, XV and XVI) in both solvent systems upper Solvent system code I. (Chloroform: Methanol: n-Hexane: Acetic acid) and lower Solvent system code D. (Ethyl Acetate: Ethanol: Distilled water)

Fig. 38: UV spectrum of group 1st of black photocopy toners

Fig. 39: UV spectrum of group 2nd of black photocopy toners

Fig. 40: UV spectrum of group 3rd of black photocopy toners

Fig. 41: UV spectrum of group 4th of black photocopy toners

Fig. 42: UV spectrum of group 5th of black photocopy toners

Fig. 43: UV spectrum of group 6th of black photocopy toners

Fig. 44: UV spectrum of group 7th of black photocopy toners

Fig. 45: UV spectrum of group 8th of black photocopy toners

Fig. 46: UV spectrum of group 9th of black photocopy toners

Fig. 47: UV spectrum of group 10th of black photocopy toner

Fig. 48: UV spectrum of group 1st of colour processed photocopy toner

Fig. 49: UV spectrum of group 2nd of colour processed photocopy toner

Fig. 50: UV spectrum of group 3rd of colour processed photocopy toner

Fig. 51: UV spectrum of group 4th of colour processed photocopy toner

Fig. 52: UV spectrum of group 5th of colour processed photocopy toner

Fig. 53: UV spectrum of group 6th of colour processed photocopy toner
Fig. 54:  UV spectrum of group 7th of colour processed photocopy toner
Fig. 55:  UV spectrum of group 8th of colour processed photocopy toner
Fig. 56:  UV spectrum of group 9th of colour processed photocopy toner
Fig. 57:  UV spectrum of group 10th of colour processed photocopy toner
Fig. 58:  UV spectrum of group 1st of colour raw photocopy toner
Fig. 59:  UV spectrum of group 2nd of colour raw photocopy toner
Fig. 60:  UV spectrum of group 3rd of colour raw photocopy toner
Fig. 61:  UV spectrum of group 4th of colour raw photocopy toner
Fig. 62:  UV spectrum of group 5th of colour raw photocopy toner
Fig. 63:  UV spectrum of group 6th of colour raw photocopy toner
Fig. 64:  FTIR spectra of raw and processed toner of black photocopy toner showing characteristics peaks at same position.
Fig. 65:  FTIR spectrum of group 1st of black toners
Fig. 66:  FTIR spectrum of group 2nd of black toners.
Fig. 67:  FTIR spectrum of group 3rd of black toners
Fig. 68:  FTIR spectrum of group 4th of black toners
Fig. 69:  FTIR spectrum of group 5th of black toner
Fig. 70:  FTIR spectrum of group 6th of black toner
Fig. 71:  FTIR spectrum of yellow colour of sample no. XXIX (Canon CLC 300)
Fig. 72:  FTIR spectrum of cyan colour of sample no. XXIX (Canon CLC 300)
Fig. 73a: FTIR spectrum of magenta colour of sample no. XXIX (Canon CLC 300)
Fig. 73b: FTIR spectrum of black colour of sample no. XXIX (Canon CLC 300)
Fig. 74:  FTIR spectrum of group 1st of processed colour toner
Fig. 75:  FTIR spectrum of group 2nd of processed colour toner
Fig. 76:  FTIR spectrum of group 3rd of processed colour toner
Fig. 77: FTIR spectrum of group 4\textsuperscript{th} of processed colour toner

Fig. 78: FTIR spectrum of group 5\textsuperscript{th} of processed colour toner

Fig. 79: FTIR spectrum of group 6\textsuperscript{th} of processed colour toner

Fig. 80: FTIR spectrum of group 1\textsuperscript{st} of raw colour toner

Fig. 81: FTIR spectrum of group 2\textsuperscript{nd} of raw colour toner

Fig. 82: FTIR spectrum of group 3\textsuperscript{rd} of raw colour toner

Fig. 83: FTIR spectrum of group 4\textsuperscript{th} of raw colour toner

Fig. 84: FTIR spectrum of group 5\textsuperscript{th} of raw colour toner

Fig. 85: FTIR spectrum of group 6\textsuperscript{th} of raw colour toner

Fig. 86: Differentiation of black toners with TLC, UV and FTIR

Fig. 87: Differentiation of processed colour toners with TLC, UV and FTIR

Fig. 88: Differentiation of raw colour toners with TLC, UV and FTIR

Fig. 89a: Difference in quality of strokes in word ‘thirty’ in 1\textsuperscript{st} generation photocopy produced by good quality black photocopier.

Fig. 89b: Difference in quality of strokes in word ‘thirty’ in 2\textsuperscript{nd} generation photocopy produced by same good quality black photocopier.

Fig. 89c: Difference in quality of strokes in word ‘thirty’ in 3\textsuperscript{rd} generation photocopy produced by same good quality black photocopier

Fig. 90a: Difference in quality of strokes in word ‘thirty’ in 1\textsuperscript{st} generation photocopy produced by bad quality black photocopier.

Fig. 90b: Difference in quality of strokes in word ‘thirty’ in 2\textsuperscript{nd} generation photocopy produced by same bad quality black photocopier.

Fig. 90c: Difference in quality of strokes in word ‘thirty’ in 3\textsuperscript{rd} generation photocopy produced by same bad quality black photocopier

Fig. 91a: Difference in quality of strokes in word ‘thirty’ in 1\textsuperscript{st} generation photocopy produced by colour photocopier.
Fig. 91b: Difference in quality of strokes in word ‘thirty’ in 2nd generation photocopy produced by same colour photocopier.

Fig. 91c: Difference in quality of strokes in word ‘thirty’ in 3rd generation photocopy produced by same colour photocopier.

Fig. 92a: Difference in quality of strokes in digit ‘4’ and ‘0’ in 1st generation photocopy produced by good quality black photocopier.

Fig. 92b: Difference in quality of strokes in digit ‘4’ and ‘0’ in 2nd generation photocopy produced by same good quality black photocopier.

Fig. 92c: Difference in quality of strokes in digits ‘4’ and ‘0’ in 3rd generation photocopy produced by same good quality black photocopier.

Fig. 93a: Difference in quality of strokes in digits ‘4’ and ‘0’ in 1st generation photocopy produced by bad quality black photocopier.

Fig. 93b: Difference in quality of strokes in digits ‘4’ and ‘0’ in 2nd generation photocopy produced by same bad quality black photocopier.

Fig. 93c: Difference in quality of strokes in digits ‘4’ and ‘0’ in 3rd generation photocopy produced by same bad quality black photocopier.

Fig. 94a: Difference in brightness of strokes in digit ‘6’ in 1st generation photocopy produced by good quality black photocopier.

Fig. 94b: Difference in brightness of strokes in digit ‘6’ in 2nd generation photocopy produced by same good quality black photocopier.

Fig. 94c: Difference in brightness of strokes in digit ‘6’ and ‘0’ in 3rd generation photocopy produced by same good quality black photocopier.

Fig. 95a: Difference in brightness of strokes in digit ‘6’ in 1st generation photocopy produced by bad quality black photocopier (shown by arrow head).

Fig. 95b: Difference in brightness of strokes in digit ‘6’ in 2nd generation photocopy produced by same bad quality black photocopier.

Fig. 95c: Difference in quality brightness of strokes in digit ‘6’ in 3rd generation photocopy produced by same bad quality black photocopier.

Fig. 96a: Difference in brightness of strokes in digit ‘8’ in 1st generation photocopy produced by colour photocopier.

Fig. 96b: Difference in brightness of strokes in digit ‘8’ in 2nd generation photocopy produced by same colour photocopier.

Fig. 96c: Difference in brightness of strokes in digit ‘8’ in 3rd generation photocopy produced by same colour photocopier.
Fig. 97a: Extra deposition of toner behind the digit ‘5’ in 1\textsuperscript{st} generation photocopy produced by good quality black photocopier.

Fig. 97b: Extra deposition of toner behind the digit ‘5’ in 2\textsuperscript{nd} generation photocopy produced by same good quality black photocopier.

Fig. 97c: Extra deposition of toner behind the digit ‘5’ in 3\textsuperscript{rd} generation photocopy produced by same good quality black photocopier.

Fig. 98a: Extra deposition of toner behind the digit ‘5’ in 1\textsuperscript{st} generation photocopy produced by bad quality black photocopier.

Fig. 98b: Extra deposition of toner behind the digit ‘5’ in 2\textsuperscript{nd} generation photocopy produced by same bad quality black photocopier.

Fig. 98c: Extra deposition of toner behind the digit ‘5’ in 3\textsuperscript{rd} generation photocopy produced by same bad quality black photocopier.

Fig. 99a: Extra deposition of toner at the line joining of two pages in 1\textsuperscript{st} generation photocopy produced by good quality black photocopier.

Fig. 99b: Extra deposition of toner at the line joining of two pages in 2\textsuperscript{nd} generation photocopy produced by same good quality black photocopier.

Fig. 99c: Extra deposition of toner at the line joining of two pages in 3\textsuperscript{rd} generation photocopy produced by same good quality black photocopier.

Fig. 100a: Extra deposition of toner at the line joining of two pages in 1\textsuperscript{st} generation photocopy produced by bad quality black photocopier.

Fig. 100b: Extra deposition of toner at the line joining of two pages in 2\textsuperscript{nd} generation photocopy produced by same bad quality black photocopier.

Fig. 100c: Extra deposition of toner at the line joining of two pages in 3\textsuperscript{rd} generation photocopy produced by same bad quality black photocopier.

Fig. 101a: Extra deposition of toner at the line joining of two pages in 1\textsuperscript{st} generation photocopy produced by colour photocopier.

Fig. 101b: Extra deposition of toner at the line joining of two pages in 2\textsuperscript{nd} generation photocopy produced by same colour photocopier.

Fig. 101c: Extra deposition of toner at the line joining of two pages in 3\textsuperscript{rd} generation photocopy produced by same colour photocopier.

Fig. 102a: Discontinuity of printing behind the word in 1\textsuperscript{st} generation photocopy produced by good quality black photocopier.
Fig. 102b: Discontinuity of printing behind the word in 2\textsuperscript{nd} generation photocopy produced by same good quality black photocopier.

Fig. 102c: Discontinuity of printing behind the word in 3\textsuperscript{rd} generation photocopy produced by same good quality black photocopier.

Fig. 103a: Discontinuity of printing behind the word in 1\textsuperscript{st} generation photocopy produced by bad quality black photocopier.

Fig. 103b: Discontinuity of printing behind the word in 2\textsuperscript{nd} generation photocopy produced by same bad quality black photocopier.

Fig. 103c: Discontinuity of printing behind the word in 3\textsuperscript{rd} generation photocopy produced by same bad quality black photocopier.

Fig. 104a: Discontinuity of background printing behind the letter ‘P’ in 1\textsuperscript{st} generation photocopy produced by colour photocopier.

Fig. 104b: Discontinuity of background printing behind the letter ‘P’ in 2\textsuperscript{nd} generation photocopy produced by same colour photocopier.

Fig. 104c: Discontinuity of background printing behind the letter ‘P’ in 3\textsuperscript{rd} generation photocopy produced by same colour photocopier.

Fig. 105a: Difference in design of digit ‘6’ in 1\textsuperscript{st} generation photocopy produced by colour photocopier.

Fig. 105b: Difference in design of digit ‘6’ in 2\textsuperscript{nd} generation photocopy produced by same colour photocopier.

Fig. 105c: Difference in design of digit ‘6’ in 3\textsuperscript{rd} generation photocopy produced by same colour photocopier.

Fig. 106a: Difference in spacing between letters in 1\textsuperscript{st} generation photocopy produced by good quality black photocopier.

Fig. 106b: Difference in spacing between letters in 2\textsuperscript{nd} generation photocopy produced by same good quality black photocopier.

Fig. 106c: Difference in spacing between letters in 3\textsuperscript{rd} generation photocopy produced by same good quality black photocopier.

Fig. 107a: Difference in spacing between letters in 1\textsuperscript{st} generation photocopy produced by bad quality black photocopier (shown by arrow head).

Fig. 107b: Difference in spacing between letters in 2\textsuperscript{nd} generation photocopy produced by same bad quality black photocopier.

Fig. 107c: Difference in spacing between letters in 3\textsuperscript{rd} generation photocopy produced by same bad quality black photocopier.
Fig. 108a: Difference in alignment of the text in 1\textsuperscript{st} generation photocopy produced by good quality black photocopier in transplanted cases.

Fig. 108b: Difference in alignment of the text in 2\textsuperscript{nd} generation photocopy produced by same good quality black photocopier.

Fig. 108c: Difference in alignment of the text in 3\textsuperscript{rd} generation photocopy produced by same good quality black photocopier

Fig. 109a: Difference in alignment of the text in 1\textsuperscript{st} generation photocopy produced by bad quality black photocopier in transplanted cases (shown by arrow head).

Fig. 109b: Difference in alignment of the text in 2\textsuperscript{nd} generation photocopy produced by same bad quality black photocopier.

Fig. 109c: Difference in alignment of the text in 3\textsuperscript{rd} generation photocopy produced by same bad quality black photocopier

Fig. 110a: Difference in alignment of the digit ‘4’ in 1\textsuperscript{st} generation photocopy produced by colour photocopier in transplanted case.

Fig. 110b: Difference in alignment of the digit ‘4’ in 2\textsuperscript{nd} generation photocopy produced by same colour photocopier.

Fig. 110c: Difference in alignment of the digit ‘4’ in 3\textsuperscript{rd} generation photocopy produced by same colour photocopier

Fig. 111: Duplication of drum defect marks on black photocopy sample of 3\textsuperscript{rd} generation.

Fig. 112: Direction of expansion of strokes of the letter and baseline of printing towards upward.

Fig. 113: Direction of expansion of strokes of the letter and baseline of printing is towards upward and left.

Fig. 114: Direction of expansion of strokes of the letter and baseline of printing is towards upward and right.

Fig. 115: Direction of expansion of strokes of the letter and baseline of printing is towards upward and compact appearance of text.

Fig. 116: Direction of expansion of strokes of the letter and baseline of printing is towards downward.

Fig. 117: Direction of expansion of strokes of the letter and baseline of printing is towards downward and left.

Fig. 118: Direction of expansion of strokes of the letter and baseline of printing is towards downward and right.
Fig. 119: Direction of expansion of strokes of the letter and baseline of printing of upper lines with downward expansion and lower lines with upward expansion (Mixed-I).

Fig. 120: Direction of expansion of strokes of the letter and baseline of printing of upper lines with upward expansion and lower lines with downward expansion (Mixed-II).

Fig. 121: Overall compact appearance of strokes of the letter and baseline of printing.