PSC Laboratory Technical Assistant - Printing Technology VHSE Examination Previous Year Question Paper

Exam Name: Laboratory Technical Assistant - Printing Technology - VHSE

Date of Test: 07.10.2015

Question Paper Code: 188/2015

Medium of Questions: English



188/2015

| 1. | The | spacing between | lines | and paragraphs | 1 | | | |
|----|-------|--------------------|---------|--------------------|----------|------------------|-----------|-------------------|
| | (A) | Hyphenation | (B) | Leading | (C) | Indenting | (D) | None of these |
| 2. | Estin | mating the numb | er of p | oages a manuscri | pt wou | ald make when | set in ty | ype is : |
| | (A) | Casting off | (B) | Casting in | (C) | Copy fitting | (D) | Planning |
| 3. | One | Pica = | | | | | | |
| | (A) | 8 points | (B) | 38 points | (C) | 12 points | (D) | 72 points |
| 4. | The | arrangement of p | pages | for printing to ap | opear i | n proper order f | or fold | ing is known as : |
| | (A) | Registration | (B) | Imposition | (C) | Gathering | (D) | Layout |
| 5. | The | adjoining inner | margir | ns of two facing | printed | l pages : | | |
| | (A) | Folio | (B) | Margin | (C) | Tail | (D) | Gutter |
| 6. | The | person who desi | gn typ | pe faces ? | | | | |
| | (A) | Composer | (B) | Designer | (C) | Editor | (D) | Typographer |
| 7. | In a | printing press T | - Squ | ire is used in | | _ section. | | |
| | (A) | Layout | (B) | Plate making | (C) | Printing | (D) | Binding |
| 8. | | refers to | the eq | uilibrium and vi | sual w | eight of a page. | | |
| | (A) | Harmony | (B) | Rhythm | (C) | Balance | (D) | Contrast |
| 9. | Lette | er strokes that ex | tend a | bove the x - heig | tht of t | he letter : | | |
| | (A) | Ascender | (B) | Descender | (C) | Counter | (D) | Groove |
| A | | | | 3 | | | | {P.T.O.} |

| 10. | Sma | ll stroke that pro | ect fr | om bottom o | of mai | n cha | racter stroke is k | nown | as: |
|------|---------|--------------------|---------|--------------|---------|----------------|--------------------|--------|--------------------|
| | (A) | Counter | (B) | Ear | | (C) | Stem | (D) | Serif |
| | | | | | | | | | |
| 11. | Тур | e is an image carr | rier w | ith a height | of: | | | | |
| | (A) | 1.98 inch | (B) | 9.18 inch | | (C) | 0.918 inch | (D) | 0.981 inch |
| | | | 85 1925 | | | | | | |
| 12. | 3077038 | pecasting more t | | | is: | Wash. | | | |
| | (A) | Tin | (B) | Lead | | (C) | Antimony | (D) | Copper |
| 12 | Dung | ace is added in a | baale | | | | | | |
| 13. | | | DOOK | as: | /D) | Duali | minami mattan | | |
| | (A) | Text matter | | | (B) | | minary matter | | |
| | (C) | End matter | | | (D) | impi | rint matter | | |
| 14. | | may be co | oneida | ared as a en | ft prov | of. | | | |
| | (A) | Corrected proof | | area no a so | (B) | | or's proof | | |
| | (C) | Proof taken on | | | (D) | | f displayed on a | monit | or E |
| | | | 130071 | | A.S. | | vice in less. | ili | market the |
| 15. | PMS | stands for : | | | | | To Tom | | |
| | (A) | Pan - tone Mato | hing | System | (B) | Plate | Making Softwa | re | |
| | (C) | Pre Make ready | Stan | dards | (D) | None | e of these | | |
| | | | | | | | | | |
| 16. | Find | out the odd one | | | | | | | |
| | (A) | Viscosity | (B) | Tack | | (C) | рН | (D) | Drying Quality |
| | | | | | | | | | |
| 17. | | ght of | _ she | ets of the b | asic s | heet s | size of a particu | lar pa | per type is called |
| | | weight. | /D\ | 1000 | | 100 | =00 | (12) | 750 |
| | (A) | 250 | (B) | 1000 | | (C) | 300 | (D) | 750 |
| 18. | Ton | rint 2000 copies | of a b | ooklet havin | 0 32 . | na <i>a</i> ee | in D 1/8 cizo | | ream of paper |
| 1.07 | | ired without was | | ARICI HAVII | 8 32 1 | ages | III D 1/ 0 SIZE, _ | | ream or paper |
| | (A) | 3 | (B) | 1 | | (C) | 2 | (D) | 4 |
| 188/ | 2015 | | | | 4 | | | | A |

| 19. | Pign | nents are one o | of the ing | redients of | : | | | | | |
|-----|------|-----------------|------------|--------------|---------|--------|------------|----------|-------|---------------|
| | (A) | Paper | (B) | Blanket | | (C) | Ink | (D) | Dam | pen Solution |
| 20. | In a | two cylinder r | nini offs | et, which tv | vo cyli | inders | are joine | d togeth | ner ? | |
| | (A) | Plate and Im | pression | | (B) | Plate | and Bla | nket | | |
| | (C) | Impression a | nd Blanl | ket | (D) | Non | e of these | | | |
| 21. | Con | ventional dam | pening s | ystem is als | so kno | wn as | : | | | |
| | (A) | Direct damp | ening | | (B) | Indi | rect damp | ening | | |
| | (C) | Automatic d | ampenir | ıg | (D) | Non | e of these | | | |
| 22. | A gi | ross of paper= | = | sheets | i. | | | | | |
| | (A) | 500 | (B) | 288 | | (C) | 1000 | | (D) | 144 |
| 23. | Cale | endering is the | process | of: | | | | | | |
| | (A) | Chipping the | wood f | or paper m | aking | | | | | |
| | (B) | Smoothening | the pap | er surface | | | | | | |
| | (C) | Gathering th | e Calend | lar pages | | | | | | |
| | (D) | None of thes | e | | | | | | | |
| 24. | Red | ucers are exar | nples of | | - | | | | | |
| | (A) | Pigments | (B) | Vehicles | | (C) | Additiv | es | (D) | None of these |
| 25. | UCI | R stands for : | | | | | | | | |
| | (A) | Under Color | ır Remo | val | (B) | Un | Coated R | eams | | |
| | (C) | Ultra - violet | | | (D) | Un - | - wanted | Colour | Recog | niser |
| | | | | | | 10 | | | | |
| 26. | Aut | omatic reel pa | sting sys | | | | | | 12000 | |
| | (A) | Chill rolls | (B) | Dancer r | olls | (C) | Web ter | nsioner | (D) | Splicer |
| A | | | | | 5 | | | | | 188/2015 |

| 27. | | st of the web offse called : | et mac | chines are workin | g witl | nout Impression o | cylinde | ers. Such machin |
|----------|------|----------------------------------|---------|-------------------------------|---------|--------------------|---------|--------------------|
| | (A) | In-line Press | | (B) | Peri | fecting Press | | |
| | (C) | Aniline Press | | (D) | Cor | nmon Impression | Press | |
| | | | | | | | | |
| 28. | | ne traditional colo original. | ur se | paration method | | are used to | separ | ate the colour fro |
| | (A) | Foils | (B) | Densito meter | (C) | Filters | (D) | CPU |
| | | | | | | | | |
| 29. | Mea | sure the pH valu | e of th | ne dampen solutio | on is e | essential to avoid | : | |
| | (A) | Picking | (B) | Scumming | (C) | Doubling | (D) | Dot gain |
| | | | | | | | | |
| 30. | The | thickness of offse | et pla | te are ranging fro | om _ | to | P 27 1 | inch. |
| | (A) | 0.001 - 0.020 | (B) | 0.01 - 0.500 | (C) | 0.005 - 0.030 | (D) | None of these |
| | | | | | | | | |
| 31. | One | among the follow | ving i | s design software | | | | |
| | (A) | Coral draw | (B) | M S Excel | (C) | M S Word | (D) | Tally |
| | | | | | | | | |
| 32. | Moir | re' will happened | , if yo | ou are not conside | r: | | | |
| | (A) | pH of dampen s | solutio | on (B) | Roo | m temperature | | |
| | (C) | pH of paper | | (D) | Corr | ect screen angle | | |
| | | | | | | | | |
| 33. | The | invention of | | _ in 15 th century | pave | d the way for pri | inting | revolution. |
| | (A) | Lithography | (B) | Offset plate | (C) | Movable type | (D) | Xerography |
| | | | | | | | | |
| 34. | "Xer | ography", the Gr | eek w | ord means : | | | | |
| | (A) | Cheap printing | (B) | Solid printing | (C) | Letter copying | (D) | Dry writing |
| | | | | | | | | |
| 35. | The | process of roughe | ning | the plate surface | before | coating : | | |
| | (A) | Graining | (B) | Engraving | (C) | Exposing | (D) | Developing |
| 20200100 | | | | | | | | |
| 188/ | 2015 | | | 6 | | | | |

[P.T.O.]

| 36. | Fur | niture is a line sp | acing | material which | is thic | ker or larger than | : | | |
|-----|-------|---------------------|---------|-------------------------------|----------|--------------------|--------|----------------|-----|
| | (A) | 32 Points | (B) | 24 Points | (C) | 16 Points | (D) | 12 Points | |
| 37. | Acc | ording to printing | g indu | ıstry 19 th centur | y is als | so known as : | | | |
| | (A) | The ink age | | (B |) The | e paper age | | | |
| | (C) | Packaging age | | (D |) No: | ne of the above | | | |
| 38. | In a | book, preface is | writte | n by : | | | | | |
| | (A) | Publisher | (B) | Editor | (C) | Expert | (D) | Author | |
| 39. | The | term paper is de | rived f | from : | | | | | |
| | (A) | Greek word | (B) | French word | (C) | German word | (D) | Japanese wor | d |
| 40. | The | paper manufactu | ring 1 | mit owned by a | rentral | government in Ko | Harrar | m District | |
| | | HCL | (B) | HLN | (C) | HNL | 170 | NHL | |
| 41. | shee | is use to | avoi | d ink transfer | from t | he printed sheet | to the | e back of anot | her |
| | | Chilling unit | (B) | Gum | (C) | Anti set-off spra | ny | (D) Varnish | |
| 12. | PMT | is used in : | | | | | | | |
| | (A) | Scanner | (B) | Printer | (C) | Plate processor | | (D) Monitor | 98 |
| 13. | In th | is printing metho | od ima | ge carrier is pre | pared | by etching or eng | raving | process: | |
| | | Offset | (B) | Flexography | | | O | (D) Gravure | |
| 14. | Blan | ket's hardness ca | n be c | hecked with: | | | | | |
| | (A) | Densito meter | | (B) | Shor | re durometer | | | |
| | (C) | pH meter | | (D) | Scre | w gauge | | | |
| 4 | | | | 7 | | | | 188/20 | 015 |

| 45. | Find | out the odd one | : | | | | | | |
|------|-------|--------------------|--------|-------------|-----------|--------|----------------|-----------|-------------------|
| | (A) | Xerography | | | (B) | Lette | er press | | |
| | (C) | Offset | | | (D) | Grav | vure | | |
| | | | | | | | | | |
| 46. | Gene | erally accepted sc | reen a | ingle for l | olack seg | parati | on is: | | |
| | (A) | 75° | (B) | 105° | | (C) | 45° | (D) | 90° |
| | | | | | | | | | |
| 47. | The | process of making | g hole | s on the p | rinted s | heets | : | | |
| | (A) | Guillotine | (B) | Perforat | ion | (C) | Foiling | (D) | Nipping |
| 40 | **** | | | | | | | | |
| 48. | | ch printing metho | | | - | on a | | | |
| | (A) | Sheet fed | (B) | Gravure | | (C) | Flexography | (D) | Screen printing |
| 49. | Evto | nsion of a printin | a doci | on over th | no odva | of a c | hoat : | | |
| 17. | | 77 | | | ic eage | | | (7) | |
| | (A) | Continuous ton | e (D) | Bleed | | (C) | Line tone | (D) | Surprint |
| 50. | In ai | n image the elem | nents | are repre | sented 1 | ov ma | athematical ed | uations | typically used fo |
| | | trations are : | | | | | | 1 | 777 |
| | (A) | Vector image | | | (B) | Rast | er image | | |
| | (C) | Bit map image | | | (D) | Non | e of these | | |
| | | | | | | | | | |
| 51. | The | machine used to | remov | e the swe | ll of the | back | of a book: | | |
| | (A) | Platten machine | | | (B) | Pund | ching machine | 2 | |
| | (C) | Roto gravure | | | (D) | Nipp | oing Press | | |
| | | | | | | | | | |
| 52. | The | process of binding | g the | magazines | by stite | ching | in the center | of the sp | ine : |
| | (A) | Side stitching | (B) | Saddle s | titching | (C) | Perfect bindi | ng (D) | Case binding |
| | | | | | | | | | |
| 53. | | American engine | | | | | | | 2: |
| | (A) | Wilson | (B) | Tolbert I | anston | (C) | G.P. Jordan | (D) | Thomas Nelson |
| 1887 | 2015 | | | | Q | | | | |

The uneven density of ink layer is called:

- (A) Chalking
- (B) Slur
- (C) Mottle
- (D) Scum

Polymasters are used as image carrier in : 55.

- (A) Flexography
- (B) Xerography
- (C) Gravure
- (D) Mini offset

Glossary is added in a book as:

(A) Text matter

- Preliminary matter (B)
- (C) Supplementary matter
- None of these

Adhesive binding means bind with: 57.

- (A) Metal wire
- Thread (B)
- (C) Cord
- (D) Gum

PDF refers as: 58.

- (A) Portable document format
- Protected document format (B)
- (C) Portable document file
- Protected document file (D)

A translucent design impressed on paper during manufacturing and visible when paper is 59. held to light:

- (A) Grain
- Signature (B)
- (C) Water mark
- (D) Trade mark

The board which is widely used in printing industry but not for printing purpose? 60.

- (A) Pulp board
- (B) Straw board (C) Gypsum board (D) None of these

The recommended screen ruling for standard newsprint:

- (A) 85 120
- (B) 120 150
- (C) 150 170
- (D) 170 220

Find out the odd one: 62.

(A) Rubber

Reinforced fabric (B)

(C) Pulp

A

(D) Spongy filter

188/2015 {P.T.O.}

9

| 63. | Full | sheet work is als | o kno | wn as : | | | | | | |
|------|-------------|---------------------------|---------|----------|------------|---------|----------------|-------------------------|---------------|------|
| | (A) | Work and tuml | ble | | (B) | Wo | rk and back | | | |
| | (C) | Work and twis | t | | (D) | No | ne of these | | | |
| | | | | | | | | | | * |
| 64. | ww | w stands for : | | | | | | | | |
| | (A) | World Wide W | eb | | (B) | Wo | rld Wide Wi-I | 7i | | |
| | (C) | Wi-Fi Working | Wind | ow | (D) | Wo | rld Wide Win | dow | | |
| | | | | | | | | | | |
| 65. | Bino | ding method that gin : | t use | s wires, | inserted | thro | ough speciall | y punche | d holes alon | g th |
| | (A) | Spiral Binding | (B) | Comb | Binding | (C) | Deluxe Bind | ding (D) | Stapling | |
| | | | | | | | | | | |
| 66. | GSM | stands for : | | | | | | | | |
| | (A) | Grammage Mea | surin | g Systen | n (B) | Grip | per Side Mar | gin | | |
| | (C) | Gram per squar | e met | er | (D) | Nor | ne of these | | | |
| | | | | | | | | | | |
| 67. | Non macl | - printing area onine : | of a si | heet me | ant for p | ulling | by the mech | nanical fin | gers of a pri | ntin |
| | (A) | Clamp space | (B) | Grippe | er space | (C) | Bleed | (D) | Q.C. Strip | |
| | | | | | | | | | | |
| 68. | The | process of obtaini | ing an | image l | by spread | ling a | nd forcing ink | through | a stencil : | |
| | (A) | Xerographic pri | nting | | (B) | Intag | glio Printing | | | |
| | (C) | Digital Printing | | | (D) | Scre | en Printing | | | |
| | | | | | | | | | | |
| 69. | The 1 | machine that give | s the | plate ou | tput for p | orintii | ng in a CTP sy | /stem : | | |
| | (A) | Image setter | (B) | Process | s Camera | (C) | Processor | (D) | Plate setter | |
| | | | | | | | | | | |
| 70. | | ce used in the ink | clear | | | | | - And - Control Bullion | nting: | |
| | (A) | Ink Knife | (B) | Doctor | blade | (C) | Ductor roller | r (D) | Fountain key | s |
| 188/ | 2015 | | | | 10 | | | | | Δ |

| 71. | Assembled | making sheet | with attached | d pieces | s of film | ns: | | |
|-----|-------------|----------------|---|-----------|-----------|----------------|----------|------------------------------------|
| | (A) Flat | (H | Dummy | | (C) I | Butter sheet | (D) | None of these |
| | | | | | | | | |
| 72. | Tool in the | | n available in | compu | ter app | lication which | helps se | elect and eliminate |
| | (A) Slice | Select Tool | | (B) | Move | Tool | | |
| | (C) Crop | Tool | 0004000 | (D) | Healir | g Brush Tool | | |
| | | | | | | | | |
| 73. | The part of | lower case le | tters excludir | ng ascer | nders a | nd descenders | 3: | |
| | (A) X - h | | 5 C C C C C C C C C C C C C C C C C C C | e line | 9 | (C) Stem | | (D) Serif |
| | | Million and | | | | | | |
| 74. | A small pr | eliminary ske | tch of ideas w | rith a po | ossible | arrangement | of eleme | ents : |
| | (A) Roug | h layout | | (B) | Final ! | layout | | |
| | (C) Com | prehensive la | yout | (D) | Thum | b nail sketch | | |
| | | | | | | | | |
| 75. | Printers th | at operates by | firing spots | of ink o | n pape | r: | | |
| | (A) Dot | matrix (1 | 3) Ink jet | | (C) | Laser | (D) | None of these |
| | | | | | | | | |
| 76. | Radical Ba | lance is: | | | | | | |
| | (A) Asyr | nmetrical bala | ance | (B) | Infort | nal balance | | |
| | (C) Sym | metrical balar | nce | (D) | None | of these | - | |
| | | | | | | | | |
| 77. | Pasting a | polythene laye | er on the pape | er surfa | ice is ki | nown as : | | P. Louine G. T. Seller, March 1997 |
| | (A) Lam | ination (| B) Embossii | ng | (C) | Varnishing | (D) | U.V. coating |
| | | | | | | | | |
| 78. | - | types of ink | are widely u | sed in | high sp | eed web prin | ting. | |
| | (A) U.V. | inks | | (B) | Moist | ture - set ink | | |
| | (C) Mag | netic ink | | (D) | Heat | - set ink | | |
| | | | | | | | | |

| 79. | Mos | t of the packa | ging indu | istry uses | |] | orinting process | S. | | |
|------|-------|----------------------------|------------|--------------|---------|---------|------------------|----------|-----------|------------|
| | (A) | Offset | (B) | Gravure | | (C) | Flexography | (D) | Screen | printing |
| 80. | | are us | ed to cut | the paper | in to a | desir | ed shape in pa | ckaging | | |
| | (A) | Cutting mad | | 1-1- | (B) | Dies | | | | |
| | (C) | Three side tr | | | (D) | Non | e of these | | | |
| | | | | | | | | | | |
| 81. | | ch state of Ind Sabha ? | ia has the | largest nu | mber | of seat | s reserved for t | he Sched | duled Tri | bes in the |
| | (A) | Uttar Prades | sh | | (B) | Mad | hya Pradesh | | Alajo. | |
| | (C) | Himachal Pr | radesh | | (D) | Mah | arashtra | | | |
| | | | | | | | | | | |
| 82. | The | name 'Vagabl | nadanand | a' was give | en to V | V.K. G | urukkal by : | | | |
| | (A) | Sivayogi of A | Alathur | | (B) | Kum | aranasan | | | |
| | (C) | Mannathu F | admanah | ohan | (D) | Sree | Narayana Gur | u | | |
| | - | | | | | | | | | |
| 83. | | ch Indian Sing | er is pop | ularly kno | | | | | | |
| | (A) | Sujatha | | | (B) | Chit | | | | |
| | (C) | Latha Mang | eshkar | | (D) | Asha | Bhonsle | | | |
| 84. | Kuri | akose Elias Cl | navara wa | s beatified | in : | | | | | |
| | (A) | 1985 | (B) | 1986 | | (C) | 1988 | (D) | 1987 | |
| | | | | | | | | | | |
| 85. | Whic | ch of the follow | wing state | es has the l | east se | a side | area ? | | 2.4 | |
| | (A) | Kerala | (B) | Tamil Nac | du | (C) | Gujarat | (D) | Goa | |
| | | | | | | | | | | |
| 86. | 'To C | hange the Na | umboothir | i into Hun | nan' w | as the | Slogan of: | | | |
| | (A) | Atmiya Sang | tham | | (B) | Anar | nda Mahasabha | 9 | | |
| | (C) | Yogakshema | Sabha | | (D) | Saho | dara Sangham | | | |
| 188/ | 2015 | | | | 12 | | | | | A |

| 87. | The | Nobel Prizes are distributed of | n | 61 | very year. | | |
|-----|-------|--|--------------|---------|--------------------|---------|----------------------|
| | (A) | December 10 (B) Decem | nber 1 | (C) | December 9 | (D) | December 11 |
| 88. | | Government honoured which eark the 175 th birth anniversar | | indus | trialist by releas | ing con | nmemorative coins |
| | (A) | Ratan Tata | (B) | Diru | bhai Ambani | | |
| | (C) | Jamshetji Nusserwanji | (D) | Adit | ya Birla | | |
| 89. | | ch space Mission won the 201 ety ? | 5 space P | ioneer | Award of the | US bas | ed National Space |
| | (A) | Chandrayan 1 (B) Mang | alayan | (C) | G - SAT 12 | (D) | G - SAT 16 |
| 90. | Who | wrote the Introduction to 'N | alini' writt | ten by | Kumaranasan | ? | |
| | (A) | Pandit Karuppan | (B) | Dr. | Palpu | | |
| | (C) | A.R. Rajaraja Varma | (D) | Mar | thanda Varma | | |
| 91. | Who | among the following is the S | peaker of | the La | ok Sabha ? | | |
| | (A) | Sumithra Mahajan | (B) | | Kumar | | |
| | (C) | Sushma Swaraj | (D) | Uma | a Bharati | | |
| 02 | TATIL | o established places of worship | o known a | e 'Nia | rhal Thangal' ? | | |
| 92. | | Chattampi Swamikal | | | | | |
| | | Kumaranasan | | | a Vaikuntar | | |
| | (C) | Kumaranasan | (12) | 21,77 | a variation | | |
| 93. | The | Cherambadi pass connects K | erala with | 1 | * | | |
| | (A) | Coorg (B) Chen | nai | (C) | Madurai | (D) | Bangalore |
| 94. | Nar | ne the most important Nation | alist Orgai | nizatio | on before Congr | ess : | |
| * | (A) | | (B) | | nbay Association | | |
| | (C) | | tta (D) | Indi | ian Association | of Mad | ras |
| A | | | 13 | , | | | 188/2015 {P.T.O.} |

| 95. | The | The famous Manmankam festival was celebrated at : | | | | | | | | |
|------|-----|---|--------|--------------------------------|---------|-----------------|-----------|--------------|--|--|
| | (A) | Aluva | (B) | Tirunavaya | (C) | Kappad | (D) | Chaliyar | | |
| 96. | Nam | ne the Anglo - Inc | dian p | paper that was sta | irted f | from Allahaba | d in 1865 | i: | | |
| | (A) | The Harijan | (B) | The Chronicle | (C) | The Deccan | (D) | The Pioneer | | |
| | | | | | | | | | | |
| 97. | Who | was the leader of | of the | Forward Bloc? | | | | | | |
| | (A) | Veer Savarkar | | (B) | Subl | nash Chandra | Bose | | | |
| | (C) | C.R. Das | | (D) | Bipin | n Chandra Pal | | | | |
| | | | | | | | | | | |
| 98. | The | distance between | Saba | rmati Ashram an | d Dan | ndi is : | | | | |
| | (A) | 322 kms | (B) | 319 kms | (C) | 318 kms | (D) | 320 kms | | |
| | | | | | | | | | | |
| 99. | Who | se signature is fo | und o | n a ₹ 50 currency | note | in India ? | | | | |
| | (A) | President of Ind | ia | (B) | Fina | nce Minister | | | | |
| | (C) | Governor of RB | | (D) | Prim | e Minister of I | India | | | |
| | | | | | | | | | | |
| 100. | The | Goodwill Ambass | sador | of the 35 th Nation | nal Ga | imes : | | | | |
| | (A) | P.T. Usha | (B) | Mohanlal | (C) | Ammu (I | D) Sachi | in Tendulkar | | |
| | | | | | | | | | | |
| | | | | -000 | 0 - | | | | | |