The following PROPESSIONAL LETTER IN

Al Dr. P. Somasundaram, Ph.D.

Telepton No 2443452 53 Kuppiah St. West Massbaleson Chernou 600032 3001 Aug. 1988.

The Secretary to Goal.,
Agos. Department,
Eyoromment of Tamil Wadu,
Channai 600009

Jam a retd. Prof. of Poro-Technology.

J. was posenously to Head of 1 Bro-Technology

Dept. in I tona University, Chennoi. I food
worten many nesearch papers published
on many national and international

Journals.

Jevish to inform you that I have. developed a new technique for jetting I from deflevent-varieties of coconditiones within a very short peored. The quantity and quality of yield are also found to be hegher. If I neglest you to visit my modern form on a convenient day this you may adopt in your schemes after due consideration

J. t. (P. Soun navnoa Raoso)

PROFESSIONAL LETTER.

A. PARTHIBHAN, M.E. Contractor.

Telephona 1,6264125 242, Ganger Colony, Luc. Anna Nager (West) Chennai. 600 101.

2nd June 2003.

There C. Gopalem, 20, Mariyanman koil St, Pallavaram Chemnai. 600 043.

A13.

In accordance w/agreement duted/ 2nd Jan. 2003, executed by us, I have taken up/work of construction of yr. house at Pallavaram. you we appreciate the I have by. Prompt in executing / work to yr. satisfaction.

when the work is in Progress, you have Stopped further Paymond. This is quite Proves to be in vain.

It you fail to @ Payment there will be no alterrative for me except to Stop/work and claim damages Provided. +. in The agreement without any further correspondence with you.

(2) pay The

yours offy.,

(A. PARTHIBHAN)

3.(d). OFFICIAL LETTER –LAY OUT (ONE AUTHORITY TO ANOTHER)

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- 1. Name of the Office
- 2. 'From' Name & Address of the Authority (Sender) on the Left side.
- 3. 'To' Address of the authority (Receiver) on the Right side.
- 4. Letter Number and date.
- 5. Salutation
- 6. Subject
- 7. Reference.
- 8. Body of the Official Letter.
- 9. Complementary Close.
- 10. Designation of the Official.

OFFICIAL LETTER (One authority to another authority)

CHINGLEPUT MUNICIPALITY ///

Cor Chi	ru. R.D mmissi	oner It Mu	inicipality,)	(To ((Dr. K.Madhavan, M.Sc.,(Agri) Ph.D. (5, Adams Road, (Chingleput- 603 001., (
 // // Sir,	Lette	er No	o.344/02-6, M.E.P., I	² Dated th	ne 11th September 2002
//	Sub:	Mal	aria Programme - I	Destruct	tion of wild growth around municipal area.
//	Ref:	(1)	From the Director of dated the 06th Aug		Health, letter No. 554/M 02-6, 2
//		(2)	Your letter dated th	ne 09th <i>A</i>	August 2002
//					
publi		lth ha			cited, I am to state that the Director of wth of plants breeding mosquitoes may
the h	nerb ar	rowr	oot. However, instr	ructions	the Malaria Eradication party not to disturb have been issued to spray insecticides resent the possibility of breeding.
//					Yours faithfully, //// Commissioner

Commissioner.

Type the following 'Official letter in proper form: caps. // Office of the Chief Engineer (Irrigation) The Secy. to Gout., P. W. D., F. S. G. Chennai-600 009. Thiru S. Venkatesan B.E., Chieb Engineer (Irrigation), Chennai Madras - 600 60 B. 51 Lr. No. 54/47307/84-5, dt. / 41th Sep. 1984. Sub: Irrgm. Research - upgrading of [Research [Grrigation] Station, Poondi - Proposals - regarding. This Depts. br. No. P3/47307/84-5, dated the 10th Mar. 1984. of the Silver Jubilee of the Grigation, Research Station, RodHills, my proposals assumes special importance. 3. Early orders on my about poroposals are, io, solicited. 1. 9 am to draw attention of Gout. to my poroposal L contained in / nefe. cited 8L for upgrading the irrigation Research Stn., stet. poondi into an Institute of Hydraulics and = Hydrology. J,U yours faithfully,

Chf. Engr. (Irrigation)

Type the following official letter in Proper; KANCHEEPURAM MUNICIPALITY

From nothing Thirrib 8. Sundari, M.A. commissioner, Kancheepurain Murpty., kandieepuran.

TO Thornmatly. A. Vidya, 9 Karuneegar st., Chinna kancheeferram.

Re. NO. 322/Buldgs 190, dated / 1st Jue 1990.

Sir,

Ref. your Building Plan application NO. 444 dated/10Th APril 1990 (Sub: Buldg. Plan - approval-reg. U.C.

W. r. to yr. Building plan application cited, to State that I am the Dir. of Town Planing, kpm. has stated the the site you have purchased for constrn. of a house in reserved for putting up a Gout. Hospital and so permission will not be stategranted to construct the building Proposed you by 2. In The Os, I am returning yor. buildy. Plan application along with its enclosures. sol I am already returning here with the U.L. Village map and other enclosures such as copy of documents etc. by you sent.

Haitefully yours sindrely

COMMY,

From
This N. Ramaslami, B.A;
The Editor,
The Findu'
The Findu'
Madras
(600002.

#

8

Letter No. 1151 &/Pc/91, dt. the 4th Feb - 1991.

Sir,

Sub: Civic problems -Attending to Regarding.

Ref: Letter of Thing c.s. Rao which appeared in the issue dated / 4th Jany 1991 of your daily.

Led 1991

I am , to inform you that both / points raised in the Concerned Circle officer u.c and his report has been obtained.

hish 2. In the report, the Circle Obvicer of has been stated that the road work at kuppoon wich beach has been included in //works / list during to be undertaken during 1991-92.

also/ He has mandover states that the defects at in the street lights in the area gind have been rectified

youre Hy., Public Relations Officer

Director of School Education// Caps.

From The Socy to Goot. Selvi. Ilakkiya, m. sc. B. Ed., Edn. Dept., Director of school Edn., 6x Chennai. 600 009h Chemai. 600 00\$ 9h Lr. Rc. No. 130/Audit-4/82, dt. /24Thact. 1982. Sir, Sub: Edn. Dept. - Audit objections pending for over seven months-clearance-teg. Ref: Gout. Memm. NO. 224/6-H5/82-4 Edn., dated 1238d July 1982. WITT-E. the Gout. Memorandum cited, 9 tro have to state the / departmental concerned officers have already been addressed in-this l.c. matter and Their replies are still aunited. Hey have also been specially in this regard I shall submit my further report reminded. to government receipt on of the reply of your faithfully, from they. Dir. of schl. Edn.

4. GOVERNMENT ORDER- LAY-OUT

GOVERNMENT ORDER

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1. Name of the Government	
2. The word 'Abstract'	
3. Content of the Abstract	
4. Name of the Department	
5. G.O.Ms. Number	
6. Date of the Government Order	
7. The word 'Read the following'	
8. The Content (G.O. Ms. No. Department and o	date) of 'Read the following'.
9. ORDER	110mm one 10110
10. Body of the Order	
11. 'By order of the Governor' within the bracke	t.
12. Name of the 'Secretary to Government' in Ca	
13. The word 'Secretary to government'	
14. The word 'To' and To Address	
15. 'Copy to'	
16. Forwarded By order	
17. Section Officer.	
17. Section Officer.	

GOVERNMENT ORDER

GOVERNMENT OF TAMIL NADU // Abstract Indian Medicine - Code of Medical Ethics - Addition to warning notice -Approved. Health and Family Planning Department // G.O.Ms. No.1190 Dated the 15th May 1974 Read the following: // G.O. Ms. No. 5622, Health, dated the 29th July 1973. // ORDER: The Government direct that the following additions be made to Part III - warning notice of the code of Medical Ethics approved in G.O. Read above: (i) There is no objection to advertisements of the firm of manufacture or of their reputed medicinal preparations. (ii) The photographs of the firms may be advertised bay not the photographs of patients or clients or the Registered Medical practitioners. (By order of the Governor) P.G.MURTHI, Secretary to Government. // To The Director of Indian Medicine, Madras 600 006. Copy to All Collectors Forwarded / By order ////

Section Officer

GOVERNMENT OF TAMIL NADO Abstract.

ies h

- Special Stage - Sanctioned.

Revenue Dept.

G.O. Ms. MO. 338

Dated the 15/Foct. 2001 Read the folly:-

G.o. Ms. No. 298, Revenue, dt. the 25 July 2001.

ORDBR:

In the Gout. order cited, six temporary past of Tah soildarns. were Sometioned for two months for Supervising. the precurement of kurver paddy for Tanjanur Ot. New, Gour. In the U.C food Dept. Lane decided to I the Emterne procurement operations

2. Gout. therefore, Sanction the Continuance of the above passes of the above passes of the above passes the special the hecersity ceases which even is contier.

(By order of the Governor)

The Collin. Tonyanus 620 od It. Seay to Good. Forwarded byman

GOVERNMENT CROSER OF TAMIL NADU &

11982

Asian games aspos - Holiday for the Gout. Offices in certain places - orders -

Public Dept.

G.O. MS. NO. 1008

Dated Its lot NOV. 1982.

Read the following.

From the Director of Sports and youth Services, Madras letter NO. 248/12/82, dated the 7th october 1982.

ORD BR :

The gout. declare friday, the 3rd.

Decr. 1982, as a local Lobiday for good.

Decr. 1982, as a local Lobiday for good.

Defricate in madras City and alto

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Gent. y Tamil Nadu Ollcaps.

Schools - Spl. Grade to Teachers - orders-Dissued.

Edu Cation Dept.

G.o. Ms. 2329 NO.

Dated the 11th Aug. 2001 Read the following:

G.O. Ms. No. 1950, Finance, dated the 515 July 2001.

ORDERI

It has bn. represented to gout. that the leachers in schools may be awarded Spl. Grade on Completion of twenty years of service in their post. II. 2. The Gout. Lave carefully examined the above request and direct that Higher Grade leachers and secondary Grade Teachers in all schools under all kinds of management be awarded spl. Grade on Completion of twenty years of Satisfactory Service in the same category.

(By order of / Governor)

Commissionerd Seg to Gour.

To The Dinceling School Education, Madras 600 006.

Type the following GOVBRNMENT ORDER en proper form. Grovernment of Tarul Nadu. Schools-Hr. See Schools-Science equipment - Purchase of - Sanetioned. Education Dept. G1.0.Ms. No 1715 Dated / 6th ort. 1997 Read to folly: For the Director of School Education, Lr No. 4218/H8/97, debed To dot Jan ORDER : -The Director of School Solvention has sent proposals for/ purchase of Science equepment for to 45 Higher Secondary schools Responded during 1995- Lat the sate of Rest opportunity after carefully examining / Directools Posoposets) ander senction of a souson of Rs 12,00,000/ (Respect twelve Laters only) /3hdfor to above purpose Clark asger of (Gloverson) M.A. SHANKAR. Sey to Got. The Director of School Education Chennei 600 006 Promanded Proy order

Section Green

Type the following DEMI - OPPICIAL LEGGER. in boober from. Epiermonent of Tamul Nader
Promee Dept. Fort St. George: Chenrou 600 009 K ALLAUDIN, I.A.S., Dy. Deag to God -D. O. L. NO A5/99-2 dated to 2nd Oct 1921 Dear Thurn Ramanyam Sub: Meeting - Bleventh Finance. Communica - Visit- L. Chenrai -· 60.2 Coverage of Ref: Foson to Secretary, Blevento from Communen La No DA/BPC/99. dated IT IKT Sep, 1988 The Blevon The Fragace Common, has planned to hist channel in order to ascertain (to (needs of the Govt. here the meetings of the Commission are scheduled to take place on 1st and 2nd Nov. 1988 in the Secretariat, Chennai. / As to converge of to meetings I am to regless. you to depute at last Three shorthan I shot nepresters form your office for tw purpose. gam also to inform you that the usual heneranum will be paid to to deperters. Your Streerely (k. ALLA WIN) Thom & Kamanyano, I P.S Syst. og Police Special Pomeh.

Chennai. 600 00 4

Gout. of Tamil Madu 11 caps.
Abstract.

Education - Aided Schools - payment y House Pent Allowance to Teachers - Condens issued. Education Department.

9.0 Mg. NO.558

Dated the 8th opnil 2004.

Caps order:

The gn. g Sanctioning HRA to the Orided School Teachers fas bn. I the moder he Contideration of the Gout. The Gout. The Gout. Tone how he devided to allow HRA to them, at the world forme nates applicable to those him below world body he schools. Accordingly, they direct ms. that the Aided Schools be parid H.R.A.

Teachers 2. This order takes effect from

1st opnil. 2004 and millbe in force up to

31st worch 2004.

Concurrence of the Department.

(By order of the Governor)

S. SRININDSON Sery to Gout.

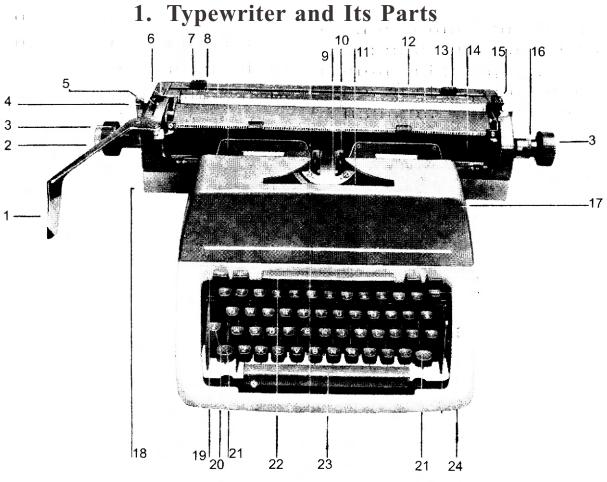
The Dr. y School Edn. Madras 600 006.

Cory to Finance Department. Forwarded/By order

8.0.

PART-C

I. MECHANISM



- 1. Handle / Line Space Lever
- 2. Plunger Knob
- 3. Thumb Wheel
- 4. Cylinder Release Lever
- 5. Line Space Lever
- 6. Carriage Release Lever Right
- 7. Left Hand Margin
- 8. Margin Scale
- 9. Type bar guide
- 10. Ribbon Carrier
- 11. Segment
- 12. Paper bail Roller

- 13. Right hand Margin
- 14. Cylinder (Platen Roller)
- 15. Carriage Release Roller Left
- 16. End of the Paper Indicator
- 17. Cowl Cover
- 18. Carriage
- 19. Margin Release Key
- 20. Shift Lock
- 21. Shift Key
- 22. Tabulator Bar
- 23. Space bar
- 24. Ribbon Colour Indicator

2. HISTORY OF THE TYPEWRITER:

The first typewriter was invented by Mr. HERRY MILL and was later developed by Sholes, Glidden, Soule and Yost. The first practical typewriter was however, introduced in 1873 and it was brought to India only in 1876.

Letters are type-written on the paper; hence this machine is called as typewriter. The typewriter is most commonly used and best of office machine. Typewriter is a device for writing with neater letters, for doing quicker and better work, for taking more copies and for reading the typed matter easily. There are noiseless, electric and electronic typewriters also.

KINDS OF TYPEWRITERS

There are two kinds of Typewriters:

- 1. Standard Typewriter
- 2. Portable Typewriter



Standard Typewriters are most commonly used for office Purpose.
Portable Typewriters are used for camp purpose and it can be easily taken during travel.

ADVANTAGES OF TYPEWRITER

- 1. Neatness and accuracy.
- 2.Less strain.
- 3. Greater speed [less time or time is saved].
- 4. Economy in stationary.
- 5. More number of copies can be taken.

IDENTIFICATION OF TYPEWRITER

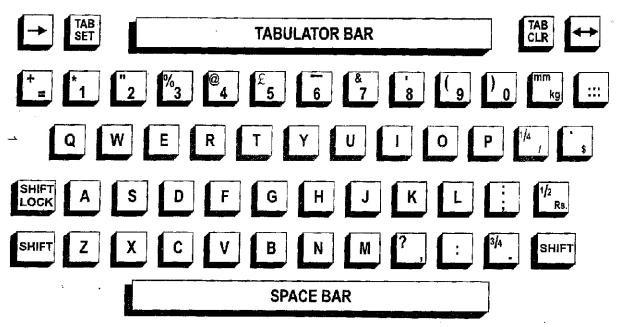
A Type writer can be identified by its make and serial number. Question:

- 1. Who invented the typewriter? And when?
- 2. How many kinds of typewriter are there?
- 3. What is the advantages of typewriter?
- 4. How can a typewriter be identified?
- 5. What is the use of standard model and portable model?

We can divide the typewriter in 3 main parts;

(1) KEYBOARD (2) CARRIAGE (3) MACHINE

3. KEY BOARD



The front portion of the machine where all keys are placed is called the 'key board'. There are two kinds of key board :(1) Universal standard Key Board and (2) Ideal Key Board.

All the modern typewriters have only the Universal Standard Key Board. Ideal Key Board is not in use now.

The Universal Standard Key Board is not arranged in the alphabetical order or 'abcd' order.

Frequently occurring letters like "e,r,I", are fixed in the middle of the key board to be operated by strong fingers.

According to the strength of the fingers, the other letters are arranged in the Key Board. So the Keys are not arranged in the alphabetical order.

There are 44 character keys in the Key Board, in all Typewriters. Each Key represents two letters (upper case and lower case characters)

There are 9 non- character Keys are also found in the Key Board. They are as follows:

- 1.Shift Keys
- 2.Shift lock
- 3. Margin Releaser

- 4.Back spacer
- 5.Tablulater
- 6. Ribbon position Indicator

- 7.Key releaser
- 8.Space Bar
- 9. Personal touch Indicator

When we operate the character Key, the carriage moves 1 degree towards left with making an impression.

When we operate non-character Key, the carriage moves 1 degree towards left but not making any impression.

Dead Key is a Key which gives an impression but not making the carriage to move. It is available only in Tamil type writer .

'N' and 'H' are called master Keys. These are used to check up the alignment.

'a' and ';' are called Guide Keys and the two little fingers are called Guide fingers. 'asdf' and ';lkj' are called Home Key.

NON-CHARACTER KEYS AND THEIR USES:

- **1. SHIFT KEYS:** There are two shift keys and one shift lock on the Key Board. Two shift Keys are placed on the both side of the Key Board. Shift Key is used to type the upper case character occasionally but Improper uses of shift key causes Bad Alignment. The two shift keys are for the use of easy manipulation.
- **2. SHIFT LOCK:** The shift lock is used to type the upper case character continuously and also to type headings, Boarders and under score in the display work. The shift lock Key can be released by using the shift Key.
- **3. MARGINAL RELEASER:** This is used for typing beyond the set margins. It is used to complete a word on the right side margin. It is also used on the left side for typing marginal notes paragraph numbers and etc.
- **4. BACK SPACER:** when we operate the back spacer, the carriage moves towards right by one degree by leaving blank space. this is used to fill up omissions and to make correction. To type combination letters etc.
- **5. TABULATOR:** It consist of
 - (1) Tabulator Bar
 - (2) Tabulator Set Key
 - (3) Tabulator Clear Key

There are as many number of tabulator stops in the tabulator rack as there are degrees in the carriage scale.

The tabulator bar is used to bring the carriage to any particular position quickly towards left.

The tabulator bar is used to type tabular are columnar statements, specifications and indent paragraphs. (giving five spaces for paragraphs)

6. RIBBON POSIION INDICATOR: Otherwise called ribbon colour indicator or ribbon switch or bi-chrome device lever, is fixed at the right side of the key board.

The up and down movement of the ribbon is controlled by the ribbon position indicator.

- **7. KEY RELEASER:** It is used for releasing the type bars when 'jam' occurs due to mishandling.
- **8. SPACE BAR:** It is located at the bottom of the key board and operated by the right thumb. If we use the space bar the carriage moves 1 degree towards right without making impression (1 degree blank space). Also It is used for leaving blank space between words.

SHIFT SYSTEMS: There are two kinds of shift system:

(a) Segment Shift System. (b) Carriage Shift System.

QUESTIONS:

- 1. How many Non-character Keys in their Typewriter?.
- 2. How many character Keys in the standard key board?
- 3. What is meant by a Dead Key?
- 4. What are the Guide Keys and Home Keys?
- 5. What are the Guide fingers?
- 6. What is the use of shift Keys and shift Lock?
- 7. What is the use of space Bar?
- 8. What is the use of Back Spacer?
- 9. How many kinds of shift system?
- 10. What is the use of margin Releaser?

4. CARRIAGE

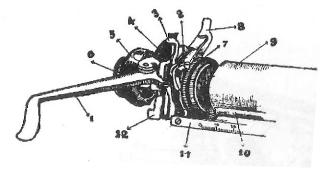
CARRIAGE:

Carriage is an important part in a typewriter. The carriage can move in both the direction. Carriage moves towards left whenever the space Bar, Tabulator bar or carriage Releaser Lever is used.

Different sizes of carriage can be fitted to the Standard Typewriter.

SIZES OF CARRIAGE:

- 1. Foolscap Size 80 degree to 100 degree
- 2. Draft Size 110 degree to 125 degree.
- 3. Brief Size130 degree to 140 degree.
- 4. Police Size 180 degree.
- 5. Manifest Size 240 degree.



Carriage and its parts

- 1. Line Space and Carriage Return Lever
- 2. Line Space Pawl
- 3. Line Space Knob
- 4. LineSpaceGauge (1,2,3)
- 5. Left Tumb Wheel
- 6. Variable Line Spacer
- 7. Cylinder Ratchet Wheel
- 8. Cylinder Ratchet Detent Release Lever
- 9. Cylinder otherwise called Planten
- 10. Paper Deflector
- 11. Frolnt Carriage Scale
- 12. Cylinder Lock

CYLINDER: It is also known as Platen. Cylinder is made of Rubber. The shape of the cylinder is round so as to get one impression at a time. It helps to feed the paper.

There are three kinds of Cylinders.

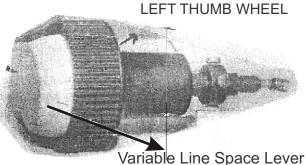
- 1. Soft Cylinder
- 2. Hard Cylinder
- 3. Medium Cylinder



The following points will prolong the life of the Cylinder:

- 1. By giving light touch.
- 2. By using backing sheet while typing.
- 3. No oil should be used for rubber parts. Use petrol or spirit and
- 4. Damaged or slippery cylinder is one of the causes for irregular line Spacing.
- 5. Punctuation marks should be typed gently in order to avoid injury to the Cylinder

THUMB WHEELS: Otherwise called as Cylinder Knobs. There are two thumb wheels / Cylinder knobs, each one on both the sides. It is used to insert and remove the paper from the cylinder. It is also used to rotate the Cylinder.



VARIABLE LINE SPACER:

- 1. To type on the ruled sheets.
- 2. To type Chemicals formula and Algebra sings.
- 3. To type component letter.
- 4. To Give fractional line space.

LINE SPACE LEVER: It is fitted on the left side of the carriage. It helps to return the carriage to the next writing line. So it is also called carriage return level

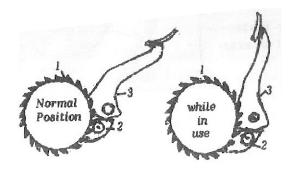
PAPER BAIL: It is fixed above the Cylinder and has two rollers. It holds the paper firmly at the top. It prevents the paper from flying in the air. It helps to type up to the very bottom of the paper.

CARD HOLDERS: It helps to hold the paper. To type on cards, envelops and we can type at the top of the paper and also to the bottom edges of the paper. It is also used to draw vertical ruling.

CYLINDER RATCHET WHEEL: It is also known as line space ratchet wheel. It is a toothed wheel fixed at the left end of the Cylinder. It helps to regulate the line spaces (viz. single line space, one and half, two, two and half & 3. Etc). Worn-out teeth of the Cylinder ratchet wheel is one of the causes for irregular line spacing.

DETENT ROLLER: It is a small steel roller pressing the tooth of the Cylinder. Cylinder rotates tooth by tooth to make space between lines. Worn-out detent roller

- 1. Cylinder Ratchet wheel
- 2. Detent Roller
- 3. Detent Release Lever



Is one of the causes for irregular line spacing.

DETENT RELEASE LEVER: By using this lever we can type mathematical symbols and chemical formulae while the current page is being typed

LINE SPACE PAWL: It is acting on the Cylinder ratchet wheel. It is attached to the line space lever.

LINE SPACE GAUGE: It indicates single, double and treble line spacing. So, It is also called Line space Indicator.

LINE SPACE KNOB and also called LINE SPACE ADJUSTING LEVER or LINE SPACE REGULATOR. It acts on the line space gauge and controls the line spacing.

FEED ROLLERS:

There are 2 sets of feed Rollers under the Cylinder. These are made of Rubber or Cork. When these feed rollers are in close contact with the Cylinder, they help to hold the paper firmly.



MARGINAL STOPS: There are two marginal stops. The are on the Marginal rack and moved to the desired degree in the marginal scale.

Left Marginal Stop:

- 1. Control the left margin.
- 2. Control the movement of the carriage towards Right.
- 3. Defective left marginal stop causes irregular left margin.

Right Marginal Stop:

- 1. Control the right margin.
- 2. Control the movement of the carriage towards Right.
- 3. It causes the ringing of the bell and the bell warns that the line of typing is coming to an end.
- 4. It locks the key levers.

TYPEWRITER SCALES: There are four scales in the typewriter.

- 1. Marginal scale or Paper Table Scale
- 2. Carriage Scale or Paper Bail Scale
- 3. Line finder Scale or Alignment Scale
- 4. Front Scale or Line Space Adjusting Scale

PAPER TABLE: It protects the paper from the oil parts.

RUBBER FEET: There are four rubber feet under the Typewriter for the protection of the machine.

METHOD OF TYPING: Two types of typing methods:

- 1. Sight Method: More strain, more mistakes -- Not advisable
- 2. Blind Method: Without seeing the key-board typing the matter. It increases the speed Advisable.

Typing with uniform touch and with equal interval between operation of character keys is called 'Rhythmic Touch'.

ERASER: The carriage should be brought to either end of the typewriter and correct the mistakes with an eraser, to avoid dust falling into the typewriter.

Questions:

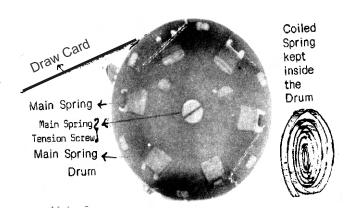
- 1. Mention the various size of the carriage?
- 2. How many kinds of Cylinder?
- 3. How many scales are there in the typewriter?
- 4. How would you preserve the life of Cylinder?
- 5. Give the other name of the Thumb knobs and mention its uses?
- 6. What is the use of Line Space Adjusting Leaver?
- 7. What is the use of Card Holder?
- 8. How many marginal stops and what are the uses?
- 9. What is the use of Variable Line Spacer?
- 10. What is the use of Feed Roller?
- 11. How many Method of typing?
- 12. How to erase the mistake while typing?
- 13. How many rubber feet in the typewriter? Mention its uses?
- 14. What is the use of Cylinder Ratchet Wheel?
- 15. What is the use of Detent Roller?

Main Spring: Main Spring Drum (Back side)

5. MACHINE

MAIN SPRING DRUM:

It is located at the left back side of the Typewriter. In this drum there is mainspring with tension. This mainspring tension is other wise called Carriage Tension which is the most important of the Typewriter. The carriage moves from right to left due to this



mainspring tension which is situated on the left side. In Urdu (language) Typewriters the mainspring is fixed in right side and so the carriage moves from left to right when we type. There is no mainspring in Electric Typewriters.

- 1. Too much main spring tension cause the jerky movement of the Carriage
- 2. Too low main spring tension cause the sluggish movement of the carriage.

There are other two main tensions in the Typewriter:

- 1. Key tension.
- 2. Touch Regulator tension.

DRAW CORD: It is also called as Draw Band or Draw Strap. One edge of the Draw Cord is hooked with the mainspring drum and the other edge is hooked with carriage end. Due to mainspring tension the connected draw cord pulls the carriage towards left. If the draw cord is cut off, the carriage will not move.

TYPE GUIDE or CENTRE GUIDE: It is also known as Common Centre Printing Point. It allows only one type bar to enter through and strike against the Cylinder while typing. It is cleaned with the Chamois Leather.

TYPE HEADS:

The following are the kinds of Type Heads/ Type faces:

- 1. Pica ... 10 Letters per inch
- 2. Elite ... 12 Letters per inch
- 3. Roman ... 09 Letters per inch
- 4. Gothic
- 5. Italics.
- 6. These typefaces should be cleaned with Petrol.

RIBBON MOVEMENTS: There are three Ribbon Movements of the carriage.

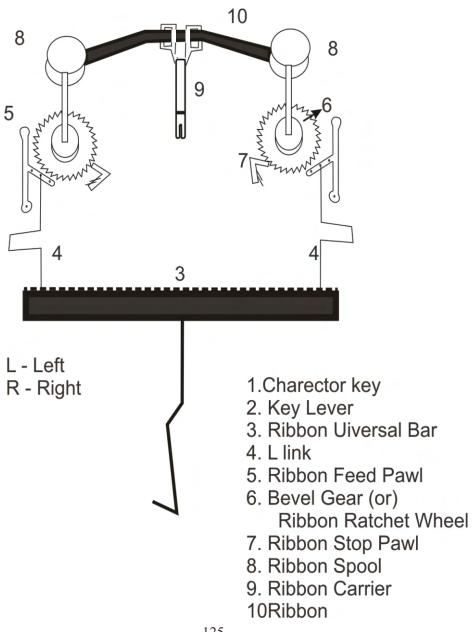
- 1.Up and down Movement
- 2.Lengthwise Movement
- 3. Automatic Reverse Movement

Up and down Movement is used to utilize the full Width of the Ribbon.

Lengthwise Movement is used to utilize the full length of the Ribbon.

Automatic Reverse Movement is used to utilize the Ribbon for many times.

RIBBON MOVEMENT OF THE CARRIAGE



RIBBON:

Ribbon take is made of cotton or silk, dipped in ink. It makes the impression visible on the paper.

There are two kinds of Ribbon:

- 1. Record Ribbon: It is used for ordinary purpose
- 2. Copying Ribbon: It is used for copying purpose

Double colour Ribbon is called 'Bi-chrome Ribbon'

To preserve the Ribbon from moisture or from dryness the typewriter should be covered soon after the work is over. Normal length of the ribbon is 8 yards and $\frac{1}{2}$ inch. Width.

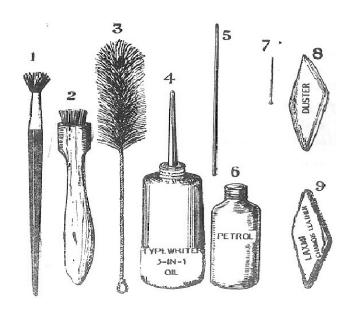
Questions:

- 1. Where is the Mainspring drum Located?
- 2. What is the use of Mainspring?
- 3. What is meant by Draw Cord? Mention it's uses?
- 4. What is the use of Type guide?
- 5. Mention the kinds of Type faces/Type heads?
- 6. How many kinds of Ribbon?
- 7. Name the three movements of the Ribbon?
- 8. How may colour types of Ribbon?
- 9. Which is called Bi-colour Ribbon?
- 10. What is the other name of Type Guide?

6. CLEANING AND OILING

CLEANING MATERIALS:

- 1. Long handled Brush.
- 2. Type Cleaning Brush.
- 3. Wire Brush.
- 4. Oil Can
- 5. Touch Oiler
- 6. Petrol or spirit
- 7. Hat Pin or sharp pin
- 8. Duster Cloth
- 9. Chamois Leather or Polishing Cloth
- 1. Long Handled Brush is used to clean the outer parts (External Parts)of the Typewriter. (e.g. Carriage, Type bars, type segment and etc.)
- 2. Type Cleaning Brush is also known as Hard Brush. It is used to clean the type faces by dipping with petrol.
- 3. Wire Brush is used to clean the inner parts (Interior parts) such as key leavers.
- 4. Oil can is used for oiling the outer parts. Only Typewriter Oil or three-in-one oil is used for oiling the Typewriter.
- 5. Touch Oiler is used for oiling the interior parts (the frictional parts)- (like Ribbon gears, pinion wheel, escapement wheel, dogs and etc.)
- 6. Petrol or Spirit is used for cleaning the rubber parts (Cylinder, feed rolls, type faces, type segment and etc.)
- 7. Hat Pin or Sharp Pin is used to clean the dirt and dust which is filled in the slots (letters like a,e,o,u,d,g,r,q, and etc.)
- 8. Duster Cloth is used for cleaning the base board, metal cover and for wipingout the excess of oil in the carriage way rods.
- 9. Chamois Leather or Polishing cloth is used to clean the nickel parts.



CARE TAKING OF TYPEWRITER:

- 1. Should clean the typewriter daily.
- 2. Should clean the typeface/type head fortnightly.
- 3. Should oil the typewriter monthly.
- 4. Overhauling Should be done once in a year.
- 5. Rubber parts, type faces should be cleaned with petrol.

UPKEEP AND MAINTENANCE:

- 1. Typewriter must be closed or covered when it is not in use.
- 2. It should be handled very carefully.
- 3. Hard touch must be avoided and light touch should be given

CARE SHOULD BE GIVEN WHILE PACKING:

- 1. Bring the carriage to the centre.
- 2. Two marginal stops should be brought to the centre (Close together)
- 3. Space bar must be tied with frame.
- 4. Shift Lock should be pressed
- 5. Cover the machine with metal cover or by good cloth.

7. ENVELOPE ADDRESSING

There are two methods of Envelope Addressing:

- 1. Block Method
- 2. Indent Method or Indentation Method

In Block Method of envelope addressing, all the lines of the receiver's address should be commenced from one and the same degree near the middle-centre of the envelope.

In Indent Method, the first line of the addressee's address is to be commenced near the middle centre of the envelope but the other lines should be commenced indenting or leaving five spaces after every one of the lines.

There are two types of envelopes:

- 1. Ordinary Envelopes or as Post Covers
- 2. Window envelope or Panel Envelope or Outlook Envelope.

TOP LEFT CONRNER TOP CENTRE TOP RIGHT CONER BOOK POST On I.G.S.Only, (For affixing stamps), Urgent, etc. QMS LEFT CENTRE Despatch Clerk's Signature MIDDLE CENTRE Receiver's Address **BOTTOM LEFT CORNER** Sender's addres in Block Method in single line spacing

ADVANTAGES:

- 1. Window envelopes generally used by Insurance Companies.
- 2. It saves labour and time.
- 3. Address need not be typed twice.
- 4. Risk of wrongly addressing in the Enveloping can be avoided
- 5. It can be visibly seen through glass paper of the window envelope.

PIN CODE NUMBER must be typed immediately following the name of the Town leaving a space after the first three digits. (e.g. Vellore 632 006)

Questions:

- 1. What are the materials required for cleaning and oiling?
- 2. What is meant by Window Envelope?
- 3. What are the advantages of Window Envelope?
- 4. How do you take care of your Typewriter?
- 5. How do you pack your machine during travel?
- 6. How many methods of Envelop addressing? What are they?
- 7. Where to type the 'To' address and 'From' address on the Envelope?

8. The following respectable terms are used either before commencing the name or the end of the name of the addressee:

... Master or Selvan, Mr. or Thiru. or Sri Male (unmarried) (Selvan B. Sughanthar Master A. Newton Female (unmarried) ... Miss or Selvi or Kumari (Miss Vijayanthi, Selvi. Raja Rajeswari Male (married) ... Mr. or Sri or Thiru, or at the end Esq. or Avl.(Thiru. K.Anandan, Amos Esq.) ... Mrs. or Smt. or Tmt . Female (married) (Tmt. Savithiri Balaji) Company(with personal name) ... M/s.or Messrs. (M/s.Spencer & Company) ...The (The Imperial Industry Ltd.,) Company(with impersonal name) Before the designation of officials ...The (The Manager) Governor or President of India ... H.E. (His Excellence) His Excellency the Government of Tamil Nadu. Madathipathis Head of Mutts Pope H.H. (His Holiness). His Holiness Kanchi Kamakodi Jaganatha Swamigal Christian Priest / Monks Rev . Father Arul Francis - do Nuns Rev. Sister. Daisy Rani Judges Mr. Justice Perumalswamy Chief Justice Mr. (name)...... Respectable authorities or persons Hon'ble Thiru. or Hon'ble sir - do ladies Hon'ble Tmt . or Hon'ble Smt . Physician Males Dr. Lionel Royston Physician - Female Dr. (Mrs.) or Dr.(Kumari) or Dr. (Tmt) Or Dr. (Smt) or Dr. (Selvi) Muslim Males Janab S.Hayath Basha Sahib Muslim Ladies Janaba M.A. Zehrajabeen Sahiba

9. MECHANISM QUESTION & ANSWERS

1. What is a typewriter?

Typewriter is a machine which produces impression like a print.

2. Who invented the Typewriter and when?

Sir. John Henry Mill invented the Typewriter in 1714. First Typewriter brought to India in 1876. Electronic Typewriters were introduced invented in 1936 by Muthiah of Ceylon. In 1958 Tamil Nadu Government approved a Standardized Tamil Key Board.

3. What are the various kinds of Typewriter?

There are two kinds of Typewriters. They are:

1. Standard Typewriter 2. Portable Typewriter

Standard Typewriters are used in Offices, Institutes and Schools.

Portable Typewriters are used for Camp purposes.

4. How can a typewriter be identified?

A Typewriter can be identified by its make (Model) and its serial number.

5. How many keys are there in the Keyboard?

There are 44 Character Keys and 11 Non-character keys in the Keyboard.

6. What is meant by a "Dead Key"?

The Dead Key causes impression but does not causes the carriage to move. It shows in the Language Typewriters.

7. What is Character Key? What is non character key?

The key which give impression while typing are called Character Keys. Keys which do not give impression are called non-character keys.

8. Mention the Non-Character keys?

(A) Space Bar, [Shift key], [c] Shift lock, [d] Back Spacer key,[e] Tabulator Bar, [f] Tabulator set key, [g] Tabulator clear key, [h] Margin Releaser, [i] Key Release key.

9. What is the use of Space Bar?

Space Bar is used to give one space between one word to another. The carriage moves to left when it is pressed. It is also used to type vertical borders in display work. Space Bar is fixed at the bottom of the key Board. This should be operated by right thumb.

10. What is the use of Back Space Key?

Back space key is used to type (to fill up) the omitted characters. The Carriage moves one space to right side when it is press.

11. What is the use of shift key and shift lock?

Shift key is used to Type upper case characters (Capital letters) occasionally and to release the Shift Lock. Shift lock is used to type upper case characters continuously.

12. What are the Guide Keys?

Guide keys are 'A' and ';'.

13. What are Home Keys? Why are they so called?

'asdf' and ';lkj' are called Home keys. Because the respective fingers should remain on these keys when not striking the other keys.

14. Which is the Master Key? What is the use of Master Key?

Keys with capital letters 'N' and 'H' are called Master keys. It is used to check the alignment of other types.

15. What are the various sizes of Typewriter?

[A] Foolscape 80 -100 degree [b] Brief size 140 degree [c] Policy 180degree [d] Manifest 240.

16. State the different kinds of Type faces?

Pica (10 letters for one inch)

Elite(12 letters for one inch)

Roman/Large pica (8 letters for one inch)

Madrid pica, Cubic pica, Cheque Writer, Italic, Script etc.

The Kind types that is most commonly used in pica and Elite.

17. What are the two kinds of shift systems?

a) Carriage shift system b) Segment shift system. Segment shift system is advantageous.

18. What are the uses of Type bar cushion or Rubber bed?

Type bar cushion is arranged under the type faces. It reduces the sound while typing. It prevents damage to the type bars.

19. What are the uses of variable Line spacer?

The Variable Line spacer is used to type on ruled papers, to type chemical formula and fractions, to type algebra sings and to type double total lines

20. What is the link between pinion wheel and the carriage?

The carriage Rack is the link between pinion wheel and the carriage.

21. When the Typewriter is to be taken to distant places, how should the marginal stops be placed?

The two marginal stops should be brought together to the centre place of the carriage. The carriage does not move either left or right side.

22. Why is the carriage always moving from right to left?

The mainspring which givers the tension to draw the carriage is fixed in; the left back side of the typewriter. So the carriage is moving always from right to left,

23. How many movements of ribbon are there?

There are three movements:

- a. Step by step movement of Lengthwise movement.
- b. Up and down movement or Breath wise movement.
- c. Automatic reversal movement.

24. What is meant by alignment?

Alignment is the forming of letters in a regular line with even space between them.

25. What happens if the Draw Cord snaps?

The Carriage suddenly dashes to the left side.

26. What is Mainspring? Describe the function?

Mainspring is a coiled spring. It is screwed tightly and fixed in the Mainspring Drum. Mainspring Drum is fixed in the left backside of the machine. It supplies the motive power to draw the carriage towards left through the draw cord.

27. How Many rubber feet are in the Typewriter? What are the uses of it?

There are four rubber feet in the typewriter.

Uses: 1. To reduce the sound and prevent the machine from moving while typing.

2. To prevent damage to the key levers.

28. How many methods followed in typing? What are they?

There are two methods of manipulation of the key board

They are 1)Touch method or Blind method

2) Sight method

29. What is meant by touch system?

Touch system means mentally locating the position of the keys by sense of touch without looking at the key board.

II. INTRODUCTION TO COMPUTER OPERATION:

Knowing About Computer

What is a Computer?

We use Typewriter Machines in our daily life. Typewriter Machines make our work easy. Machines save our time, energy and give us comfort. But a Computer is an advanced machine found from the basic of the typewriter.

Computer is also a Machine. It helps us to do our work with ease and makes our life easy. Computers are used in almost all walks of life.



Computers work on electricity. They need to be switched ON before we can use them. We switch ON rthe Computer using the ON/OFF Switch. When we switch ON the Computer, Electricity flows from the Power Plug through the Power Cable to the Computer. To check whether a Computer or its part is ON or OFF, we need to check the Power-ON I Light . If the light glows it is ON, Or else, It if OFF Almost all the Computer parts have Power ON Lights on them.

• Electricity is dangerous. Never touch Plugs or wires when the Computer is ON. You can get hurt if you are not careful.

Early History

2500 BC - The Abacus

1614 AD - Napier's Bones

1633 AD - The Slide Rule

1642 AD - The Rotating wheel Calculator

1822 AD - The Difference Engine

1890 AD - Generation of Computers

Generation of computers

First Generation - 1940 - 1956 : Vacuum Tubes Second Generation - 1956 - 1963 : Transistors

Third Generation - 1964 - 1971 : Integrated Circuits Fourth Generation - 1971 - Present : Microprocessors

Fifth Generation - Present and Beyond : Artificial Intelligence

Data, Information and Program

Computer is a tool for solving problems. Computers accept instructions and data, perform arithmetic and logical operations and produce information. Hence the instructions and data fed into the computer are concerted into information through processing.



Basically data is a collection of facts from which information may be derived. Data is defined as an un- processed Collection; fo raw facts in a manner suitable for communication, interpretation or processing.

Hence data are

Stored facts Inactive

Technology based

Gathered from various sources.;

On the other hand information; is a collection of facts from which conclusions may be drawn. Data that has been interested, translated or transformed to reveal the underlying meaning. This information can be represented in textual, numerical, graphic, Cartographic, narrative, or audiovisual forms.

Hence information is

Processed facts

Active

Business Based

Transformed from data

Algorithm is defined as a step-by-step procedure or formula for solving a problem i.e.a a set of instructions or procedures for solving a problem. It is also defined as a mathematical procedure that can usually be explicitly encoded in a set of computer language instruction that manipulate data.

A computer program (or set of programs) is designed to systematically solve a problem. For example, a problem to calculate the length of a straight line joining any two given points.

The programmer must decide the program requirement develop logic and write instructions for the computer in a programming language that the computer can translate into machine language and execute. Hence, problem solving is an act of defining a problem understanding the problem and arriving at workable solutions.

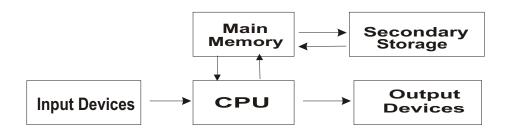
In other words, problem solving is the process of confronting a novel situation, formulating connection between the given facts identifying the goal of the problem and exploring possible methods for reaching the goal. It requires the programmer to coordinate previous experience and intuition in order to solve the problem.

Hardware and Software Introduction

A computer system has two major components, hardware and software. In practice, the term hardware refers to all the physical items associated with a computer system. Software is a set of instructions, which enables the hardware to perform a specific task

Computer Hardware

A computer is a machine that can be programmed to accept data (input), and process it into useful information (Output). It also stores data for later reuse (storage). The processing is performed by the hardware. The computer hardware responsible for computing are mainly classified as follows:



Input devices allows the user to enter the program and data and send it to the processing unit. The common input devices are keyboard, mouse and scanners.

The **Processor**, more formally known as the central processing unit (CPU), has the electronic circuitry that manipulate input data into the information as required. The central processing unit actually executes computer instructions.

Memory from which the CPU fetches the instructions and data is called main memory. It is also called as primary memory and is volatile in nature.

Output devices show th processed data - information - the result of processing. The devices are normally a monitor and printers.

Storage usually means secondary storage which stores data and programs. Here the data and programs are permanently stored for future use.