

Lab assessment on Application packages use:

1. Cover page (p)
2. Introduction to electronic word processing with example. (H)
3. List the features of electronic word processing. (H)
4. Define the term: (H)
 - (a) Hard page break (b) Soft Page break (c) document proof
 - (d) Header and footer (e) alignment (f) Indentation (g) Mail Merge
 - (h) TOC (i) word wrap (j) bullets and numbering (k) hard carriage return
 - (l) soft carriage return
5. Practical work out: (P)
 - (a) Documentation:
 - i. Study your personal computer system and prepare report on it describing basic computer system devices, peripheral specifications being used along with the brief notes on various software installed with their purpose of operation. (

Newspaper sample, CV design, Question paper, report writing, book writing

(b) Designing objects (to support multimedia)

Identity card (single person, multiple persons), calendar, Ludo structure
(autoshape use), Customization of photo for passport size

(c) Report preparation with data analysis

6. Introduction to electronic spreadsheet with example. (H)
7. List the features of spreadsheet. (H)
8. Define the term:
 - (a) Worksheet (b) workbook (c) cell (d) formula (e) chart (f) Database
 - (h) data filter (i) What-if analysis
9. Practical work out: (P)
 - (a) Simple worksheet preparation (b) chart preparation (c) database with queries
 - (d) what-if analysis (e) a research work out
10. Introduction to Power Point Presentation (H)
11. List its features. (H)
12. Practical work out:
 - (b) Slide preparation
13. Conclusion

PATHSHALA NEPAL FOUNDATION

PRE-UNI PROGRAM

Baneshwor, Kathmandu



Lab assessment report on
Use of Application Package

Submitted By:

Name:

Class:

Section:

Date:

Submitted To

Department of Computer Science

PATHSHALA NEPAL FOUNDATION

[Note: every printed document should contain header Containing Lab report on application packages and Footer containing Prepared by: Your name.]

Practical work out based on electronic word processing:

Based on documentation:

- Prepare a CV of a person following the guideline given below:
- Select paper type as letter or size of 8.5"x11".
- Set the top, bottom, right and left margin as 0.5" each.

Type the following text in MS-Word and format it as shown below:

- Set the font type "ARIAL" and font size for heading 14 and for normal text as 12.

Curriculum Vitae

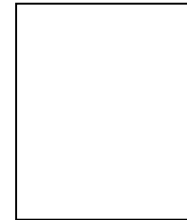
Name: : Ramesh Raj Rijal

Nationality : Nepalese

Date of Birth : January 2, 1975

Marital Status : Unmarried

Address : Ward No.4, Kanchanbari, Biratnagar, Nepal



Academic Qualification:

Bachelor's Degree : Tribhuwan University, Kathmandu
In Commerce

Pre-University : St.Xavier College, TU, Kathmandu
(1992-1994)

School Leaving Certificate : National High School, Kathmandu, Nepal.
(1991)

Computer Skill:

6 months course in Software Technology and System Management
from DSI, Kathmandu Centre.

- Make line spacing 1.5.
- Place a photo (one clipart) in the box provided.
- Change the name of the person to capital letters.
- Change the word unmarried with appropriate antonym.
- Supply the current date as header to right edge of the document.

- Prepare a news paper sample as given below following the guideline as stated below:

1. Set the margin to the document TOP, BOTTOM, LEFT, RIGHT, header and footer all as 0.5" each. Also select the paper size and define as custom with width 8.5" and height 11.5".
2. Select the font type as Arial with size 12.
3. Type the text for the first paragraph in full justified mode as given below.
4. Change the line space in the first paragraph into 1.5 lines (space as one and half line) after typing the text.
5. Supply the border to the first paragraph as 3-D border and also shade it with green color.

An Example of changing Linespace¹ and Shading² with fixed Border³ to the selected text:

An object in word processing implies us for either a picture, or chart or graph or a table prepared by using another application software and possible to bring in word document through insertion or import. Such objects in document help to present the information more systematic, descriptive and attractive too.

6. Supply the footnote to the word Linespace as "The Space between two textual lines", Similarly Shading with "The process of coating or filling the specified color to the selected text/picture/table" and Border with "The boundary line fixed to the selected text or picture or table"
7. Type the heading as "**A sample of newspaper presentation:**". Format the document with 3 columns from the description forward. Define space between column as 0.2" each.
8. Change the font size into 10 and type the text as it is as given below:

A sample of newspaper presentation:

FRIENDSHIP:

It is the attachment between two persons through pure heart and sacrifice. The true friendship always provides people a very good support to solve problems in their lives through the mutual help, sharing etc. It helps to form their lives in better aspects.



Figure 1: Hand in Hand with true spirit - a very good symbol of true friendship.

Unity among the people is not possible without the true means of friendship. Therefore, to get true friends in life means to be united in the society.

TABLE SORT:

It is an additional feature of TABLE use in the document. It implies us for the process of organizing data/ information in table either in ascending or descending order. In the table the data can be sorted column wise form only.

NAME	MARKS SCORED	
	Ch(Th)	CSc(Pr)
NAVIN	30	40
JYOTI	40	45
ASHISH	38	40
GAURAV	35	42
MAHIM	36	40
ZENAS	40	40

INSERTING EQUATION AS AN OBJECT:

The relation to solve quadratic equation are:

INSERTING DRAWING OBJECT:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$



An example of showing text effect:

- $(a+b)^2 = a^2 + 2ab + b^2$
- $H_2 + O_2 = 2H_2O$

9. In the above table sort the data in ascending order on the basis of Name of the student.
10. Save the document as PRAC.DOC inside the folder you have created.

¹ The Space between two textual lines

² The process of coating or filling the specified color to the selected text/picture/table

³ The boundary line fixed to the selected text or picture or table

- A formal question paper sample (of your terminal exam)



PATHSHALA NEPAL FOUNDATION

Baneswor, Kathmandu

FIRST Terminal Examination- 2078

Class XI

SET A

FM: 50

Subject: Computer Science (4271)

Time: 2 hrs

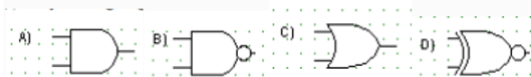
Candidates are required to give their answer in their own words as far as practicable. The figures indicate the full marks.

Group-A (MCQ)

A. Choose the correct answer:

1x9=9

1. How to represent Boolean function $F = (x \cdot y)'$ in logic gate?



2. An example of an Output device is a:

a) Scanner b) Plotter c) Tapes d) Software

3. Which memory stores BIOS (a firmware) in a computer system?

a) Hard Disk b) RAM c) Flash Drive d) ROM

4. ICs are made up of

a) Conductor b) insulator c) super conductor d) semi-conductor

5. Which unit is responsible for converting the data received from the user into computer understandable format?

a) Memory Unit b) ALU c) Input Unit d) Output Unit

6. Which one of the following is the smallest unit of data in computer?

a) Tb b) Mb c) Gb d) KB

7. Which one of the following is known as the workspace for the CPU to work?

a) ALU b) Hard disk c) RAM d) ROM

8. The 2's complement of $(10)_{10}$ is

a) 1010 b) 0101 c) 1011 d) 0110

9. The octal equivalent of $(0.5)_{10}$ will be

a) 0.5 b) 0.625 c) 0.25 d) 0.4

Group-B (Short Answer questions)

B. Answer the following questions: (attempt any five only)

5x5=25

- Discuss briefly about the capabilities and limitations of a computer system.
- What type of memory is CACHE? Why is CACHE memory introduced in modern computer system?
- What do you mean by generation of computer? Highlight the features of third generation computer.

OR

Discuss the features of electronic word processing with brief introduction of it.

13. Convert and calculate the following values as indicated:

1x5=5

a) $(25.4)_8 = (?)_2$ b) $(71.5)_{10} = (?)_8$ c) $(10101.101)_2 = (?)_{16}$

d) $(10101)_2 - (1011)_2$ e) $(101010)_2 \div (110)_2$

14. What is 9's complement? Subtract denary equivalent of $(100101)_2$ from the denary equivalent of $(175)_8$ using 9's complement.

OR

Define 2's complement. Subtract the binary equivalent of $(A2)_{16}$ from the binary equivalent of $(150)_8$ using 2's complement.

Group-C (Long Answer questions)

C. Answer the following questions: (attempt any two only)

2x8=16

15. Define Computer architecture. Draw a logic diagram highlighting each element of a typical computer system along with the appropriate connection for data flow, control flow and instruction flow and also describe the main functions of each of the elements.

16. Draw XOR and XNOR gates with truth table and logic gates. Also state and prove distributive law using truth table.

2+2+2+2=8

OR

- a) Define Bus. Draw the bus architecture of a micro computer system.

4

- b) Write short notes on: (any two)

2+2

I) Microprocessor II) Mobile computing III) Hard copy output device

*** ALL THE BEST ***

Go to Settings to activate this window

- Prepare a TOC for a complete document (e.g. book or report)
- Prepare invitation card as given alongside for the different personnel.

NAME	ORGANIZATION	CONTACT ADDRESS	DESIGNATION
RAM K.C.	ABC EDUCATION FOUNDATION	JAWALAKHEL, LALITPUR	CEO
SITA SHARMA	NEW MOON SCHOOL	TAUMADHI, BHAKTAPUR	PRINCIPAL
HARI KHADKA	GLOBAL EDUCATION FOUNDATION	BANESWOR, KATHMANDU	MANAGING DIRECTOR
NARESH SHRESTHA	LITTLE ANGLES' SCHOOL	LALITPUR	PRINCIPAL
SHYAM BYANJANKAR	ST. JOSEPH SECONDARY SCHOOL	LALITPUR	PRINCIPAL



Based on design of different objects:

- Prepare identity cards with barcode for the following students as illustrated below:

Regd no	Name	Grade	Section	Father's name	Address	Tel no
79001	RAM K.C.	XI	A	RAMESHWOR K.C.	Baneswor, Kathmandu	4455342
79002	HARI SHRESTHA	XI	A	GOPAL SHRESTHA	Gaushala, Kathmandu	4423423

Add any 10 different students detail yourself.

Barcode should be prepared for the regd no (registration number)


ID CARD

PATHSHALA

A private boarding secondary school
For meaningful education and meaningful life

SULOCHANA SHARMA
Class: XI -A

Father's Name : Subhash Sharma
Address : Baneswor, Kathmandu
Tel. No. : 4473132
Valid date : 2079-06-31



<https://pathshala.edu.np>

New Baneswor, Kathmandu
Nepal
pnfbaneswor@pathshala.edu.np

Bagdol, Lalitpur, Nepal
pnflalitpur@pathshala.edu.np
Contact: 01-5190010, 01-5191044



पाठशाला
साथक शिक्षा : साथक जीवन



SABINA K.C

Class: XI
Address: Chabahil, Kathmandu
Contact No: 9851102345
Guardian's Name: Ram K.C.



<https://pathshala.edu.np>

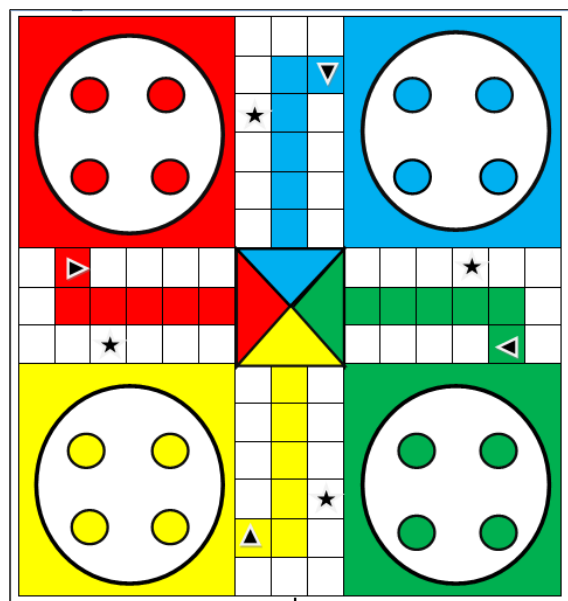
New Baneswor, Kathmandu
Nepal
pnfbaneswor@pathshala.edu.np

Bagdol, Lalitpur, Nepal
pnflalitpur@pathshala.edu.np
Contact: 01-5190010, 01-5191044

- Design a Ludo using drawing objects as shown alongside.
- Design a calendar of month falgun and Chaitra 2079. (Hint: table insertion and format)

e.g.

FALGUN 2074			FEB/MAR 2018				CHAITRA 2074	MAR/APR 2018		
	6 18	13 25	20 4	27 13	SUNDAY		4 18	11 25	18 1	25 8
	7 19	14 26	21 5	28 12	MONDAY		5 19	12 26	19 2	26 9
1 13	8 20	15 27	22 6	29 13	TUESDAY		6 20	13 27	20 3	27 10
2 14	9 21	16 28	23 7	30 14	WEDNESDAY		7 21	14 28	21 4	28 11
3 15	10 22	17 1	24 8		THURSDAY	1 15	8 22	15 29	22 5	29 12
4 16	11 23	18 2	25 9		FRIDAY	2 16	9 23	16 30	23 6	
5 17	12 24	19 3	26 10		SATURDAY	3 17	10 24	17 31	24 7	



Practical work out (spreadsheet)

1. Create a worksheet as shown given below:

	A	B	C	D	E	F	G	H
1	A-1 OFFICE SYSTEM							
2	RAM SHAH PATH, KATHMANDU							
3	PROJECTION OF INCOME IN DIFFERENT FIELDS (IN US\$)							
4	S.No	YEAR	CONSULTANT	HARDWARE SALES	SOFTWARE SALES	MAINTENANCE	TOTAL	
5	1.	1995	400	2000	5000	500	?	
6	2.	1997	?	?	?	?	?	
7	3.	1999	?	?	?	?	?	
8	4.	2001	?	?	?	?	?	
	5.	2003	?	?	?	?	?	
	6.	2005	?	?	?	?	?	
	7.	2007	?	?	?	?	?	
9	8.	2009	?	?	?	?	?	
10		TOTAL:	??	??	??	??	???	
11		Maximum	?	?	?	?	?	
12		Minimum	?	?	?	?	?	
13		Average	?	?	?	?	?	

(b) From the evaluation of Income projection for every two years, it was found that the income of the office from the descriptions given below changed as follows:

- Consultant – 5% more than the previous income
 - Hardware sales – 10% more than the previous income
 - Software sales – 5% less than the previous income
 - Maintenance – 5% more than the previous income
- Calculate the income in each field accordingly

(c) Format all amount with currency \$.

(d) Calculate the year wise total income.

(e) Also calculate field wise total and the grand total income as stated above.

(f) Find out the Maximum, minimum and average sales of each type of software separately as specified above.

(g) Prepare a line graph to analyse yearly income in each field with the supply of suitable title, legend.

(h) Extract all the records of different years having software sales greater than or equal to 4000.

(i) Save the worksheet as income.

2. Prepare a worksheet as given below carrying out the necessary work out as stated below:

	A	B	C	D	E	F	G	H
1	WHO, UN							
2	NEPAL CHAPTER							
3	ANALYSIS ON DISEASES							
4	S.N.	Year	Diabetes	Diarrhea	Cancer	Hypertension	Total	
5	1.	1995	40000	60000	10000	50000		
6	2.	1997	?	?	?	?	?	
7	3.	1999	?	?	?	?	?	
8	4.	2001	?	?	?	?	?	
9	5.	2003	?	?	?	?	?	
10	6.	2005	?	?	?	?	?	
11	7.	2007	?	?	?	?	?	
12	8.	2009	?	?	?	?	?	
13								
14		Total	?	?	?	?	?	
15		Maximum	?	?	?	?	?	
17		Minimum	?	?	?	?	?	
18		Average	?	?	?	?	?	

From the data being recorded for every two years, it was found that the diseases recorded have been changed as follows:

- Diabetes – 5% more than every previous two years
- Diarrhea – upto 2005, 3% more than the every previous two years and from 2007 decreased by 2%
- Cancer – 2.5% more than every previous two years
- Hypertension – 2% more than every previous two years
- Calculate the number of patients with the respective diseases accordingly.
- Calculate total, maximum, minimum, average patients of each type.
- Format all the data with thousand separators without any decimal places.
- Prepare column graph to analyse patients of different types based on different years with supply of suitable titles, and legend.
- Prepare column graph to analyse number of patients in different years based on type of disease supply of suitable titles, and legend..
- Extract the number of sick people with disease DIABETES more than or equal to 50000 and HYPERTENSION more than or equal to 56000 with the corresponding year.
- Save the worksheet as disease analysis.

3. Prepare the worksheet as given below:

	A	B	C	D	E	F	G	H		
1	SALARY CHART DESCRIPTION OF LOTUS CORP. Sanepa, Lalitpur									
2										
3										
4	S.No	name	Designation	Department	Basic salary	Allowance	Gross	PF	TAX	NET
5	1.	Lochan Subedi	MANAGER	ADM		?	?	?	?	?
6	2.	Naresh Bhattarai	OFFICER	ACCOUNT		?	?	?	?	?
7	3.	Manav Pandey	ASSISTANT	ADM		?	?	?	?	?
8	4.	Mandira K.C.	SECRETARY	ACCOUNT		?	?	?	?	?
9	5.	Salim Javed	MESSANGER	ADM		?	?	?	?	?
10	6.	Salina Manandhar	OPERATOR	EDP						
11	7.	Manoj Bajracharya	ASSISTANT	MARKETING						
12	8.	Raju Upadhya	ASSISTANT	MARKETING						
13	9.	Sonam Gyatso	ASSISTANT	ACCOUNT						
14	10.	Tripti Tuladhar	ASSISTANT	EDP						
15	11.	Krishna Chipalu	OPERATOR	EDP						
16	12.	Santosh Shrestha	DIRECTOR	ADM						
17		GRAND TOTAL:								??
18		Maximum					?			?
19		Minimum					?			?
20		Average					?			?

- (b) Insert two records of “Ganesh Shakya” and “Sudeep Rai” who are working in MARKETING and EDP departments as OFFICERS respectively between the records of “Manav Pandey” and “Mandira K.C.”.
- (c) Also add some records
- (d) Calculate Basic salary as follows:
 Director=>65000, Manager=>55000, Officer=>45000, Operator->40000, Secretary=>40000, Assistant=>35000, Messenger=>20000
- (e) Calculate Allowance as 15% of Basic Salary to all employees. Also calculate GROSS AMOUNT, PF, TAX and NET AS follows:
 Gross=BSAL + ALLOWANCE
 PF = 10 % OF Gross
 TAX = If Gross >=10000, tax=10% of Gross otherwise no tax.
 NET = Gross – PF – TAX
- (f) Find out the Maximum, Minimum and Average of Gross and NET separately.
- (g) Format all amount with default currency symbol.
- (h) Extract all the employees records who are drawing Gross salary more than or equal to 50000.
- (i) Save the worksheet as salary sheet.

4.The following case is one of the human daily life oriented problems related to a business organization. It's concerned with the preparation of pay-roll sheet of Blue Star business house.

Bluestar Business Company has got the following manpower. Prepare a monthly salary chart specifying all the details as stated below, following all the criteria and strategies as specified:

	A	B	C	D	E	F	G	H	I	J	K	L
1	BLUESTAR BUSINESS HOUSE											
2	RAMSHAH PATH, KATHMANDU											
3	PAY-ROLL DESCRIPTION											
4	S. N.	NAME	DEPARTMENT	POST	JOB STATUS	BASIC SALARY	Housing ALLOWANCE	Special ALLOWANCE	GROSS	PF	TAX	NET
5	1.	Asim Thapa	Marketing	Manager	P							
6	2.	Leena Shakya	Accounting	Sr.Officer	P							
7	3.	Deepak Newa	EDP	Supervisor	P							
8	4.	Bijeta Khatri Cheetri	Administration	Assistant	P							
9	5.	Binamra Hada	Marketing	Officer	T							
10	6.	Gopal Pandey	Accounting	Assistant	P							
11	7.	Jeevan Tuladhar	Marketing	Sr. Officer	T							
12	8.	Navin Shrestha	Marketing	Assistant	T							
13	9.	Kabita Amatya	Accounting	Assistant	P							
14	10.	Krishna Chipalu	EDP	Operator	T							
15	11.	Santosh Shrestha	Administration	Director	T							
16	12.	Rajesh Khen Dhau	Administration	Officer	P							
17	13.	Sweta Shakya	EDP	Operator	T							
18	14.	Salina Manandhar	EDP	Operator	P							
19	15.	Manoj Bajracharya	Marketing	Assistant	P							
20	16.	Raju Upadhya	Marketing	Assistant	T							
21	17.	Sonam Gyatso	Accounting	Assistant	T							
22	18.	Tripti Tuladhar	Administration	Assistant	P							

23	19.	Arun Gopal Shrestha	Administration	Assistant	P							
24	20.	Ram Bdr. Singh	Marketing	Peon	P							
25	21.	Kalu Rana Magar	Administration	Peon	P							
26	22.	Shailu Balambu	Administration	Secretary	P							
		GRAND TOTAL								?	?	?

- The BASIC SALARY was fixed for the personnel as follows:
DIRECTOR → 50000. MANAGER → 40000, Sr.Officer → 35000, Officer → 32000, Secretary→25000, Assistant→ 20000, Peon 15000, Supervisor→30000, Operator→25000
- The employees, who are Permanent (Job status →P), are given both the housing allowance and special allowance as 10% and 15% of their BASIC SALARY respectively, where as the employees, who are Temporary (Job status →T), are given only Dearness Allowance as facility and that of 20% of their BASIC SALARY.
- Calculate Gross (Gross salary) as sum of (BASIC SALARY, HOUSING ALLOWANCE & special ALLOWANCE).
- Calculate P.F. (Provident Fund) as 10% of BASIC SALARY only for the Permanent staffs.
- Calculate TAX amount following the given hint:
 - If the staff is Permanently appointed and drawing GROSS SALARY \geq 40000, TAX amount = 10% of the GROSS
 - If the staff is Permanent and drawing GROSS SALARY $<$ 40000 but more than or 20000, Tax amount = 5% of the GROSS.
 - If the staff is Permanent and drawing GROSS SALARY $<$ 20000, TAX AMOUNT=0
 - If the staff is Temporary and receiving GROSS SALARY \geq 50000, TAX amount=15% of the GROSS.
 - If the staff is Temporary and receiving GROSS SALARY $<$ 50000 but more than equal to 25000, TAX amount=6% of the GROSS otherwise no tax.
- Calculate NET (Net salary) as (GROSS – P.F. – TAX)
- Calculate the Grand total of TAX amount, P.F. amount and Net amount. Similarly, also find out the maximum, minimum value in Tax amount, P.F. amount and Net amount just below the grand total with the label specification.
- Format the entire amount with thousand separator.
- Sort the data on the basis of DEPARTMENT in ascending order.
- Filter out all the permanent employees' records belonged to the DEPARTMENT "Administration" somewhere in the current worksheet.
- Prepare a pie-chart to analyze the NET SALARY received by each of the permanent employees of Administration Department on the basis of the filtered records.

Problems based on what-if analysis:

- Calculate the interest and amount for the principle Rs. 500000 invested for 2 years time at the rate of interest 7.5% per year.

Also analyse the interest and amount for the same principle and time period by varying the rate of interest as follows:

2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12 so on

- Analyse the amount for the principle Rs 600000 by varying the time period and rate of interest for the investment as follows:

Time period in year : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

Rate of interest in % per yr: 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12