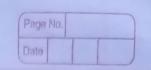
	Page No.
	Experiment No -3 (Date)
	11 2 1 1211 1 1 ade
	Name: Ujiwal Lade
<b>/</b>	Roll no : 06
	DIV -B Clays TE
1/2	
	Aim! Study of connectivity and configuration
	of Rasberry-Pi   Beagle board with basic
	peripherals LED's understanding GPIDand
	its use in program.
1 . 1	Theory
	Connectivity and Configuration of Raypherny
	-P; Guides to Configure Raypheony Pi
	i seriore i contrata prima de la reconsista de la reconsi
	a fini Ta Parkini Pi Garation tool
	rospi-coofig: The Rosphory Pi Configuration tool
	(rosp-config) in Rosphian allowing you to
	access and easily proble features such as the
	comera and to change your specific setting
	The same of the sa
2	Config. txt : Paspherry Pi-configuration fix
	The Description of the Control of the State of the Control of the
3.	wireless: configuring your Pito connect to a
- i	coincless network using the Ralpherry PiB9
	Pizemos in built wireless connectivity or a
	USB wiseless dongle.
	USB WAZIESS CONGLET
6	a 1 1 1 Carllauman man
7.	Wheless Access Point: Configuring your
	Raspherry Pi-3 or a wiseless acces point vaincy
	the Rosberry PIB and A zero W's In built.
	wireless connectivity or aLB wireless dongle-

Page No	
Date	

- 5. Audio Config i Switch your auden ofp between Homt and 35mm Jack.
- 6. Camera config! Installation and setting up the Rasperry Pi comera board.
- De external Storage and on a Rasperrypi
- 8. Localisation: Setting up your Pi to work in your local language / time Tone
- 9. Default Pin Configuration : Sichanging the default pin states.

  10. Device frees confi Device free Greenlays

  4 parameters
- Il Kernal Command line ! The linu Kernel accepts a command line of parameters during boot. This command line is defined in a fix in the boot partition called endline tot. It can be edited using any text edditer Sudo puno ( boot | and condline, tet
- 12 12 VART Configuration! The Socs used on the Rasberry Ris have furo built in varis a PLOII and a mini VART They are implemented using different how blocks so trey have slightly different characteristics Both



while connecting RS 032 or other system that stille different voltage levels between proporals

13. Screen saver: It using Rospberry pie Solely on the console (no desktop GoI)

you need to set the console blooking. The

current Setting can be displayed oxing

cat | sys | module ( kernal porameter)

console blook

To set permonatly on the kernal and line Sydonomoro | boot | condline. txt.

Connectivity of Rospberry Pi

( begred land us "

Connectivity is truly superb for they device. There are two 20 ports that can be used to topok up peripherals or adapters and this was be used on be expended with powered hub All the ports are found on the top of the board, while the SD cond reader of located at the bottom.

GPO Mode!

The GPO O Board option specifies that you are referring to the pirs by the numbers of the pin the plug - i.e the numbers are printed on the board (e.g pi) and the me middle of the diagrams below the GPIOBCN option means that you are referring to the pins by the "Broadcomm SOC channel"

Page	No.	
Date		

number these one the numbers after GPIN The model B+ Pizero PizB& PiBB uses the name numbering as the model Bri and add's new pins (boord numbers) 274

Building a Circuit

To Set ping conte!

GPIO. Setup (23, GPIO, In); Pull cop-down

- GPIO. PUD - Power

GPIO. Setup (24, GPIO, In pull-up - down= GPIO

PUB - UP)

The coede looks like

Import PPIGPED BOD GPDB

GPED. Set mode CGPED. BCN)

GPED. Set up (23. GPED. TH, PUIL-UP-down

= GPED. PUD \_ Down)

GPED. Set up (24. GPED. IN, PUIL + UP-down

\_ GPED. PUD - UP)

While pare!

If (GPLO, input (23) ==1);

print (" Button I Pressed")

if (GPLO, input (24) == 0);

print ("Button R Pressed")

GPLO, Cleon UP();

Registers: Always use resistons to connect LED's up to GPID pins. Potting resistensin Circuit with Engure that small Current (about 66mA) will flow & Pi will not be domaged.

Page N	No.	
Date		

Jumper Wire! Used on board boards to 'Jimp'
from an connection to another

- Ones you will be using in this circult have
different connector on each end.

- The end with the 'Pin' will go into bread
board

- Me eend with the piece of plotte with a
hole in it will go on to onto the Pis 6Pto pins.

Conclusion

Thus—we have studied connectivity and configuration of Rayberry Pi and also we of GPTO.