

Syllabus for FYJC (Science)

SUBJECT: ENGLISH

Section -1 (Prose)

- 1.1 Being Neighbourly
- 1.2 On The Summit: We Reach The Top
- 1.3 The Call of the Soil
- 1.4 Pillars of Democracy
- 1.5 Mrs. Adis
- 1.6 Tiger Hills

Section-2 (Poetry)

- 2.1 Cherry Tree
- 2.2 The Sower
- 2.3 There is Another Sky
- 2.4 Upon the Westminster Bridge
- 2.5 Nose Verses Eyes
- 2.6 The Planners

Section 3 (Writing Skill)

- 3.1 Expansion of Ideas
- 3.2 Blog –Writing
- 3.3 E- Mail Writing
- 3.4 Interview
- 3.5 Film –Review
- 3.6 The Art of Compering

Section-4 (Genre- Drama)

- 4.1 History of English Drama
- 4.2 The Rising of Moon
- 4.3 Extracts of Drama
 - (A) Midsummer Nights Dream
 - (B) An Enemy of the People.

विषय :मराठी

विभाग १

पाठ, कविता

- स्वतंत्रतेचें स्तोत्र (काव्यानंद)..... स्वातंत्र्यवीर वि.दा. सावरकर
१. मामू शिवाजी सावंत
२. प्राणसई (कविता)..... इंदिरा संत
३. अशी पुस्तकं..... डॉ. निर्मलकुमार फडकुले
४. झाडांच्या मनात जाऊ (कविता) नलेश पाटील
५. परिमळ..... प्रल्हाद केशव अत्रे
६. दवांत आलिस भल्या पहाटी (कविता)..... बा.सी. मर्डेकर
७. 'माणूस' बांधूया ! प्रवीण दवणे

विभाग - २

पाठ, कविता

८. ऐसीं अक्षरें रसिकें (संतकाव्य) संत जानेश्वर
९. वहिर्नीचा 'सुसाट' सल्ला शोभा बोंद्रे
१०. शब्द (कविता) यशवंत मनोहर
११. वाङ्.मयीन लेण्याचा शिल्पकार सुमती देवस्थळे
१२. पैजण (कविता) नीलम माणगावे

कवितेचे रसग्रहण

विभाग - ३

साहित्यप्रकार

नाटक- साहित्यप्रकार-परिचय

१. हसवाफसवी..... दिलीप प्रभावळकर
२. ध्यानीमनी..... प्रशांत दळवी
३. सुंदर मी होणार..... पु. ल. देशपांडे

विभाग - ४

उपयोजित मराठी

१. सूत्रसंचालन
२. मुद्रितशोधन
३. अनुवाद
४. अनुदिनी (ब्लॉग) लेखन
५. रेडिओजॉकी

विभाग - ५

व्याकरण

१. शब्दशक्ती
२. काव्यगुण
३. वाक्यसंश्लेषण
४. काळ
५. शब्दभेद

विषय :हिंदी

- 1)प्रेरणा
- २)लघु कथाएं
अ) उषा की दीपावली
आ) मुस्कराती चोट
- ३)15 अगस्त
- ४)मेरा भला करने वालों से बचाए
- ५)मध्ययुगीन काव्य
भक्ति महिमा
बाल लीला
- ६)कलम का सिपाही
- ७)स्वागत है
- ८)तत्सत
- ९)गजलें

अ) दोस्ती

आ) मौजूद

१०) महत्वाकांक्षा और लोभ

११) भारती का सपूत

१२) सहर्ष स्वीकारा है

१३) नुक्कड़ नाटक

अ) मौसम

आ) अनमोल जिंदगी

व्यवहारिक हिंदी

१४) हिंदी में उज्ज्वल भविष्य की संभावनाएं

१५) समाचार जन से जनहित तक

१६) रेडियो जॉकी

१७) ई अध्ययन नई दृष्टि

परिशिष्ट

मुहावरे

भावार्थ

रेडियो जॉकी और रेडियो संहिता

परिभाषिक शब्द

हिंदी साहित्यकारों की मूल नाम उनके विशेष नाम

SUBJECT: MATHEMATICS

Part 1

1. Angle and its measurement
2. Trigonometry –I
3. Trigonometry –II
4. Determinants and Matrices
5. Straight Line
6. Circle
7. Conic Sections
8. Measures of Dispersion
9. Probability

Part 2

1. Complex Numbers
2. Sequences and Series
3. Permutations and Combination
4. Methods of Induction and Binomial Theorem
5. Sets and Relations
6. Functions
7. Limits
8. Continuity
9. Differentiation

SUBJECT: PHYSICS

NAME OF CHAPTERS

1. UNITS AND MEASUREMENTS
2. MATHEMATICAL METHODS
3. MOTION IN A PLANE
4. LAWS OF MOTION
5. GRAVITATION
6. MECHANICAL PROPERTIES OF SOLIDS
7. THERMAL PROPERTIES OF MATTER
8. SOUND
9. OPTICS
10. ELECTROSTATICS
11. ELECTRIC CURRENT THROUGH CONDUCTORS
12. MAGNETISM
13. ELECTROMAGNETIC WAVES AND COMMUNICATION SYSTEM
14. SEMICONDUCTORS

PRACTICALS

NAME OF EXPERIMENTS

1. USE OF VERNIER CALIPERS
2. USE OF MICROMETER SCREW GUAGE
3. USE OF SPHEROMETER
4. COEFFICIENT OF STATIC FRICTION
5. TRAVELLING MICROSCOPE
6. FOCAL LENGTH OF CONVEXLENS BY DISPLACEMENT METHOD
7. REFRACTIVE INDEX OF LIQUID BY CONCAVE MIRROR
8. THERMISTOR
9. DIODE CHARACTERISTICS

LIST OF ACTIVITIES

1. REFRACTIVE INDEX OF CONVEX LENS
2. ROLLING FRICTION
3. COEFFICIENT OF RESTITUTION
4. REFRACTIVE INDEX OF GLASS BY TOTAL INTERNAL REFLECTION
5. STUDY OF RESISTANCE USING COLOUR CODE
6. STUDY OF POTENTIAL DIVIDER CIRCUIT

SUBJECT: CHEMISTRY

NAME OF CHAPTERS

- 1) Some Basic Concepts of Chemistry
- 2) Introduction to Analytical Chemistry
- 3) Some Analytical Techniques
- 4) Structure of Atom
- 5) Chemical Bonding
- 6) Redox Reaction
- 7) Modern Periodic Table
- 8) Elements of Group 1 and 2
- 9) Elements of Group 13,14 and 15
- 10) States of Matter
- 11) Adsorption and Colloids
- 12) Chemical Equilibrium
- 13) Nuclear Chemistry and Radioactivity
- 14) Basic Principles of Organic Chemistry
- 15) Hydrocarbons
- 16) Chemistry in Everyday Life

PRACTICALS

NAME OF EXPERIMENTS

- 1] Introduction to apparatus used in chemistry laboratory.
- 2] Study of burner, operating pinch cock/stopcock and handling of concentrated acid containers.

Quantitative Analysis [Long experiments]

- 3] To determine concentration in terms of molarity of NaOH by titrating it against (0.05 M) standard solution of Oxalic acid.
- 4] To determine concentration in terms of molarity of HCl by titrating it against (0.05 M) standard solution of sodium carbonate.

Qualitative Analysis [Long experiment](Any 4 water soluble salt)

- 5] Detection of one basic radical(cation) and one acidic radical(anion) qualitatively from given inorganic salt.

Surface Chemistry [Short experiment] (Any 2)

- 6] To prepare colloidal solution of starch.
- 7] To prepare colloidal solution of ferric hydroxide $[\text{Fe}(\text{OH})_3]$.
- 8] Study of role of emulsifying agent in stabilizing the emulsion of an oil.

Chemical Equilibrium [Short Experiments] (Any 1)

- 9] Study the shift in equilibrium position between ferric ions and thiocyanate ions by increasing the concentration of either of the ions.
- 10] Study the shift in equilibrium position between $[\text{Co}(\text{H}_2\text{O})_6]^{2+}$ ions and chloride ions by increasing the concentration of either of the ions.

Experiment based on pH change [Short Experiments] (Any 1)

- 11] Study the pH change in the titration of a strong base (0.1 M NaOH) and strong acid (0.1 M HCl) using universal indicator.
- 12] Determination of the pH and nature of solution of some salts using pH paper or universal indicator.

$[\text{NH}_4\text{Cl}, \text{Na}_2\text{CO}_3, \text{CH}_3\text{COONa}, \text{NaCl}, \text{unknown salts}]$

Characterization and purification of chemical substances [Short Experiments]

- 13] Determination of melting point of given organic solid.
- 14] Determination of boiling point of given organic liquid.
- 15] Crystallisation of an impure sample of copper sulfate or benzoic acid.

LIST OF ACTIVITIES

- 1] Preparation of 100 ml of 0.1 M standard oxalic acid solution.
- 2] Determination of pH of different fruit juices by using pH paper or universal indicator.
- 3] Calibration of pipette by burette.
- 4] To obtain pure water from impure water containing ink by simple distillation method.
- 5] Checking the adulteration in given food materials.
- 6] To determine pH of HCl solution of various concentrations by using pH paper or universal indicator.
- 7] To determine pH of NaOH solution of various concentrations by using pH paper or universal indicator.

SUBJECT: BIOLOGY

NAME OF CHAPTERS

1. Living World.
2. Systematics of Living Organisms.
3. Kingdom Plantae.
4. Kingdom Animalia.
5. Cell Structure and Organization.
6. Biomolecules.
7. Cell Division.
8. Plant Tissue and Anatomy.
9. Morphology of Flowering Plants.
10. Animal Tissue.
11. Study of Animal Type: Cockroach.
12. Photosynthesis.
13. Respiration and Energy Transfer.
14. Human Nutrition.
15. Excretion and Osmoregulation.
16. Skeleton and Movement.

PRACTICALS

NAME OF EXPERIMENTS

Part A- List of the Experiments to be performed.

1. Study of part of microscope.
2. To observe mitochondria in onion peel cells.
3. Biochemical tests.
4. Preparation of stained temporary mount of onion root tip to study mitosis.
5. To prepare a temporary stained slides of dicot and monocot specimens.
6. Study of plant family (vegetative and floral characteristics).
7. To prepare a temporary stained slide of squamous epithelium.
8. To study effect of light on rate of photosynthesis.
9. To study human dentition.
10. To study effect of enzymes on starch, egg albumin and fats.
11. To test urine sample for normal and abnormal constituents.

Part B – Demonstration Experiments (spotting).

1. Study of plant specimens and identification.
2. Study of animal specimens and identification.
3. Study of permanent slides of T.S. of sunflower and maize root.
4. Study of modification of root, stem and leaves.
5. Study of identification of inflorescence.
6. Study of animal tissues
7. Demonstration of aerobic respiration by Ganong's respirometer.
8. Demonstration of anaerobic respiration.
9. To study external morphology and digestive system of cockroach.
10. To study mouth parts, gizzard and trachea of cockroach.
11. To study histology of digestive system of mammal.
12. Study of human skeleton (axial & appendicular).

SUBJECT: COMPUTER SCIENCE

NAME OF CHAPTERS

CS-I

1. Number Systems
2. Program Analysis
3. Introduction to C++
4. Visual Basic
5. Networking & Internet

CS-II

1. Electronic Components
2. Logic Gates & Sequential Circuits
3. Functional Hardware Parts of PC
4. Peripheral Devices

PRACTICALS

CS-I

1	Study of Windows 98
2	C++ Programs
3	Using Structures
4	C++ Programs using Operators
5	C++ Programs using Control Structures
6	C++ Programs using Functions
7	VB Programs Study of tools & controls
8	VB Programs use of buttons, label, textbox, picture box & action button
9	VB Program Simple Addition / Subtraction Calculator
10	Study of Internet
11	Study of FTP

CS-II

1	Study of Basic Gates
2	Study of Universal Blocks using IC
3	Study of Half Adder
4	Study of full Adder
5	Study of Square wave Generator
6	Study of Diode Matrix ROM
7	Study of Decoder
8	Study of Multiplexer
9	Study of Input Devices
10	Study of Scanner & Printer
11	Study of Multimedia

SUBJECT: INFORMATION TECHNOLOGY (97)

1. Basics of Information Technology
2. Introduction to DBMS
3. Impressive Web Designing
4. Cyber Law

PRACTICALS

Skill Set 1 - Daily Computing

LibreOffice :

SOP 1 : Create a Resume

The resume should contain the following :

- Title at the center with applicable font and size.
- It should contain points such as Name, Address, Mobile Number, Date of Birth, Nationality, Caste, Category, Hobbies etc. Add some extra points.
- For educational qualifications a student should insert a table.
- At the end students should write a few lines about their aim.

SOP 2: By using Mail Merge send an invitation for your birthday party.

- Use mail merge feature.
- Send invitation to at least 5 friends.

SOP 3 : Create a mark list. The mark list should display :

- Fields as Name, Math, Physics, Chemistry, Biology, Total, Percentage.
- Below each subject find out the lowest marks and highest marks.
- Enter minimum 10 records.
- Declare the first three ranker students.
- Create a chart based on the above data.

SOP 4: Create an Informative presentation on your college.

- Presentation should contain minimum 8 slides.
- One slide should contain a chart.
- One slide with an image.
- Each slide should contain custom animation & slide transition effect.

2

Web Designing (HTML - 5)

Skill Set 2 - HTML 5

SOP 1 : Write a program using HTML with following specifications.

- The background colour should be green.
- The text colour should be red.
- The heading should be large in size as 'My First Web Page'.
- Display a horizontal line after the heading.
- Display your name in Bold, address in Italics and standard as 11th.

SOP 2 : Create a web page with, following specification.

- Image of any scientist with an alternate text as his name.
- Create a paragraph related to information of that scientist.
- Create a table of his/her inventions.

SOP 3 : Create a webpage with following specification.

- Display heading 'Application Form' in highest heading with center alignment.
- Accept name, standard 11th or 12th with only one selection choice.
- Submit the form.

SOP 4 : Write a program using HTML with the following specification.

- A webpage with details about a class with total number of students-100, (Boys-50), Girls- 50 in tabular form.

e.g.

Number of Students	Boys	Girls
100	50	50

- Link this page to another page as follows.

STD - XI <i>Stream - Science</i> <u>Div - A</u>

Demo.html



3

Client Side Scripting (JavaScript)

Skill Set 3 - JavaScript

SOP 1 : Create JavaScript program for the following using appropriate variables, JavaScript inbuilt functions and control structures.

- To accept integer and display the result by multiplying it with 3.
- To accept two integers and display larger number of them.
- To check whether, user entered number is positive or negative.

SOP 2 : Create JavaScript program for the following using appropriate variables, JavaScript inbuilt functions and control structures.

- To accept two positive or negative numbers and check whether they are equal or not.
- To accept number and display square of it.
- To check whether the accepted integer is multiple of 3 or multiple of 7.

SOP 3 : Create JavaScript program for the following using appropriate variables, JavaScript inbuilt string functions and control structures.

- To accept string and calculate its length.
- To accept string and display it into lowercase and uppercase.
- To check whether the length of string is 4 or greater.

SOP 4 : Create event driven JavaScript programs for the following using appropriate variables, JavaScript inbuilt functions and control structures.

- To accept number and validate if the given value is a number or not by clicking on the button.

Enter Value:-

- To calculate addition and division of two numbers.

1st Number :

2nd Number :

4

Accounting Packages (GNUKhata)

Introduction to accounting software :

In computerised accounting complete book keeping is done which enables user to record all types of transactions including receipts, payments, income and expenses, sales and purchases, debit notes, credit notes, adjustment journals, memorandum journals and reversing journals. Various open-source accounting software are available in market such as GNUKhata, GNUCash, Turbo Cash, Ledger SMB, Money Manager You can use any accounting software. This book has introduced GNUkhata which is one of the open source software.

Golden rules of accounting :

There are three types of account

1. **Personal Account** : Personal account is related with Individual's, Organizations and Institutions accounts. Example Persons capital account, Bank account etc.

Rules of Personal account

Debit the Receiver

Credit the Giver

2. **Real Account** : Accounts relating to assets of business are called Real account. Real accounts which are tangible or intangible in nature. Example Furniture, Goodwill, Trademark etc.

- Rules of Real account

- Debit what comes in

- Credit what goes out

3. **Nominal Account** : Nominal Account is related with all the expenses, losses, and incomes and gains of the business. Example wages, salary, advertisement, interest received etc.

Rules of Nominal Account

Debit all Expenses and Losses

Credit all Incomes and Gains

Open source accounting software package-GNUKhata

GNUKhata is a free and flexible software for accounting and inventory management. It provides solutions for basic book keeping. It has various version such as GNUKhata 4.0, GNUKhata 5.0 and GNUKhata 6.0. We will be using GNUKhata 6.0 in this textbook. This software freely available on <https://www.gnukhata.in>.

Features of GnuKhata :

1. GnuKhata is free and open source accounting software.
2. GnuKhata is based on double entry book keeping.
3. GnuKhata allows you to comprehensive financial reports-ledgers, trial balance, profit and loss account, balance sheet.
4. GnuKhata provides source document attachment facility in vouchers.
5. GnuKhata gives linking facility. To linking of sales and purchase transactions to invoices.
6. GnuKhata allows you to export and import spreadsheet
7. GnuKhata gives password security and data audit facility.
8. Unique dual ledger facility.
9. Inventory includes invoicing and cash memo.
10. It can be easily transformed into Indian languages.
11. It is GST complaint

Opening screen of GNUKhata

When we open GNUKhata for the first time it is called opening screen or welcome screen of GNUKhata.

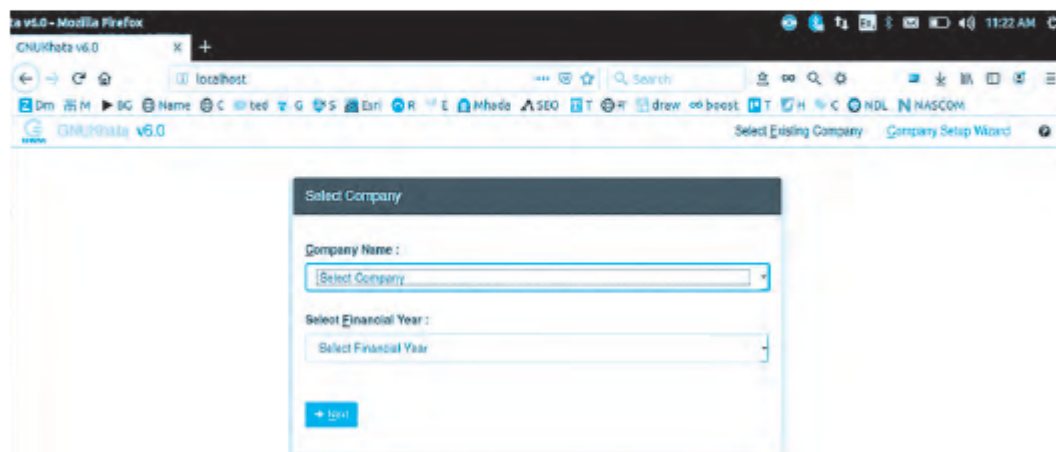


Fig. 1 Opening Screen Of GNUKhata

1) Company Setup wizard

1. **Create Company** : The first step in GNUKKhata is to create an organization. Click on 'Company Setup Wizard' (or press Shift + Control + C).

GNUKKhata v6.0 Select Existing Company Company Setup Wizard

BALBHARTI (Profit Making) Financial Year : 01-04-2019 to 31-03-2020

Company Setup Wizard
This wizard will help you setup GNUKKhata just the way you wish to manage your business.

Company Name :
ABC PVT LTD

Case :
Upper Case

Company Type : Profit Making Not For Profit

Financial Year :
01 04 2019 --To-- 31 03 2020

How would you like to use GNUKKhata?
 Accounting only.
 Invoicing with Billwise Accounting.
 Inventory with Invoicing and Billwise Accounting.
Use 'Up' & 'Down' arrow keys to navigate and press 'Enter' key to proceed.

Use Simple Mode for Receipt and Payment Vouchers.
 Use System Generated Voucher Numbering.

Proceed

Fig 2: Company Setup Wizard

While creating a company the following details are to be given :

- **Company Name** : Enter the name of the company.
- **Company Case** : Select appropriate case for example as-is, upper case, lower case or title case.
- **Company type** : Select the company Type either 'Profit Making' or 'Not For Profit'.
- **Financial year** : Enter financial Year of the company.
- **How Would you like to use GNUKKhata?** It displays following three options, select Accounting only.
 - Accounting only.
 - Invoicing with Billwise Accounting.
 - Inventory with Invoicing and Billwise Accounting.
- Uncheck 'Use Simple Mode for Receipt and Payment Vouchers' and 'Use System Generated Voucher Numbering'.
- **Proceed Button**:-It allows you to proceed to create company profile .

2. Company Profile :

The screenshot shows a web browser window with the title "EHR/HRM v5.0". The page is titled "Company Setup Wizard" and contains a form for entering company information. The form is divided into two main sections: "Company Information" and "Registration Information".

Company Information:

- REGISTRATION NUMBER : [text input]
- VMS REGISTRATION NUMBER : [text input]
- Address : [text input]
- CITY : [text input]
- STATE : [dropdown menu]
- COUNTRY : [text input]
- Postal Code : [text input]
- Contact Number : [text input]
- Website : [text input]

Registration Information:

- DATE OF REGISTRATION : [date picker]
- DATE OF VMS REGISTRATION : [date picker]
- EMAIL : [text input]
- Phone Number : [text input]
- PAN : [text input]
- Service Tax number : [text input]
- GSTIN : [text input]
- Bank Details : [text input]

At the bottom of the form, there are two buttons: "Go Back" and "Next Step".

Fig 3: Company profile screen

Enter appropriate company information in the above fields.

- 3. Create Admin :** The next step is the 'Create Admin' which is mandatory. Fill all the fields and click on 'Create & Login'.

The screenshot shows a web browser window with the title "Create Admin". The form contains the following fields:

- Username : [text input with value "admin"]
- Password : [password input with value "****"]
- Confirm Password : [password input with value "****"]
- Security Question : [text input with value "what is your place of birth"]
- Answer to Security Question : [text input with value "delhi"]

At the bottom of the form, there are two buttons: "Go Back" and "Create & Login".

Fig. 4 Admin Creation Screen

4. **Admin Dashboard** : After login, following admin dashboard appears.

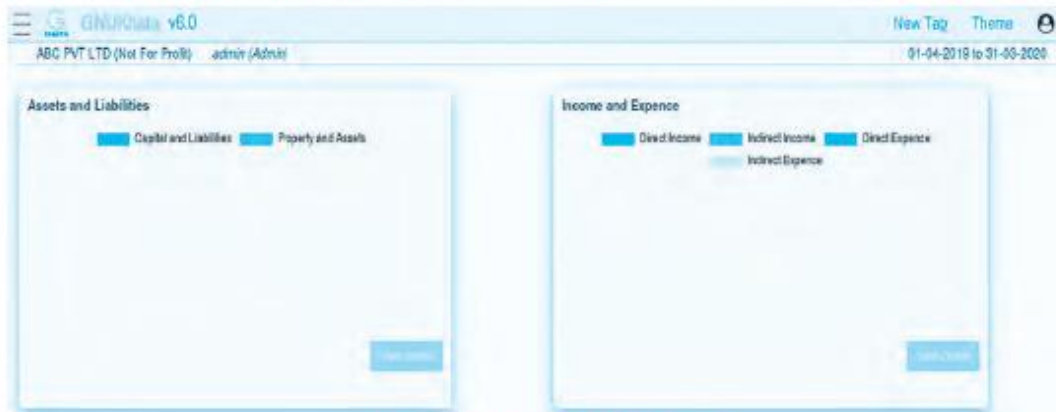


Fig. 5 : Admin Dashboard

2) **Select Existing Company**

You can select already created company using 'Select Existing Company' Option on Opening Screen as shown in Fig. 1



Fig. 6 : Select Existing Company

3) **Delete Existing Company**

Click on Hamburger Menu on left top corner of dashboard. Click on 'Administration → Delete Company'.

Groups and sub-groups in GnuKhata

Group is a type of account. Groups are helpful for classifying and identifying account head and also to get summarized information. Group of account is a method of organizing the large number of ledger accounts into sequential arrangement. GnuKhata has 13 groups.

BALANCE SHEET GROUPS, SUB-GROUPS AND LEDGER ACCOUNTS

The summary of balance sheet groups, sub-groups and ledger accounts are given below.

Group Name	Sub-Group Name	Ledger Account
(1) Capital / Corpus	None	<ul style="list-style-type: none"> • Capital Account • Partner's Capital Account • Share Capital Account • Capital Fund
(2) Current Assets	(1) Cash as Bank (2) Cash in hand (3) Inventory (4) Loans and Advance (5) Sundry Debtors	<ul style="list-style-type: none"> • Bank Account • Cash Account • Petty Cash Account • Closing Stock (System Generated) • Stock at the Beginning (System Generated Ledger Account) • Short Term Loans and Advances given to Employees. • Prepaid Expenses • All Debtors/Customers Account
(3) Current Liability	(6) Provisions (7) Sundry Creditors for Expenses (8) Sundry Creditors for Purchases	<ul style="list-style-type: none"> • Account of PF, ESI, TDS dues, etc. • Provision for Bad debts • Provision for Income Tax • Outstanding Expenses • All Suppliers / Creditors Account
(4) Fixed Assets	(9) Building	<ul style="list-style-type: none"> • Building Account • Office Building Account • Factory Building Account
	(10) Furniture (11) Land (12) Plant & Machinery	<ul style="list-style-type: none"> • Furniture Account • Shop Furniture Account • Land Account • Machinery Account • Plant Account • Plant & Machinery Account
(5) Investments	(13) Investment in Bank Deposits (14) Investment in Shares & Debentures	<ul style="list-style-type: none"> • Bank Fixed Deposit • Investment in Shares • Investment in Debentures
(6) Loans (Asset)	None	<ul style="list-style-type: none"> • Accounts of all Long Term Loans given by the organisation

Group Name	Sub-Group Name	Ledger Account
(7) Loans (Liability)	(15) Secured (16) Unsecured	<ul style="list-style-type: none"> • Bank Loan • Other secured loans • Loan from Partners • Loan from Manager(s), etc.
(8) Miscellaneous Expenses (Assets)	None	<ul style="list-style-type: none"> • Preliminary Expenses • Pre-operation Expenses, etc..
(9) Reserves	None	<ul style="list-style-type: none"> • Retained Earnings • General Reserves • Reserves and Surplus

Table 1 : Summary of Balance Sheet groups

PROFIT & LOSS OR INCOME & EXPENDITURE ACCOUNT GROUPS, SUB- GROUPS AND LEDGER ACCOUNTS

The summary of Profit and Loss account groups and sub groups are given in Table

Group Name	Sub-Group Name	Ledger Account
(1) Direct Income	None	<ul style="list-style-type: none"> • Sales • Professional Fees • Profit and Loss Account or Income & Expenditure Account (System Generated Ledger Account)
(2) Indirect Income	None	<ul style="list-style-type: none"> • Bad debt received • Commission Received • Discount Received • Income from Investment • Rent Received • Interest Received, etc..
(3) Direct Expense	None	<ul style="list-style-type: none"> • Wages Carriage Inward • Coal, Gas & Water of Factory • Factory Expenses (Lighting, Power, etc) • Freight • Import Duty • Octroi • Factory Expenses • Opening Stock Account (System Generated Ledger Account) • Purchases • Sales Return, etc..

Group Name	Sub-Group Name	Ledger Account
(4) Indirect Expense	None	<ul style="list-style-type: none"> • Office Expenses Salary • Rent • Insurance • Audit Fee • Electricity • Depreciation • Bad debt • Telephone Charge • Commission Allowed • Discount Allowed • Export Duty • Interest on Loan • Legal Expenses • Postage and Telegram • Printing and stationery, etc..

Table 2. Summary of Profit and Loss groups, Sub-groups and Ledgers

Ledger :

A Ledger account contains a record of all transactions relating to an asset, liability, capital, and an item of expenditure or revenue. It has to be created under any of this group.

How to create a account (Ledger account) using GNUKhata

- 1. Create an account :** GNUKhata allows you to create single account at a time. Click on Hamburger Menu (☰) available at left top corner of the dashboard. It displays the options as shown in fig. no. 7.

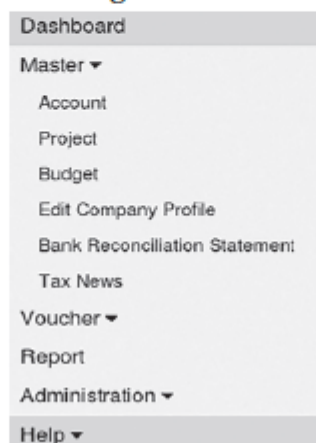


Fig. 7 Admin Dashboard Menu

Click on the Master → Account. It allows you to create account as shown in fig. 8.

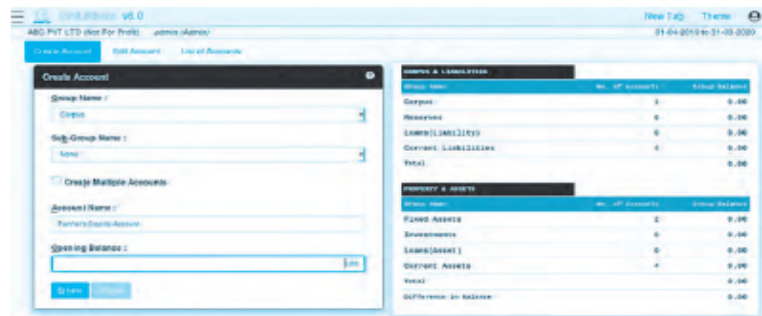


Fig. 8 Group Creation Screen

Select appropriate group name, sub-group name and enter account name and click on save. You can also create Multiple Accounts.

Note :

1. You can not create a new Group but you can create a new Sub-Group of any Group in addition to the existing ones or where there is none.
2. You can not delete a Group or Sub-Group. Having created a new Sub-Group you may not use it.
3. You can not create Sub-Group of Sub-Group.

2. Edit Account : To edit/delete account, click on 'Edit Account' and select appropriate account from 'List of Accounts' drop-down.

3. List Accounts : To view all the accounts, click on 'List Accounts'.

Skill Set 4 - Accounting Package

SOP 1 : Use of Accounting Package to create a company.

Create a company with the following particulars.

Company Name	: B.B Enterprises
Case	: Upper Case
Company Type	: Profit Making
Financial Year	: 01-04-2019 to 31-03-2020
Use GNUKKhata for	: Accounting Only

Create profile with relevant data for any company. Create Admin account for the company.

SOP 2 : Create ledger accounts using accounting Package.

Create ledger accounts for the following and allocate proper groups.

1. Import duty
2. Insurance
3. Machinery
4. Audit Fee
5. Purchase
6. Sales
7. Telephone charges
8. Interest Recieved
9. Salary
10. Professional fees

Skill Set 5 - Digital Content Creation

SOP 1 : Use of Toolbox and editing an image using GIMP.

- Create an image by using Toolbox controls from GIMP.
- Insert the image in an already created image.

SOP 2 : Use GIMP for the following.

- Create a new image
- Put your name using the text tool.
- Use various filters to make a logo of your name.
- Autocrop image to text size.

SOP 3 : Use Inkscape for the following.

- Draw a simple landscape using basic geometric shapes.
- Use gradient tool for the same.

SOP 4 : Use Inkscape for the following.

- Load an Id size image,
- Make 12 copies of it.
- Arrange in 4 rows x 3 columns on an A4 size page.

SOP 5 : Use Inkscape for the following.

You are starting a new business.

- Create an advertisement to be published in local newspaper promoting your product or services.
- Size should be 210 x 210 mm.
- Create your own visiting card using inkscape.

SOP 6 : Using Inkscape make the following picture.



6

DBMS (PostgreSQL)

Create a database in PostgreSQL

To create a database in PostgreSQL create database statement is used

syntax :

```
postgresql=# create database database_name ;
```

e.g `Postgresql> create database college ;`

```
postgres=# CREATE DATABASE college;
CREATE DATABASE
postgres=# █
```

To view databases :

To view database `\l` command is used.

```
Postgresql=#/l
```

```
postgres=# \l
          List of databases
  Name      | Owner   | Encoding | Collate | Ctype | Access privileges
-----+-----+-----+-----+-----+-----
 balbharti  | postgres | UTF8     | en_IN  | en_IN |
 college    | postgres | UTF8     | en_IN  | en_IN |
 postgres   | postgres | UTF8     | en_IN  | en_IN |
 template0  | postgres | UTF8     | en_IN  | en_IN | =c/postgres +
            |          |          |          |          | postgres=Ctc/postgres
 template1  | postgres | UTF8     | en_IN  | en_IN | =c/postgres +
            |          |          |          |          | postgres=Ctc/postgres
(5 rows)
```

To connect database :

To connect database `\c` command is used.

```
postgresql=# \c database_name
```

e.g `\c college;`

```
postgres=# \c college;
You are now connected to database "college" as user "postgres".
college=# █
```

To create table :

To create table in database **Create table** command is used

```
database name=# create table table_name (fieldname Datatype, fieldname Datatype);
```

```
college=# CREATE TABLE XI (Roll_no integer, Student_name text);  
CREATE TABLE  
college=# █
```

To insert data in table :

To insert data in a table **insert into** command is used.

```
database name=# insert into table_name (field name)values(data1,'data1')
```

```
college=# INSERT INTO XI (Roll_no,Student_name) VALUES(101,'Sachin');  
INSERT 0 1  
college=# █
```

To view inserted data :

To view inserted data **select * from** command is used.

```
database name=#select * from table_name.
```

```
college=# SELECT * FROM XI;  
roll_no | student_name  
-----+-----  
      101 | Sachin  
(1 row)
```

To update table:

To update table **UPDATE** command is used.

```
database name=# update table_name SET column_name=Value WHERE Ref-  
erence_Column_name=Value
```

```
college=# UPDATE XI SET Roll_no = '1001' WHERE Student_name = 'Sachin';  
UPDATE 1  
college=# █
```

To add Primary Key:

To add primary key to already created table, we can use following command.
or we can create primary key during table creation.

```
ALTER TABLE table_name ADD PRIMARY KEY (column_name);
```

```
college=# ALTER TABLE XI ADD PRIMARY KEY (Roll_no);  
ALTER TABLE  
college=# █
```

To add Foreign Key:

To add foreign key to while creating table, we can use the following command or
we can create foreign key during table creation.

```
ALTER TABLE table_name ADD FOREIGN KEY (current_column_name)  
REFERENCES refered_table_name (referedtable_primarycolumn_name);
```

One to One relationship

```
college=# CREATE TABLE Marks (record_no integer PRIMARY KEY, total_marks integer,result  
text,roll_no integer, FOREIGN KEY (roll_no) REFERENCES XI(Roll_no));  
CREATE TABLE  
college=# █
```

Lets see the result of both table 'XI' and 'Marks' with one-to-one relationship.

```
college=# SELECT XI.Roll_no,XI.student_name,Marks.total_marks,Marks.result FROM XI,Marks where  
XI.Roll_no=Marks.roll_no;  
roll_no | student_name | total_marks | result  
-----  
1001 | Sachin | 230 | PASS  
(1 row)
```

Do you know ?

- \c Connect to database
- \l List all the databases
- \dt List all the tables from database
- \d To view structure of table.

To delete table :

To delete table, DROP command is used.

```
databasename=# DROP table_name;
```

```
postgres=# DROP TABLE Marks;  
DROP TABLE
```

To delete database :

Drop command is used to delete database also.

```
postgresql=# drop database database_name;
```

```
postgres=# DROP DATABASE college;  
DROP DATABASE
```

Note : Before deleting the current database you have to connect to another database eg. postgresQL