

Visit our Website: www.qualexe.com

Dear Aspirants,

This is step-by-step user guide for **QUALEXE**...!

We understand that you are practicing hard for your Exam Preparation.

QUALEXE is a strategically crafted tool to crack different Government Exams.

At **QUALEXE**, we offer,

- **MCQs** – For Subject specific Practice.
- **Papers** – Pervious year papers for different government exams.
- **Exams** – All relevant information for different exams.
- **Quiz** – Weekly Quizzes for regular practice.
- **Tournament** – Compete with other aspirants and win exciting prizes.
- **Test Series** – Witness the Exam giving experience with Exam specific tests

Login / Signup with your Email ID and explore **QUALEXE** features for Free...!

The screenshot shows the Qualexe website homepage. At the top, there is a navigation bar with the Qualexe logo and menu items: MCQ, Papers, Exam, Quiz, Tournament, and Test Series. A 'Login/Sign Up' button is located in the top right corner. The main heading reads 'Platform for Quality Exercise' with the tagline 'Sculpt yourself here with'. Below this, there are five main service categories: Weekly Quiz, Tournament, MCQ, Test Series, and Result Analysis. The page features two 'Latest Updates' sections. The first section, titled 'Latest Updates', contains a notification about 'GSECL VSJE & PA Gr 1 Electrical Recruitment' with a 'NEW' tag and the text 'Exam Postponed'. The second section, titled 'Announcement', contains a notification about 'GSECL test series for VSJE & PA Electrical' with a 'NEW' tag and the text 'Attempt it for free'. A 'Trending' section is also visible on the right side of the page. Several callout boxes with arrows point to specific elements: one points to the 'Login/Sign Up' button, another points to the 'Trending' section, and two others point to the 'Latest Updates' sections.

Latest Updates – Get latest updates regarding different Govt. Exam notifications

Trending - Get all latest updates regarding Quiz, Tournament and Test Series

Latest Updates – Get latest updates regarding different Govt. Exam notifications

MCQ

The screenshot shows the Qualex website interface. At the top, there is a navigation bar with the Qualex logo and links for MCQ, Papers, Exam, Quiz, Tournament, and Test Series. Below this is a large orange banner with the text 'MCQ' and an illustration of a person with a clipboard. The main content area is divided into two columns. The left column contains a list of subjects, each with a small icon: BASIC ELECTRONICS, CONTROL SYSTEM ENGINEERING, DIGITAL ELECTRONICS, ELECTRICAL CIRCUIT ANALYSIS, ELECTRICAL ENERGY CONSERVATION AND AUDITING, ELECTRICAL ENGINEERING MATERIALS, ELECTRICAL MACHINES, ELECTRICAL WIRING, ELECTROMAGNETICS, MEASUREMENT & INSTRUMENTATION, MICROPROCESSOR AND MICROCONTROLLER INTERFACING, POWER ELECTRONICS & DRIVES, POWER SYSTEM, SIGNALS & SYSTEMS, and UTILIZATION OF ELECTRICAL ENERGY. The right column displays two MCQ questions. The first question, Q1, asks for the dynamic output resistance given a change in collector-emitter voltage from 6V to 9V and a change in collector current from 6mA to 6.3mA. The options are 20kΩ, 10kΩ, 60kΩ, and 50kΩ. Below the options are two buttons: 'Show Answer' and 'Solution'. A detailed solution box follows, showing the calculation: $\Delta V_{CE} = 9 - 6 = 3\text{ V}$, $\Delta I_C = 6.3\text{ mA} - 6\text{ mA} = 0.3\text{ mA}$, and $R_O = \frac{\Delta V_{CE}}{\Delta I_C} = \frac{3}{0.3\text{ mA}} = 10\text{ k}\Omega$. The second question, Q2, asks for the result of negative feedback in an amplifier, with options for gain and bandwidth changes. It also has 'Show Answer' and 'Solution' buttons.

Numerous MCQs available for Subject wise Preparation

Detailed Solution for better understanding

Many More new Subjects to come...

View Solution and Correct Answer

Papers



Previous Years Papers



GEB

GSECL

VIDYUT SAHAYAK (JUNIOR ENGINEER-ELECTRICAL)

VIDYUT SAHAYAK (PLANT ATTENDANT GR. I)

GSECL VSJE 2020 #Shift 1

GSECL VSJE 2020 #Shift 2

We have everyday content for you

QUIZ
Read every day, test it here

TOURNAMENT
Participate, Compete, Win...

TEST SERIES
Strategically Designed Mock test for competitive Exams

MCQ
Check Your Expertise in each Subject

Result
Analyse your strengths and weaknesses



Exam wise
Previous Year Papers with correct answers

Exam

Qualex MCQ Papers Exam Quiz Tournament Test Series

Exam

ACPC

GEB

GIDC

GPSC

GSRTC

GSSSB

MC

DGVCL >

GETCO >

GSECL > LIVE

MGVCL >

PGVCL >

UGVCL >

For **Different Examination Bodies** –
Get Latest Exam Notifications, Exam
Specific Test Series, Tournaments,
Quizzes and many more...

Quiz



MCQ Papers Exam Quiz Tournament Test Series

Quiz

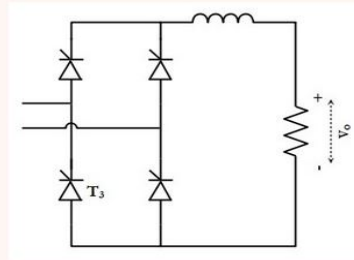


Weekly Quiz –
Every week
total 5 Quizzes
are available
to user for
Practice.

Year 2022		
July Week # 1	Expire on 01 Aug 2022	+
July Week # 2	Expire on 08 Aug 2022	+
July Week # 3	Expire on 15 Aug 2022	+
July Week # 4	Expire on 22 Aug 2022	—
Quiz 1	Attempted	
Quiz 2	Get Started	→
Quiz 3	Get Started	→
Quiz 4	Get Started	→
Quiz 5	Get Started	→
FAQs		

July Week # 4 Quiz 1

Q1. The fully controlled thyristor converter in the figure is fed from a single-phase source. When the firing angle is 0° , the DC output voltage of the converter is 300 V. What will be the output voltage for a firing angle of 60° , assuming continuous conduction?



- 300
- 150
- 200
- 700

Quiz wise User
Attention

Your Answer and
Correct Answer

Tournament

Tournament



Monthly Tournaments
Mark its Start and End date in your Calendar.

Tournament Round #1
Start Date: 1 July 2022 End Date: 31 July 2022 [Start Now](#)

Tournament Round #2
Start Date: 16 July 2022 End Date: 31 July 2022 [Start Now](#)

Tournament Round #1 and Round #2

RESULTS

Results will be declared on...
Last day of each month at 11:59:59 pm

Winner will get Exciting Gift

An illustration of a hand holding a golden trophy with confetti falling around it.

Winners
Every month Top 3 rankers of Tournament will get Gift from **QALEXE**

Tournament FAQs

Test Series

The screenshot shows the Qualexex Test Series page. At the top, there is a navigation bar with the Qualexex logo and menu items: MCQ, Papers, Exam, Quiz, Tournament, and Test Series. Below the navigation bar is a large orange banner with the text "Test Series" and an illustration of a student at a desk. On the left side, there is a blue box with the text "Exam Specific Test Series". The main content area features two GSECL exam listings, a "Launching offer" section with a "Hurry-Up - Attend 5 Test Series In Just ₹ 0 ₹-499 Only." banner, and five test series cards. Each card displays the test series name, number of questions, marks, and time, along with "Attempted" status and buttons for "Detailed Solution" and "Performance". The fifth card has a "Start Now" button. On the right side, there is a vertical sidebar with a "We have everyday content for you" header and sections for QUIZ, TOURNAMENT, TEST SERIES, MCQ, and Result. At the bottom right, there are two blue callout boxes with white text: "Test Series Detailed Solution" and "Performance Analysis for Each User", with arrows pointing to the "Detailed Solution" and "Performance" buttons of the fifth test series card.

MCQ Papers Exam Quiz Tournament Test Series

Test Series

Exam Specific Test Series

GSECL (VIDYUT SAHAYAK (PLANT ATTENDANT GR. I)) Expire on 31 July 2022

GSECL (VIDYUT SAHAYAK (JUNIOR ENGINEER-ELECTRICAL)) Expire on 31 July 2022

Launching offer

Hurry-Up - Attend 5 Test Series In Just ₹ 0 ₹-499 Only.

Test Series 1 - VSJE
100 Questions 100 Marks 120 Mins
Attempted
Detailed Solution
Performance

Test Series 2 - VSJE
100 Questions 100 Marks 120 Mins
Attempted
Detailed Solution
Performance

Test Series 3 - VSJE
100 Questions 100 Marks 120 Mins
Attempted
Detailed Solution
Performance

Test Series 4 VSJE
100 Questions 100 Marks 120 Mins
Attempted
Detailed Solution
Performance

Test Series 5 VSJE
100 Questions 100 Marks 120 Mins
Start Now

We have everyday content for you

- QUIZ
Read every day, test it here
- TOURNAMENT
Participate, Compete, Win...
- TEST SERIES
Strategically Designed Mock test for competitive Exams
- MCQ
Check Your Expertise in each Subject
- Result
Analyse your strengths and weaknesses

Qualexex

Test Series Detailed Solution

Performance Analysis for Each User

Dear Aspirants,

Have you visited **My Profile** section on **QUALEXE**...!

It is the Best feature of **QUALEXE** and a powerful tool for Detailed and Subject wise Performance analysis, which will help to achieve your **Targeted Score**.

All Features of **My Profile** Section is freely available to all **Registered Users**.

At **QUALEXE** – In **My Profile** section, you can explore,

- **Dashboard** – To access different examination modules.
- **Score Board** – For Individual Score for all attempted Quizzes, Tournaments and Test Series.
- **Personal Details** – User's details.
- **Subject Wise Statistics** – For Subject Wise Performance Analysis of user in different exam modules.
- **Leader board** – Compare your Test Series scores with other users and get your performance rank.
- **Performance Summary** – Comparative Performance Analysis for Test Series with Rank, Accuracy and Score.

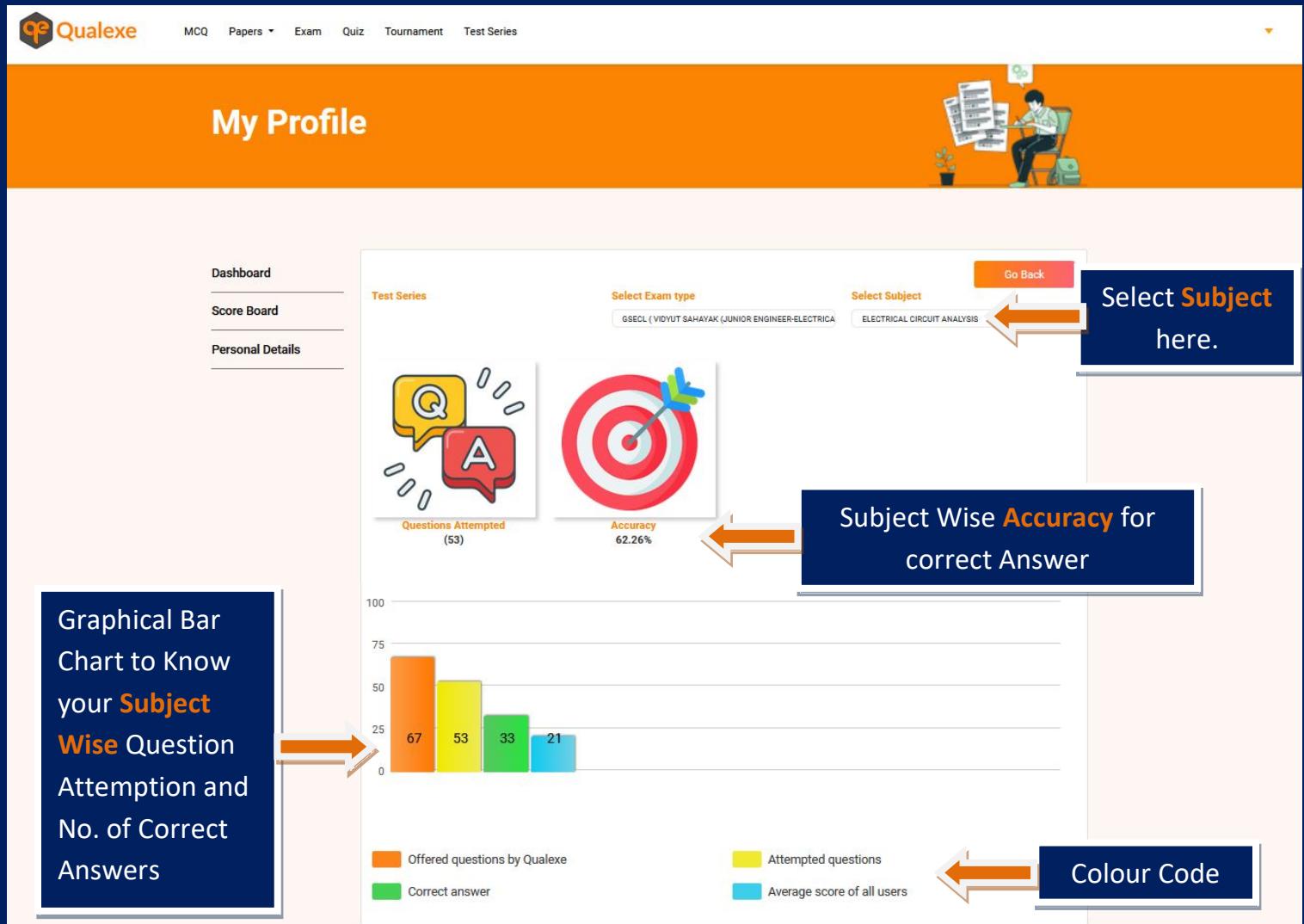
My Profile

The screenshot shows the 'My Profile' interface. At the top, there's a navigation bar with the Qualexe logo and menu items: MCQ, Papers, Exam, Quiz, Tournament, and Test Series. Below this is a large orange banner with the text 'My Profile' and a user profile picture. To the right of the profile picture are links for 'My Profile', 'Change Password', and 'Logout'. Underneath the banner, there's a 'Subject Wise Statistics' section with four buttons: 'Weekly Quiz', 'Tournament', 'Test Series', and 'Overall'. On the left side, there's a sidebar with 'Dashboard', 'Score Board', and 'Personal Details'.

All **My Profile** features are accessible from here.

Subject Wise Statistics for Various **Exam Modules** along with **Overall Performance**

(1) Subject Wise Statistics for Test Series



Such Subject Wise Statistics are also available for **Quiz, Tournament** and **Overall**.

(2) Score Board for Test Series

Qualex MCQ Papers Exam Quiz Tournament Test Series

My Profile

Dashboard Weekly Quiz +
Score Board Tournament Quiz +
Personal Details Test Series Quiz -

Test Series

Quiz	Score
GSECL (VIDYUT SAHAYAK (JUNIOR ENGINEER-ELECTRICAL))	- Leader Board
Test Series 1 - VSJE	Score: 52.5 / 100 Performance
Test Series 2 - VSJE	Score: 45 / 100 Performance
Test Series 3 - VSJE	Score: 46.25 / 100 Performance
Test Series 4 VSJE	Score: 31.25 / 100 Performance
All test series - Overall score	Score: 175 / 400 Performance
GSECL (VIDYUT SAHAYAK (PLANT ATTENDANT GR. I))	+ Leader Board

Detailed Solution and Performance Summary for Individual Tests

Score for Individual Tests

Leader Board to compare your Rank with other Users

Such Score Board is available for **Quiz** and **Tournament** also.

(3) Detailed Solution for Test Series

Correct Answer and your Answer



Go Back

Test Series 1 - VSJE

Q1. When the rotor of a 3-phase induction motor is completely blocked, the slip is equal to _____.

- 0
 0.3
 0.5
 1

Solution

For blocked rotor put $N_r = 0$ in $s = \frac{N_s - N_r}{N_s} \implies s = 1$

Q2. A 50 W electric light bulb is connected to a 200 V supply. Determine (a) the current flowing in the bulb and (b) the resistance of the bulb.

- 0.5 A and 400 Ω
 0.25 A and 800 Ω
 0.5 A and 800 Ω
 0.25 A and 400 Ω

Solution

Given data :

$$P = 50 \text{ W}, V = 200 \text{ V}$$

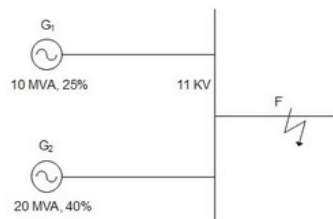
$$\text{Bulb resistance } R = \frac{V^2}{P} = \frac{(200)^2}{50} = 800 \Omega$$

$$\text{Current flowing in the bulb } I = \frac{V}{R} = \frac{200}{800} = 0.25 \text{ A}$$



Detailed Solution for better understanding

Q3. Fig. shows the single-line diagram of a power system. The % reactance value of the 11kV generators is calculated by taking their ratings as base values. Calculate the short-circuit MVA if a 3-phase fault occurs at the beginning of the feeder. Choose base MVA as 20 MVA.



- 130 MVA
 45 MVA
 180 MVA
 90 MVA

Solution

\implies System base – 20 MVA

$$\text{Reactance for Generator 1, } G_1 = j0.25 \times \frac{20}{10} = j0.5 \text{ pu}$$

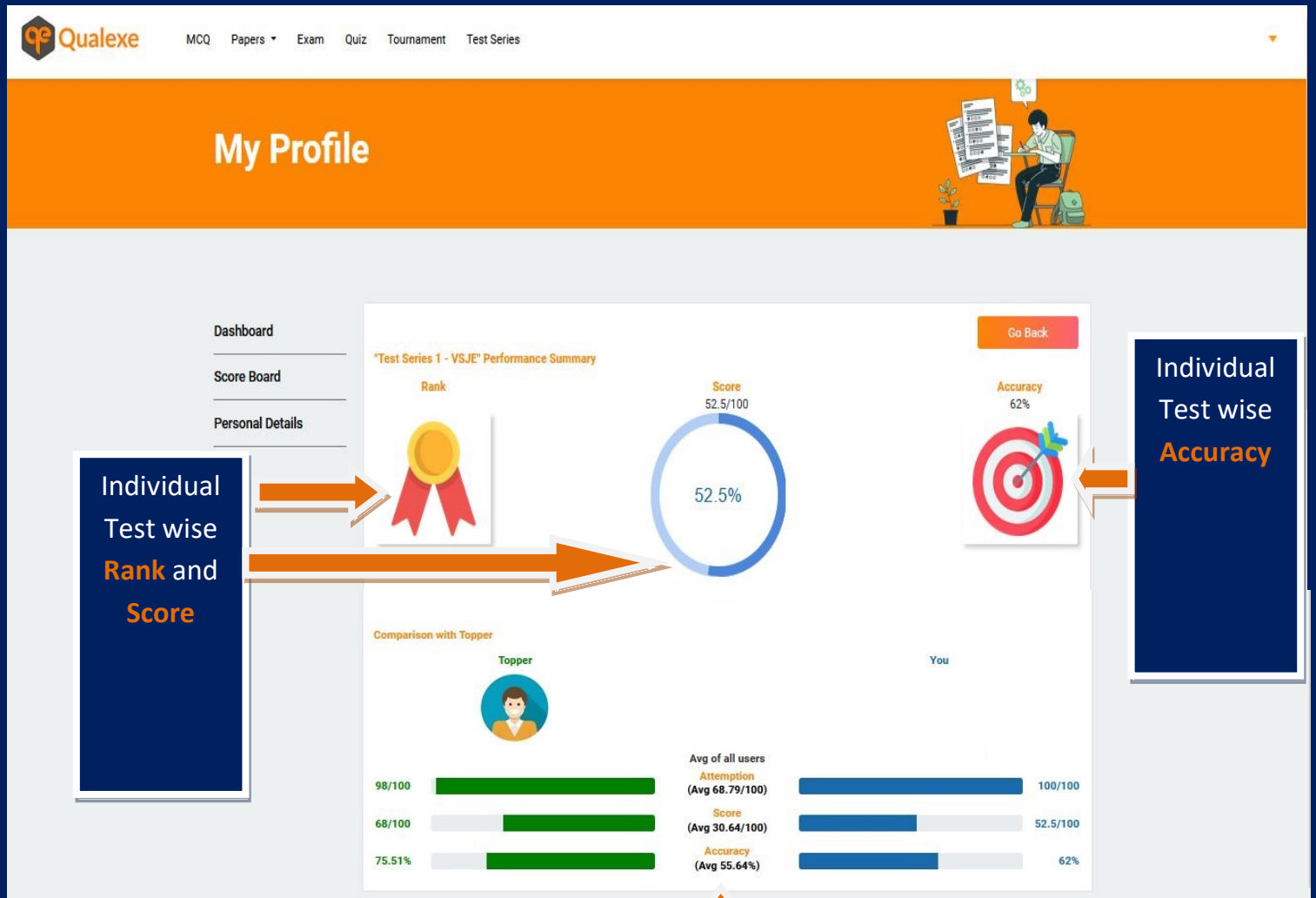
$$\text{Reactance for Generator 2, } G_2 = j0.40 \times \frac{20}{20} = j0.4 \text{ pu}$$

\implies These two Generators are connected in parallels,

$$\implies \text{Resultant Reactance } X = j0.5 \parallel j0.4 = j0.22 \text{ pu}$$

$$\therefore MVA_{sc} = \frac{MVA_{base}}{X} = \frac{20}{0.22} = 90.90 \text{ MVA}$$

(4) Performance Summary for Test Series



Your **Comparative Analysis** with Topper will help you to focus on **Target Score**