

# DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

## Chapter 1 : Electrical Engineering Questions and Answers

*Electrical Engineering interview questions and answers for freshers and experienced - List of Electrical Engineering questions with answers that might be asked during an interview 30 electrical engineering interview questions and answers.*

Interested candidates must go through the entire election process and Interview is one of most important part of any job selection. Apart from having a degree, one needs to prepare well in order to qualify the interviews. Here on this page, we have tabulated Electrical Engineering Interview Questions with Answers for fresher as well as non-fresher candidates. Right from the inception of electricity and its distributive branches, the discipline of EEE has seen disruptive changes while adapting itself to the rapidly changing technologies. Experts see it as a microcosm of all things electrical and electronic, without which there would have been literal darkness all over the face of the earth. Alongside the major branches of engineering, the discipline of EEE holds a significant importance in heralding the greatness of the science of engineering as a whole. For the layman, the branch of Electronic and Electrical Engineering EEE can be defined as the branch of engineering that is associated with the study and applications of electricity, electronics and electromagnetism. Each and every equipment around you function based on the principles of this science. Its uses run the gamut from the early telegraph and telephone to the highly advanced robotic machinery and artificial intelligence based programming. It is because of the advancements and inventions in this field, that we are able to enjoy the luxuries of today at a nominal price. To describe the specific impact of each technology on the various equipment around us, it becomes a bit complicated. All the electronic devices around us and the electrical machinery use a combination of different principles and concepts to function. But to be specific in a differentiating sense, the entire branch can be sub divided based on the specific area they cater to such as- Digital computers, Control Systems, Telecommunications, Power engineering, RF Radio Frequency Engineering, Signal Processing, Microelectronics and Instrumentation to name a few. Each of these branches holds its own importance and relevance to the subject as a whole in its own unique way. It is no ordinary task as such to be able to win over the interviewer without any technical knowledge about the subject of interest. Most of the companies that look to employ electrical engineers, be it corporate firms or large public sector establishments look for a crystal clear understanding of the science in a potential employee. To be able to meet this criteria, a student must be able to impress the interviewer with his strong grasp over the concepts and principles. To help a student achieve this level, it is recommended that he be thorough with every concept concerning the most critical and important subjects by going through the topics under question repeatedly. The previous Interview questions will largely help a student to get a clear idea of the level and difficulty of the questions and will also help him in identifying the important topics. Referring to these important interview questions will not only serve as a morale booster but will also be quite instrumental in judging his level of preparedness for the interview. The containing questions will surely boost the knowledge and will also give the confidence to the candidates which is quite essential for the aspirants. And thus we assure you that these Questions will surely help you getting you dream job and Cracking the interview. If you have any questions regarding this, You can write to us y leaving a Comment below and Share your Experiences with us by Commenting.

# DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

## Chapter 2 : Technical Interview Questions and Answers for Freshers [calendrierdelascience.com](http://calendrierdelascience.com)

*Electrical Engineering interview questions and answers pdf free download for freshers & Experienced,eee questions mcqs viva objective faqs with answers ppt. Basic Electrical Interview Questions and Answers Pdf ebook for Job.*

What are the functions of a column in a building? What are the uses of Groynes? What are the strongest shapes in the building? How many feet are in 4 square yards? What is the average density of soil? What is the ratio of Grades M5, M7. How do you compute the volume of airflow? Who designed the city of Washington DC? How do you maintain water pressure? The mixture of different ingredients of cement is burnt at Q The foundations are placed below ground level, to increase Q The portion of a brick cut across the width is called Q The concrete slump recommended for beams and slabs; is Q In jack arch floor, the rise is kept Q What is absolute pressure? What is the meaning of soil reinforcement? Minimum size of the particles of silt soil, is Q Under reamed piles are generally Q Describe briefly the various methods of concrete curing. Sometimes the side of concrete bridges is observed to turn black in color. What is the reason for this phenomenon? What reinforcements are used in the process of prestressing? What are the functions of grout inside tendon ducts? What is the different type of slump test indications? Is it worthwhile to carry out tests on particle density of soil particles for geotechnical design? What are the main reasons for conducting pull-out tests for soil nails?

# DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

## Chapter 3 : 7 Electrical Engineer Interview Questions and Answers | calendrierdelascience.com

Here are the best interview question for electrical engineers fresher: 1. WHY IS A THYRISTOR CONSIDERED TO BE A CHARGE CONTROLLED DEVICE? Amid the triggering process of the thyristor from forward blocking state to forward conduction state through the gate signal, by implementing the gate signal.

What is the power factor of an alternator at no load? At no load Synchronous Impedance of the alternator is responsible for creating angle difference. So it should be zero lagging like inductor. What is the function of anti-pumping in circuit breaker? When breaker is close at one time by close push button, the anti pumping contactor prevent re close the breaker by close push button after if it already close. What is stepper motor. Stepper motor is the electrical machine which act upon input pulse applied to it. There are a Transformer and an induction machine. Those two have the same supply. For which device the load current will be maximum? The motor has max load current compare to that of transformer because the motor consumes real power.. What is SF6 Circuit Breaker? SF6 is Sulphur hexa Flouride gas.. What is ferrantic effect? Output voltage is greater than the input voltage or receiving end voltage is greater than the sending end voltage. What is meant by insulation voltage in cables? It is the property of a cable by virtue of it can withstand the applied voltage without rupturing it is known as insulation level of the cable. MCB is miniature circuit breaker which is thermal operated and use for short circuit protection in small current rating circuit. MCCB moulded case circuit breaker and is thermal operated for over load current and magnetic operation for instant trip in short circuit condition. Normally it is used where normal current is more than A. Where should the lighting arrestor be placed in distribution lines? Near distribution transformers and out going feeders of 11kv and incomming feeder of 33kv and near power transformers in sub-stations. It is an inverse definite minimum time relay. In IDMT relay its operating is inversely proportional and also a characteristic of minimum time after which this relay operates. It is inverse in the sense ,the tripping time will decrease as the magnitude of fault current increase. What are the transformer losses? Copper losses are caused by the resistance of the wire  $I^2R$ . Magnetic losses are caused by eddy currents and hysteresis in the core. Copper loss is a constant after the coil has been wound and therefore a measurable loss. Hysteresis loss is constant for a particular voltage and current. Eddy-current loss, however, is different for each frequency passed through the transformer. Two bulbs of w and 40w respectively connected in series across a v supply which bulb will glow bright and why? Why temperature rise is conducted in bus bars and isolators? Bus bars and isolators are rated for continuous power flow, that means they carry heavy currents which rises their temperature. This type of generators are used in windmills. It is important part in Synchronous Generators, it controls the output voltage of the generator by controlling its excitation current. Thus it can control the output Reactive Power of the Generator. Difference between a four point starter and three point starter? The shunt connection in four point stater is provided separately form the line where as in three point stater it is connected with line which is the drawback in three point stater Why the capacitors works on ac only? Generally capacitor gives infinite resistance to dc components i. How many types of colling system it transformers? ONAN oil natural,air natural 2. ONAF oil natural,air forced 3. OFAF oil forced,air forced 4. ODWF oil direct,water forced 5. OFAN oil forced,air forced Operation carried out in Thermal power stations? The water is obtained in the boiler and the coal is burnt so that steam is obtained this steam is allowed to hit the turbine , the turbine which is coupled with the generator generates the electricity. What is 2 phase motor? A two phase motor is a motor with the the starting winding and the running winding have a phase split. What is the principle of motor? Whenever a current carrying conductor is placed in an magnetic field it produce turning or twisting movement is called as torque. What is meant by armature reaction? The effect of armature flu to main flux is called armature reaction. The armature flux may support main flux or opposes main flux. It is used with generators for charging a number of capacitor in parallel and discharging them in series. It is used when voltage required for testing is higher than the available. What are the advantages of speed control using thyristor? What is ACSR cable and where we use it?

## DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

Uninterrupt power supply is mainly use for short time. What will happen when power factor is leading in distribution of power? If their is high power factor, i. What are the advantages of star-delta starter with induction motor? The main advantage of using the star delta starter is reduction of current during the starting of the motor. Starting current is reduced to times Of current of Direct online starting. Hence the starting current is reduced , the voltage drops during the starting of motor in systems are reduced. For lighting loads, neutral conductor is must and hence the secondary must be star winding. To minimize the current unbalance in the primary we use delta winding in the primary. Why computer humming sound occurred in HT transmission line? This computer humming sound is coming due to ionization breakdown of air into charged particles of air around transmission conductor. This effect is called as Corona effect, and it is considered as power loss. What is rated speed? At the time of motor taking normal current rated current the speed of the motor is called rated speed. It is a speed at which any system take small current and give maximum efficiency. If one lamp connects between two phases it will glow or not? If the voltage between the two phase is equal to the lamp voltage then the lamp will glow. When the voltage difference is big it will damage the lamp and when the difference is smaller the lamp will glow depending on the type of lamp.

# DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

## Chapter 4 : ENGINEERING Interview Questions for Freshers Experienced PDF

*Engineering interview questions,multiple choice questions,objective type questions,seminor topics,lab viva questions and answers,online quiz test pdf free download for freshers gate cat syllabus pdf*

Why star delta starter is preferred with induction motor? Star delta starter is preferred with induction motor due to following reasons: State the difference between generator and alternator Generator and alternator are two devices, which converts mechanical energy into electrical energy. Both have the same principle of electromagnetic induction, the only difference is that their construction. Generator persists stationary magnetic field and rotating conductor which rolls on the armature with slip rings and brushes riding against each other, hence it converts the induced emf into dc current for external load whereas an alternator has a stationary armature and rotating magnetic field for high voltages but for low voltage output rotating armature and stationary magnetic field is used. Why AC systems are preferred over DC systems? Due to following reasons, AC systems are preferred over DC systems: It is easy to maintain and change the voltage of AC electricity for transmission and distribution. Plant cost for AC transmission circuit breakers, transformers etc is much lower than the equivalent DC transmission c. When a large fault occurs in a network, it is easier to interrupt in an AC system, as the sine wave current will naturally tend to zero at some point making the current easier to interrupt. How can you relate power engineering with electrical engineering? Power engineering is a sub division of electrical engineering. It deals with generation, transmission and distribution of energy in electrical form. Design of all power equipments also comes under power engineering. Power engineers may work on the design and maintenance of the power grid i. What are the various kind of cables used for transmission? Cables, which are used for transmitting power, can be categorized in three forms: Why back emf used for a dc motor? The induced emf developed when the rotating conductors of the armature between the poles of magnet, in a DC motor, cut the magnetic flux, opposes the current flowing through the conductor, when the armature rotates, is called back emf. Its value depends upon the speed of rotation of the armature conductors. In starting, the value of back emf is zero. What is slip in an induction motor? Slip can be defined as the difference between the flux speed  $N_s$  and the rotor speed  $N$ . Speed of the rotor of an induction motor is always less than its synchronous speed. Explain the application of storage batteries. Storage batteries are used for various purposes, some of the applications are mentioned below:

# DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

## Chapter 5 : Job interview questions and answers for freshers

*Power engineering is a sub division of electrical engineering. It deals with generation, transmission and distribution of energy in electrical form. Design of all power equipments also comes under power engineering.*

Bachelor of Engineering Industry: IT - Software Key skills: First of all, thank you very much for giving me this golden opportunity. Let me introduce myself, Myself Mona Choudhary. There are four members in my family; my father, mother, me and my sister. During my Graduation period, I had done three Mainframe projects and successfully completed a training course on the Mainframe. I am excellent in planning, analyzing, designing, and developing. I am interested to work as a Mainframe web developer and my goal is to get good opportunities on the same profile in your company. I have done many successful Mainframe projects during college. My weakness is my soft nature that sometime harms me. Thanks for giving me this golden opportunity. Immediate Job Openings in Java. Hi, Good Morning! First of all, many thanks for calling me and giving me this golden opportunity to introduce myself in front of you. Myself Soon Jha from Mumbai, born and brought-up in this great city. I love my family very much, my father is in the Indian Navy, my mother is a housewife, earlier, she was working with in an MNC, but because of me, my brother and sister, she left the job. My brother and sister both are studying in 10th and 12th standard respectively. In my college, I have done many mobile application development projects successfully. I am skilled in planning, designing, developing, implementing, debugging and troubleshooting mobile applications using Android. My goal is to build a successful career as a mobile app developer, which can help my company and me personally. My strengths are; laborious, positive attitude, punctuality, and strong in management skills. My hobbies are; watching T. Thanks again for giving me this golden chance. Myself Mohan Singh from Mumbai, I have been living in this city since , but I was born and brought-up in Agra, and I completed my 10th, 12th and Graduation from there only. Goenka Public School and Graduation B. M Madan Mohan Malviya college, Agra. I have very good academic scores in School and College. About my family; my father is a retired person, my mother is a housewife, and I have one more brother, he is in 10th standard. I am a fresher, but I am very hard working person and passionate to gain more and more knowledge. Whatever task I take in my hand, I do with full passion and concentration, and try to complete the task online. My strengths are my quality; my interpersonal skills make me comfortable with others and my politeness makes me strong in all circumstances. My weakness is my emotional nature which lands me in trouble sometime. My goal is to work with the a good telecom company like yours by sharing my knowledge that can be helpful for the company growth and development. Also, I want to become a very reputed person of the company. This is all about me. E from other stream can also apply Industry: I have three members in my family; me, my mother and my father. My father is a Electrical engineer and my mother is a doctor. One of the best college in India which provides the best practice labs and training courses to understand major role and importance of electricity. As we all know, how much electricity is important everywhere in schools, colleges, house, shops, and all over industries. My aim is to get the best jobs, and best practices and knowledge in the same profile. In engineering, I have scored highest than Intermediate and 10th just because of my favorite subjects. I am very much interested to work for this profile, this one opportunity will provide me a chance to prove myself. My hobbies are; singing and listening music, outing, swimming, watching news channels and playing with different instruments. My self-motivation is my biggest strength and emotional nature is my weakness. Thank again for calling me here and giving me this wonderful opportunity. Page 1 of 3.

# DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

## Chapter 6 : Electrical Engineering Interview Questions and Answers pdf Book - EEE

*You should expect both standard and technical electrical engineering interview questions at your job interview. Technical questions will usually (though not always) relate to the tasks that are required for the job, while standard interview questions will run the gambit.*

We are talking here about online or you can say electronic communication. Students are opting for this subject because it has scope. Because the number of applicants are too much and the vacancy uses to be limited. So the competition has been increasing day by day. So Check it Out. One of the main reasons why ECE is the current favorite of numerous students is the vast number of opportunities it opens up for the students after graduation. No wonder flocks of students pursue the course of ECE to guarantee a bright future for themselves. Along these lines, it is also mandatory that we specify the importance and relevance that this branch holds in this rapidly advancing modern world in the spheres of technology and communication. Starting from the very simple remote operation to the highly sophisticated satellites, robots and AI, ECE has its influence in every possible arena. As discussed above, an ECE graduate is presented with an array of career paths to pursue based in his interest right after graduation. You May Also Like: Some major avenues are in the sectors of manufacturing industries and service organizations such as broadcasting, consulting, data communication, entertainment, research and development as well as system support. Based on his personal choice and a logical understanding of the future scope of a field, the graduate can jump right ahead into one of these highly creative and interesting fields. Alongside the corporate firms that hire ECE graduates, there are a significant number of public sector undertakings that are highly interested in hiring these graduates. The interviews conducted by these companies that hire ECE graduates mainly look for the intellectual ability and inter personal skills in a student, the former overweighing the latter to a significant level. An undergraduate student in his final year who is preparing to sit for an interview is expected to start preparing for the interview as soon as possible. Important interview questions in ECE will help the student test his understanding of the different subjects and will also help serve as a last minute revision source to brush up on any missed topic. The interviewer generally intends to test the technical expertise of the student through his questions in the interview, so the best way to tackle this round of interview would be to maintain a cool head while answering the questions to the best of your ability without scope for any kind of a goof up or major blunders. Stay calm and stay focused, for there is no shortcut to success. As we have collected and all basic and as well as advanced questions in this collection. Because there are certain job profiles, which require expertise in certain fields and so, candidates look to download ECE Interview Questions for few specific subjects only.

# DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

## Chapter 7 : + TOP ELECTRICAL ENGINEERING Interview Questions & Answers

*Electrical Interview Questions s with explanation for interview,placement test,online test,competitive examination and entrance test Review a list of frequently asked Electrical interview questions for electrical graduates.*

Electrical Engineer Interview Questions 7 Electrical Engineer Interview Questions and Answers Whether you are preparing to interview a candidate or applying for a job, review our list of top Electrical Engineer interview questions and answers. Tweet When and where did you get your electrical engineering degree s , and in what classes did you excel? While not always the case, how a candidate performed while attaining a degree or a doctorate is generally a good indication of how they will perform on the job. What to look for in an answer: Discussion of math classes Theory and method classes Upper-level classes Example: I also did well in linear algebra, and I am most proud of the grade I earned in convex optimization. Were you the project lead or subject matter expert? The answer to this question will help you determine how complex a project the candidate can be trusted to lead or assist with. Spectrum of responsibilities People tasked to oversee Project components given responsibility for Example: My team was responsible for calculating voltage and current requirements, temperature variable factors, power requisites and remote GSM communication needs. As much as any other question, this one will help you determine how well a candidate will fit into the structure of your company. Nomenclature pertaining to specific electrical engineering Project specifics for individual disciplines Explanations of crossover work and projects that provided solutions for a variety of electrical engineering practices Example: Though I do not have a great deal of experience as a microelectronics engineer, I have made a hobby of gaining an understanding of the theoretical concepts behind the field. As almost all electrical engineering requires an understanding of at least one software platform. This question helps you determine how quickly a candidate can get up to speed with respect to the software your company typically uses. Familiarity with more than one type of software Understanding of the basic tenants common to all electrical engineering software Depth of familiarity with software Example: I also have experience with E3. While an understanding of electrical engineering software is essential, more important is an understanding of the concepts and theories behind electrical engineering practices. Whether the candidate seems engaged in the idea of answering the question If the candidate gives thought to a purposeful answer Whether the candidate takes their time to give the question consideration Example: Alternating current is a circuit. While alternating current is most common, because of the safety factor, direct current also has its advantages including longer travel distances, more power with less loss, and it is less expensive. Another question that determines a candidates fundamental understanding of the concepts and theories of electrical engineering. While not a difficult question to understand, knowing the basics of voltage is critical. An understanding of voltage capacities An understanding of cable sizes An understanding of the voltage volumes that differentiate high from low Example: With respect to capacity, there are three types: Cable that carries less than 1, volts is low tension; between 1, and 23, volts is high tension; and anything between 66 kV to kV is super tension. Multiple versus solitary power sources Systems with one versus multiple cables The effects of multiple cable systems on voltage Example:

# DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

## Chapter 8 : 30 electrical engineering interview questions and answers - freshers, experienced

*To get the suggested answer with tips, you may either click on the question or scroll down to the Section Two: Job Interview Questions and Answers for Freshers Warm up interview questions (click on each question to go to answer and video tips).*

When two positively charged material place together it will repel. Electron in the outer orbit is known as valence. It is the amount of charge that is stored inside a capacitor at a given voltage. It is defined as the property of a coil to resist any changes in electric current flowing through it. Mutual inductance happens when a secondary coil opposes current change in the primary coil. Both generator and alternator work on the same principle they convert mechanical energy into electrical energy. It converts induced emf Electro Motive Force into direct current, where it based on stationary magnetic field and revolving conductor which rolls on the armatures with slip rings and brushes riding against each other. It has rotating magnetic and stationary armature for high voltage and stationary magnetic field and a rotating armature for low voltage

5 Mention what are the different kind of cables used for transmissions? Cables are categorized into three forms according to its thermal capacity Low tension cables- transmits voltage upto volts High tension cables- transmits voltage up to volts Super tension cables- transmits voltage up to 66kv to kv

6 Mention what are the different colors on wires indicates? This is a must know question for any good Electrical Engineer

Black wire: This wire is used for power supply in all circuits. Any circuits with this color is considered hot or live. It is never used for a neutral or ground wire. This color wire is a secondary live wire in a volt circuit and used in some types of interconnection. You can join the red wire to another red wire or to a black wire

Blue and Yellow wire: These wires are also used to carry power but are not wiring the outlets for common plug-in electrical devices. They are used for the live wire pulled through the conduct. You will see yellow wire in the fan, structure lights, and switched outlets. This color wire is used as a neutral wire. It carries the current unbalanced load to the ground. You can join white and gray only to other white and gray wires

Green: It is connected to the grounding terminal in an outlet box and run from the outlet box to the ground bus bar within an electric panel

7 Explain RLC circuit? An RLC circuit carries an electrical circuit consisting of a resistor R and inductor L and a capacitor C , connected in parallel or series. This circuit is called a second order circuit as any voltage or current in the circuit can be described by a second order differential equation. Wire is sized by American Wire Gauge system. Your installation of conductors will depend on a few factors like gauge of the wire, wire capacity, etc. For wires, smaller the wire gauge larger the ampacity or capacity of the wire to handle current. For example, low voltage lighting and lamp cords will have 18 gauge, electric furnaces or large electric heaters are of 6 gauge. There are two types of semi-conductors intrinsic and extrinsic. Again in extrinsic semi-conductors you will have N-type semiconductors and P-type semiconductors. Transistors are comprised of several combination of n-type and p-type semi-conductors. Transistor has the ability to amplify the current, due to the reason that output power can be higher than the input power. If the resistance total in a series circuit doubles the current will reduce to half. If the series current gets double then, the resistance is halved. When a string of resistors in a series will divide the source voltage into proportion to their values. Reverse polarity is referred in a condition where one or more of your receptacles are connected incorrectly. To fix the reverse polarity, check the wire connection at the outlet and inspect your receptacle. A receptacle with reverse polarity will have the white wire screwed to the hot side and the black wire will be connected to the neutral side, if that the case swap the wires and it will resolves the problem. If it persists, a licensed electrician will be needed. A rectifier is an electrical device that transforms A. C , which flows in only one direction. The types of rectifiers are Half wave rectifier: It uses one p-n junction Full wave rectifier: It uses two p-n junction

18 Explain what is Zener diode? Zener diode is a type of seme-conductor diode that allows current to flow in the opposite direction when exposed to enough voltage. During signal conversion, amount of information is lost Digital circuits anticipate high flexibility

20 Explain what is laser diodes? Laser diodes are compact transistor like

## **DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS**

packages with two or more electrical leads. Lasing occurs when stimulated emission results into the amplification of photon confined to the lasing mode. These photons hit back and forth between the back and front mirror, and hence a diverging beam emits from the laser diode packages.

# DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

## Chapter 9 : instrumentation interview questions for freshers pdf Archives - Instrumentation Tools

*Before you dig into the questions and answers for a fresher HR interview, it will be helpful to read the introduction article here - HR Interview Preparation Tips for Freshers. Earlier article explains how one prepare for a HR interview.*

Series reactor starter What is the difference between earth resistance and earth electrode resistance? Only one of the terminals is evident in the earth resistance. In order to find the second terminal we should recourse to its definition: Earth Resistance is the resistance existing between the electrically accessible part of a buried electrode and another point of the earth, which is far away. The resistance of the electrode has the following components: A the resistance of the metal and that of the connection to it. B the contact resistance of the surrounding earth to the electrode. Explain What is use of lockout relay in ht voltage? A lock-out relay is generally placed in line before or after the e-stop switch so the power can be shut off at one central location. This relay is powered by the same electrical source as the control power and is operated by a key lock switch. The relay itself may have up to 24 contact points within the unit itself. This allows the control power for multiple machines to be locked out by the turn of a single key switch. What is the power factor of an alternator at no load? At no load Synchronous Impedance of the alternator is responsible for creating angle difference. So it should be zero lagging like inductor. Explain How to determine capacitor tolerance codes? In electronic circuits, the capacitor tolerance can be determined by a code that appears on the casing. The code is a letter that often follows a three-digit number such as Z. The first two are the 1st and 2nd significant digits and the third is a multiplier code. Most of the time the last digit tells you how many zeros to write after the first two digits and these are read as Pico-Farads. The reason that 4mA is chosen instead of 0 mA is for fail safe operation. For example- a pressure instrument gives output 4mA to indicate 0 psi, up to 20 mA to indicate psi, or full scale. Due to any problem in instrument i. So if range is mA then we can differentiate whether it is due to broken wire or due to 0 psi. Two bulbs of w and 40w respectively connected in series across a v supply which bulb will glow bright and why? What is meant by knee point voltage? Knee point voltage is calculated for electrical Current transformers and is very important factor to choose a CT. It is the voltage at which a CT gets saturated. What is reverse power relay? A generating stations is supposed to fed power to the grid and in case generating units are off, there is no generation in the plant then plant may take power from grid. To stop the flow of power from grid to generator we use reverse power relay. What will happen if DC supply is given on the primary of a transformer? Mainly transformer has high inductance and low resistance. So high electrical current will flow through primary side of the transformer. So for this reason coil and insulation will burn out. Isolators are mainly for switching purpose under normal conditions but they cannot operate in fault conditions. Actually they used for isolating the CBs for maintenance. Whereas CB gets activated under fault conditions according to the fault detected. Bus bar is nothing but a junction where the power is getting distributed for independent loads. What are the advantage of free wheeling diode in a Full Wave rectifier? It reduces the harmonics and it also reduces sparking and arching across the mechanical switch so that it reduces the voltage spike seen in a inductive load What is the function of interposing current transformer? The main function of an interposing current transformer is to balance the currents supplied to the relay where there would otherwise be an imbalance due to the ratios of the main current transformers. Interposing current transformer are equipped with a wide range of taps that can be selected by the user to achieve the balance required. What are Motor Generator Sets and explain the different ways the motor generator set can be used? Motor Generator Sets are a combination of an electrical generator and an engine mounted together to form a single piece of equipment. Motor generator set is also referred to as a genset, or more commonly, a generator. The motor generator set can used in the following different ways: Define what is power quality meter? Power Quality meters are common in many industrial environment. Small units are now available for home use as well. They give operators the ability to monitor the both perturbations on the power supply, as well as power used within a building, or by a single machine or appliance. In some situations, equipment function and operation is

## DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

monitored and controlled from a remote location where communication is via modem, or highspeed communication lines. So we can understand the importance of power measurement through power quality meters. What is the different between digital phase converter and ordinary phase converter? Digital phase converter are a recent development in phase converter technology that utilizes proprietary software in a powerful microprocessor to control solid state power switching components. This microprocessor, called a digital signal processor DSP , monitors the phase conversion process, continually adjusting the input and output modules of the converter to maintain perfectly balanced three-phase power under all load conditions. Explain the operation of variable frequency transformer? A variable frequency transformer is used to transmit electricity between two asynchronous alternating current domains. A variable frequency transformer is a doubly-fed electric machine resembling a vertical shaft hydroelectric generator with a three-phase wound rotor, connected by slip rings to one external ac power circuit. A direct-current torque motor is mounted on the same shaft. Changing the direction of torque applied to the shaft changes the direction of power flow; with no applied torque, the shaft rotates due to the difference in frequency between the networks connected to the rotor and stator. The variable frequency transformer behaves as a continuously adjustable phase-shifting transformer. It allows control of the power flow between two networks. What is the main use of rotary phase converter? Rotary phase converter will be converting single phase power into true balanced 3 phase power,so it is often called as single phase to three phase converter. Often the advantages of 3 phase motors, and other 3 phase equipment, make it worthwhile to convert single phase to 3 phase so that small and large consumers need not want to pay for the extra cost of a 3 phase service but may still wish to use 3 phase equipment. Use of switch mode power converter in real-time basis? Switch mode power converter can be used in the following 5 different ways step down an unregulated dc input voltage to produce a regulated dc output voltage using a circuit known as Buck Converter or Step-Down SMPS, step up an unregulated dc input voltage to produce a regulated dc output voltage using a circuit known as Boost Converter or Step-Up SMPS, step up or step down an unregulated dc input voltage to produce a regulated dc output voltage, invert the input dc voltage using usually a circuit such as the Cuk converter, and produce multiple dc outputs using a circuit such as the fly-back converter. Which type of oil is used as a transformer oil? Transformer oil, or insulating oil, is usually a highly-refined mineral oil that is stable at high temperatures and has excellent electrical insulating properties. It is used in oil filled transformers, some types of high voltage capacitors, fluorescent lamp ballasts, and some types of high voltage switches and circuit breakers. Its functions are to insulate, suppress corona and arcing, and to serve as a coolant. Well into the s, polychlorinated biphenyls PCB s were often used as a dielectric fluid since they are not flammable. They are toxic, and under incomplete combustion, can form highly toxic products such as furan. Starting in the early s, concerns about the toxicity of PCBs have led to their banning in many countries. Today, non-toxic, stable silicon-based or fluoridated hydrocarbons are used, where the added expense of a fire-resistant liquid offsets additional building cost for a transformer vault. Combustion-resistant vegetable oil-based dielectric coolants and synthetic pentaerythritol tetra fatty acid C7, C8 esters are also becoming increasingly common as alternatives to naphthenic mineral oil. Esters are non-toxic to aquatic life, readily biodegradable, and have a lower volatility and higher flash points than mineral oil. If we give A, V on Primary side of 1. Mcb specification are done on maximum current flow in circuit. What is the full form of KVAR? Excitation is applying an external voltage to DC shunt coil in DC motors. In three pin plug 6 Amp. Because Current flow in the conductor is inversely proportional to the conductor diameter. So if any short circuits occur in the system first high currents bypassed in the Earthling terminal. Difference between megger test equipment and contact resistance meter test instruments? Megger test equipment used to measure cable electric resistance, conductor continuity, phase identification where as contact resistance meter test instruments used to measure low resistance like relays ,contactors. When we connect the large capacitor bank in series? So in order to bring the voltage at the load terminals within its limits i. What is electrical diversity factor in electrical installations? Electrical diversity factor is the ratio of the sum of the individual maximum demands of the various subdivisions of a system, or part of a system, to

## DOWNLOAD PDF INTERVIEW QUESTIONS FOR ELECTRICAL ENGINEERS FRESHERS

the maximum demand of the whole system, or part of the system, under consideration. Electrical diversity factor is usually more than one. Why field rheostat is kept in minimum position while armature rheostat at maximum position? In motors at the time of starting the armature resistance is introduced to reduce the high starting current and the field resistance is kept minimum to have high starting torque. Why computer humming sound occurred in HT transmission line? This computer humming sound is coming due to ionization breakdown of air into charged particles of air around transmission conductor. This effect is called as Corona effect, and it is considered as power loss.