



In Partnership with



100 Times Curious – Collection of Questions
Released on the occasion of
Science & Engineering Fair of Selected Projects

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CONTENTS

1. FOREWORD
2. LIST OF PROJECTS EXHIBITED IN THE FAIR
3. QUESTIONS



FOREWORD

It is well established in neuroscience that the young brain is constantly completing a picture of the world, its objects, processes and relationships. How does it do so? By asking questions and going after what seem to be hidden mysteries. If curiosity is a trigger questions are its outcomes.

But not every child gets an opportunity to give a definite form to its questions or share its curiosities. In fact the poorer a child's economic circumstances are, the higher is the incidence of what we might call stimulus poverty- the lack of stimuli in his or her environment. Material poverty is but one reason for stimulus poverty. Children can grow stimulus-poor from any material circumstance.

Anveshana is one more platform Agastya International Foundation has created to address this problem. This event, now 6 years old in Bangalore, completed 4 years in Hyderabad and 2 years in NCR has a built in opportunity for children to get curious and ask question because it takes them far away from their regular environs thus providing a state of excitation from which questions will result.

Till now we had not created a process to verify if this questioning is happening while children and their guides engage in their projects. Anveshana 2015 set out to correct this.

What you see in this volume are the questions children asked while doing their projects. It is almost certain not all of them could have been answered. Equally, each is a first step in a voyage of discovery that the child has begun.

AGASTYA INTERNATIONAL FOUNDATION



PROJECTS EXHIBITED IN THE FAIR

S.N	PROJECT CODE	PROJECT TITLE	COLLEGE NAME	SCHOOL NAME
1	AS-E-01	LITHIUM ION BATTERIES FROM PURPURIN	CHADALAWADA RAMANAMMA ENGINEERING COLLEGE	H.M.M HIGH SCHOOL RAILWAY KODUR
2	AS-E-02	BLOOM ENERGY FOR THE FUTURE BY USING FUEL CELLS	SRI PADMAVATI MAHILA VISVAVIDYALAYAM	ZPHS TIRUCHANOR
3	AS-E-03	SOLAR AIR CONDITIONING WITH PELTIER ELEMENTS	SRI PADMAVATI MAHILA VISVAVIDYALAYAM	ZPHS TIRUCHANOR
4	AS-E-04	TO DESIGN AND FABRICATION OF HYDRAULIC MINI ROBOT	SREENVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES	R.K VIDHYALAYA ENGLISH MEDIUM SCHOOL,CHITTOOR
5	AS-E-05	SOLAR TRACKING PHOTOVOLTAIC DEVICE	SRI VENKATESWARA COLLEGE OF ENGINEERING	ZPHS TIRUCHANOR
6	AS-E-06	AUTOMATIC SIDE STAND RETRIEVING SYSTEM	N.B.K.R. INSTITUTE OF SCIENCE & TECHNOLOGY	ZP GIRLS HIGH SCHOOL,KOTA & ZPHS,KOTHAPALEM
7	AS-E-07	POWER GENERATION FROM VK0001 PANEL	SREEDEVI ENGINEERING COLLEGE	ZPHS VATTINAGULAPALLY
8	AS-E-08	PIEZO ELECTRICITY	JAYA PRAKASH NARAYAN COLLEGE OF ENGINEERING	ZPHS DHARMAPUR
9	AS-WM-01	SMART WATER & WASTE MANAGEMENT	MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY	MUKKARAM JAH HIGH SCHOOL
10	AS-WM-02	A HIGH SENSITIVE ALCOHOL SENSOR WITH AUTO CAR IGNITION	TKR ENGINEERING COLLEGE	ZPHS KARMANGHAT
11	AS-WM-03	AUTOMATED SOLAR POWERED DRAIN CLEANER	SRI SAI JYOTHI ENGINEERING COLLEGE	ZPHS VATTINAGULAPALLY
12	AS-WM-04	BIO-PAPER	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY	ZPBHS,MEDCHAL



13	AS-WM-05	SMART SANITATION SYSTEM FOR SUSTAINABLE SANITY	BV RAJU INSTITUTION OF TECHNOLOGY	VISHNU HIGH SCHOOL
14	AS-AG-01	AUTOMATIC CULTIVATION SYSTEM USING MICROCONTROLLER	ACE ENGINEERING COLLEGE	ZPHS, KAPRA
15	AS-AG-02	ROCKER BOGIE ROBOT FOR PLANT IRRIGATION	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY	ZPHS KUKATPALLI
16	AS-A-01	PELTIER AIR COOLER	VELAGAPUDI RAMAKRISHNA SIDDARTHA ENGINEERING COLLEGE	SRI NAVABHARATH SCHOOL, KRISHNALANKA
17	AS-G-01	REDUCTION OF ACCIDENTS BY ALCOHOL DETECTOR IN VEHICLES	BHOJREDDY ENGINEERING COLLEGE FOR WOMEN	M.H GUPTA HIGH SCHOOL
18	AS-G-02	TECHNOLOGICAL AID FOR DYSCALCULIA USING OPEN CV AND MINTER SYSTEM	G.NARAYANAMMA INSTITUTE OF TECHNOLOGY AND SCIENCE	G.PULLA REDDY HIGH SCHOOL
19	AS-G-03	E DUSTBIN	AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY	ZPHS VANASTALIPURAM
20	AS-G-04	QUAD WHEEL OMNI-DIRECTIONAL ROBOT	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY	ZPHS KUKATPALLI
21	AS-G-05	MICROSTRIP ANTENNA	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY	ZPHS KUKATPALLI
22	AS-G-06	SMART BED -SMART SOLUTION FOR BED SORES	MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY	GIRLS HIGH SCHOOL, MAJEEDIA
23	AS-G-07	PHASE CHANGING MATERIALS(PCMS) USED AS BUILDING MATERIAL	PRINCETON COLLEGE OF ENGINEERING AND TECHNOLOGY	ZPHS GHATKESAR
24	AS-G-08	ROTATING BUILDING USING ENERGY	PRINCETON COLLEGE OF ENGINEERING AND TECHNOLOGY	ZPHS GHATKESAR
25	AS-G-09	ENERGY EFFICIENT ENGINES	VAAGESWARI COLLEGE OF ENGINEERING	ZPHS SEETHARAMPALLI
26	AS-G-10	TWO WHEELER BLIND SPOT DETECTION SYSTEM	CHADALAWADA RAMANAMMA ENGINEERING COLLEGE	S.V HIGH SCHOOL, TIRUPATI



27	AS-G-11	SMARTER LEVEL CROSSING SYSTEM	N.R.I.INSTITUTE OF TECHNOLOGY	SRI NAVABHARATH SCHOOL,KRISHNALANKA
28	AS-G-12	3-AXIS MEMS CONTROL WHEEL CHAIR FOR PATIENTS	SREEDEVI ENGINEERING COLLEGE	ZPHS VATTINAGULAPALLY
29	AS-G-13	BOMB DETECTION AND DIFFUSING ROBOT CONTROL	SREE DATTHA GROUP OF INSTITUTIONS	SLATE THE SCHOOL
30	AS-G-14	TEEKA	G.NARAYANAMMA INSTITUTE OF TECHNOLOGY AND SCIENCE	ZPHS MANIKONDA
31	AS-G-15	ONLINE ORGAN BANKING SYSTEM	G.NARAYANAMMA INSTITUTE OF TECHNOLOGY AND SCIENCE	ZPHS MANIKONDA
32	AS-G-16	QUAD COPTER	VBIT ENGINEERING COLLEGE	JHONSON ICSE MALLAPUR
33	AS-G-17	DIGITAL WATERMARKING	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY	ZPHS KUKATPALLI
34	AS-G-18	PROVIDING SECURITY TO THE VEHICLE AND HUMANS USING GPS TRACKING SYSTEM	VNR VIGNANA JOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY	ZPHS BACHUPALLY



1. LITHIUM ION BATTERIES FROM PURPURIN

1. What is meant by welding?
2. What is meant by compressed natural gas?
3. What is electrolysis of water?
4. What is HHO?
5. What is the atomic number of hydrogen?
6. What is the atomic number of oxygen?
7. What are the properties of hydrogen?
8. What are the properties of oxygen?
9. What is fuel?
10. What is an element?
11. What is a molecule?
12. What is a bond?
13. What is a molecular bond?
14. What is monatomic?
15. What is meant by diatomic?
16. Define energy?
17. Define volt?
18. Define ampere?
19. Define watt?
20. What are the uses of tungsten?
21. What is meant by a metal?
22. What is meant by temperature?
23. What is meant by Fahrenheit?
24. What is meant by Celsius?
25. What is meant by flame?
26. What is meant by brown gas?
27. What is meant by efficiency?
28. What is the efficiency of brown gas?
29. Define power?
30. What is meant by current?
31. What is the unit of current?
32. What is the calorific value of hydrogen fuel?
33. What is meant by generator?
34. What is meant by mortar?
35. What is the meant by ac current?
36. What is meant by alternative source?
37. What is the meant by dc current?
38. What is meant by i.c engine?
39. What is meant by resource?
40. What is meant by hydrogen boosters?
41. What are the disadvantages of hydrogen fuel?
42. What are the advantages of hydrogen fuel?
43. What is meant by pure water?
44. What is meant by a catalyst?
45. What is meant by combustion?
46. What is meant by carburetor?
47. What are the characteristics of hydrogen?
48. What are the characteristics of oxygen?
49. What are the uses of hydrogen fuel?
50. How electricity is generated from hydrogen fuel?
51. What is the efficiency of hydrogen fuel?
52. How oxygen supports hydrogen fuel?
53. What are the different types of catalyst?
54. What are the different types of electrodes?
55. What is meant by cathode?
56. What is meant by anode?



57. How the electrolysis of water takes place?
58. What is a gas engine?
59. What are the accessories of i.c engine?
60. What is meant by friction?
61. What is meant by brake power?
62. Which metal is used for gas engine?
63. What are the properties of metal used for gas engine?
64. What are the specifications of gas engine?
65. What are the constituents of coal which are the most important in the production of coke?
66. When will the gross and net calorific value of a fuel be the same?
67. Which is not used as a binder in coal briquetting?
68. Why does the ratio of primary air to secondary air increases with increase in the rank of coal?
69. How can stack heat losses can be minimised?
70. What is the percentage of carbon content by weight in air dried wood?
71. During combustion of gaseous fuels, what is deficiency of air?
72. How is laboratory gas is obtained?
73. What is an element?
74. What is a bond?
75. What is monatomic?
76. What are the uses of tungsten?
77. What is meant by brown gas?
78. What is the efficiency of brown gas?
79. What is meant by mortar?
80. What is meant by IC engine?
81. What is meant by pure water?
82. What are the uses of hydrogen fuel?
83. What is low temperature carbonization?
84. What is combustion reaction of fuels?
85. How is the internal energy of the combustion products compared to that of reactants?
86. What is the size of blast furnace grade coke?
87. How is higher efficiency in the combustion of solid fuel not achieved?
88. What is a coal containing very high percentage of Durain called?
89. What is a Junker's calorimeter is used to determine the calorific value of?
90. What does the term PVC used in the plastic industry stands for?
91. What is used to produce artificial rain?
92. What is oil of vitriol?
93. What is used in the preparation of dynamite?
94. What are atoms?
95. What is the reactivity series?
96. What is an alloy?
97. What is meant by hydrogen safety?
98. What is meant by an oxy hydrogen flame?



2. BLOOM ENERGY FOR THE FUTURE BY USING FUEL CELLS

1. What is Bloom Energy?
2. Why it is Bloom Energy for the Future?
3. What is Fuel Cell?
4. Why it is called Fuel Cell?
5. What is the working principle of Fuel Cell?
6. Why we are developing Fuel Cell?
7. Is Fuel cell storage device or not?
8. Is Fuel Cell rotating device or stationary device?
9. What are the advantages of Fuel Cell?
10. What is the theme of this project?
11. Why fuel cell technology more efficient than other type of electricity Generation?
12. What is power?
13. What is voltage?
14. What is current?
15. What is resistance?
16. What is energy?
17. What is power plant?
18. What is the unit of power?
19. What is the unit of voltage?
20. What is the unit of current?
21. What is the unit of resistance?
22. What is the unit of energy?
23. How to measure power?
24. How to measure current?
25. How to measure energy?
26. How to measure resistance?
27. How many types of power supplies?
28. Which type of power supply is used in domestic purpose?
29. Where dc power is used?
30. Which phase (single or three phase) is mostly used for domestic purpose?
31. What is load?
32. How many types of loads?
33. What are the applications of fuel cells?
34. Which fuels required in fuel cell?
35. What are the main parts in fuel cell?
36. How many types of fuel cells?
37. What is the purpose of anode in fuel cell?
38. What is the purpose of cathode in fuel cell?
39. What are the main parts in fuel cell?
40. Which material used for anode?
41. Which material used for cathode?
42. What is Catalyst?
43. What is Electrolyte?
44. What is the purpose of Gas division layer in fuel cell?
45. How much of voltage we can generate by using single fuel cell?
46. What is fuel cell Stack?
47. What is the purpose of Bipolar plate in fuel cell?
48. Which material used for Bipolar plate?
49. Which material used for gas division layer?
50. What is an electrolyzer?
51. How does an electrolyzer works?
52. How many types of Electrolyzers?
53. Which materials used for Electrolyzers?
54. What are the methods to produce hydrogen and oxygen?
55. What type of connection used for connecting number of fuel cells?
56. How we classify different types of fuel cells?



57. What is PEM?
58. Which material used for electrolyte in PEM?
59. Where PEM fuel cells are used?
60. What is another name of PEM fuel cell?
61. What is the advantages of PEM?
62. Where are alkaline fuel cells used?
63. Where are solid oxide fuel cell used?
64. Where are phosphoric acid fuel cells used?
65. Where are molten carbonate fuel cells used?
66. Why ions not pass through the membrane?
67. Which material is used for electrolyte in solid oxide fuel cell?
68. Which state hydrogen and oxygen under operating conditions?
69. What are the components in the Electrolyzer?
70. What are the advantage of solid oxide fuel cell?
71. What are the advantage of phosphoric acid fuel cell?
72. What are the advantage of alkaline fuel cell?
73. What are the advantage of molten carbonate fuel cell?
74. What is Electrolyte?
75. What is Electrode?
76. Who is the Inventor of fuel cell?
77. Which type of material is used for electrolyte in phosphoric acid fuel cell?
78. Which type of material is used for electrolyte in Alkaline fuel cell?
79. Which type of material is used for electrolyte in Molten carbonate fuel cell?
80. What is Inverter?
81. What is the Rectifier?
82. What is the efficiency of PEM fuel cell?
83. What is the efficiency of Solid oxide fuel cell?
84. What is the efficiency of Phosphoric acid fuel cell?
85. What is the efficiency of Molten carbonate fuel cell?
86. What is the efficiency of Alkaline fuel cell?
87. What is Cell and Battery?
88. How many types of connections are there to connect electrical equipment?
89. What type of connection is used for Domestic power supply (either series or parallel)?
90. Who is the father of Electricity?
91. What are the byproducts of Fuel cells?
92. What is meant by Electrolysis of water?
93. Why we are using distilled water in electrolysis of water?
94. What is Ion, Atom, Molecule, Compound, Proton?
95. What is Conductor?
96. What is Insulator?
97. What is Semiconductor?
98. What is Motor?
99. What is Generator?
100. What is the working principle of Motor?



3. SOLAR AIR CONDITIONING WITH PELTIER ELEMENTS

1. What is energy?
2. What are the units of energy?
3. What are the types of energies?
4. What is solar energy?
5. What is meant by renewable energy?
6. What is meant by non-renewable energy?
7. What is conventional energy?
8. What is non-conventional energy?
9. Which type of energy is solar energy?
10. What form of energy do concentrating solar power technologies use to generate energy?
11. Which type of areas are preferred for solar power plant?
12. Why energy is required?
13. Which type of energies are mostly used?
14. What is Peltier element?
15. What is Peltier effect?
16. What is the main theme of this project?
17. What are the advantages of this project?
18. What is the source of solar energy?
19. By which device solar energy is directly converted to electrical energy?
20. How solar energy comes from sun?
21. What is solar panel?
22. What is the purpose of solar panel?
23. What is the other name for solar panel?
24. Which type of connections are mostly used in solar panel?
25. What is the basic principle of solar cell
26. What is photovoltaic effect?
27. Who discovered photovoltaic effect?
28. What are the types of photovoltaic cells?
29. How solar panels work?
30. What are the types of solar panels?
31. What is solar cell?
32. What is the material used for solar cell?
33. What is relation between solar cell and solar panel?
34. What is battery?
35. How batteries are specified?
36. Which type of batteries are used for storing electrical energy?
37. What is the difference between cell and battery?
38. What is meant by Alternating Current?
39. What is meant by Direct current?
40. What is inverter?
41. What is rectifier?
42. Which element is used for converting Alternating Current to Direct Current?
43. Which element is used for converting Direct Current to Alternating Current?
44. What are the types of inverters?
45. What are the units of inverters?
46. What are the types of solar inverters?
47. Why charge controller is needed?
48. How many types of solar panels are there?
49. Which energy is produced by sun?
50. What type of connections used in solar panel?
51. What are the layers present in solar panel?
52. What is the life time of solar panel?
53. What is the efficiency of solar cell?
54. What is the output power in solar cell?
55. Which type of element is used in PV module?
56. In addition to Silicon which materials are used in PV module?



57. How much voltage is produced by solar cell?
58. What is the range of solar radiation received on the earth surface?
59. What is cooling system?
60. What is heating system?
61. What is the working principle of air cooler?
62. What is the difference between air conditioner and
63. Why do we use solar air cooler?
64. Why solar air cooler is better than normal air cooler?
65. What are the advantages of conditioner?
66. What is the meaning of humidity?
67. What is blower?
68. What are the types of blowers?
69. Which type of blower are used in solar air cooler?
70. What is sensor?
71. What are the types of sensors?
72. Which type of sensor is used in solar air cooler?
73. What are the uses of sensor?
74. What is thermocouple?
75. What is thermocouple effect?
76. What are the types of temperature coefficients?
77. Which type of temperature coefficient is used in thermocouple?
78. Which country used solar cell first?
79. In which year, the solar cell was first used?
80. At present which country utilize the most solar power?
81. What are the types of renewable energy?
82. What are the types of non-renewable energy?
83. What is Power?
84. What are units of Power?
85. What is meant by Electricity?

86. What is a microcontroller?
87. What is a microprocessor?
88. What is electric current?
89. What is voltage?



4. TO DESIGN AND FABRICATION OF HYDRAULIC MINI ROBOT

1. What is the name of the project?
2. What is the main moto of this project?
3. Who is the father of the robot?
4. In which year the humanoid robot is invented?
5. What is robot?
6. What is hydraulic robot?
7. What are the main parts of the hydraulic robot?
8. What are the materials use in this project?
9. What is the total cost of this project?
10. What is the total weight of this project?
11. How much weight it can lift?
12. This robot is able to talk and walk?
13. Why it is not able to talk or walk?
14. The hydraulic robot is work based on which energy?
15. What are the basic laws of robots?
16. Why we can choose the hydraulic pressure as to create pressure? Why not other sources?
17. What is fluid?
18. What is hydraulic?
19. What is hydraulic fluid?
20. What is the hydraulic pressure?
21. What is "pascal law"?
22. Which type of fluid we use as hydraulic fluid?
23. Why we use water? Why not oil?
24. What is the boiling point of water?
25. What type of material we use to join syringes to syringes?
26. What is syringes?
27. What is meant rams?
28. Why we use syringes?
29. Why not rams?
30. How many total syringes we use in this projects?
31. What is the specifications of the syringes?
32. How many 5ml syringes we use in the projects?
33. How many 10ml syringes we use in the projects?
34. How many 20ml syringes we use in the projects?
35. Why we use the 5 ml syringes to this robot and 10 ml syringes to the operation side?
36. Why we use 20ml syringes?
37. Where we use the 20 ml syringes?
38. How many syringes we used in this robot?
39. What type of gum used to attach the syringes to the robot?
40. What is the material of the tube?
41. Why air bubbles come in water after some days?
42. What is name of wood we use here? Is it weight less or not?
43. Why we choose weightless wood?
44. How many individual parts in the robot?
45. How we joint all the parts?
46. Why we use key here? or what is the main purpose of the key?
47. Why we give paint coating?
48. What colour we use here?
49. What is meant by joint?
50. What meant by link?
51. What is the different between joint and link?
52. What is meant by push?
53. What is meant by pull?
54. Which is easy either pull or push?
55. Why pull is always easy than push?
56. What is pressure?
57. What is Density and its units?



58. What is the units of the mass?
59. What are the advantages of this project?
60. What are the disadvantages of this projects?
61. What is the application of the project?
62. In this project what type of material we use as a finger?
63. How much total length of tube we used in this project?
64. What is Zig-zag machine?
65. Why we use Zig-zag machine?
66. What is buffing machine?
67. Why we use buffing machine?
68. What type of links and joint we use here? Either it is simple or complex?
69. How much time to require to design and construction of this project?
70. Discuss any two points about future scope of this project?
71. This robot is automatically function or the manual operation?
72. This robot is run by the electrical power or not?
73. Tell the working principle of the mini hydraulic robot?
74. How you say the operation of the robot is easy compare to the humanoid robot?
75. Difference between the hydraulic and humanoid robot?
76. From where the word robot is coined?
77. What type of the thread we used here? Why?
78. What is the viscosity and units?
79. What is the newton's third law? Explain with the example?
80. Why the life time of the syringes is less compare to rams?
81. Why we want to change the water continuous?
82. Explain why we use 5 ml syringe to robot and 10 ml syringe to the operation purpose? Like that explain on real life example where we see daily?
83. Here the robot is able to walk or talk? in future it is possible?

84. Why we choose the wood even though we know that the lifetime of the wood is less?
85. Which country first robot invented? In what form?
86. What are the types of robots in industries?
87. Why we numbered the syringes?
88. Who is the father of robotics?
89. What is the density of water?
90. What is the diameter of the pipe tube?



5. SOLAR TRACKING PHOTOVOLTAIC DEVICE

1. What is light?
2. What is the wavelength of light?
3. Name a few other parts of the electromagnetic spectrum.
4. What are the different wavelengths of radiation emitted by the sun?
5. Of the different wavelengths of radiation emitted by the sun, what are the radiations which are filtered by the ozone layer?
6. Of the different wavelengths of radiation emitted by the sun, what are the wavelengths that are available at the surface of the earth?
7. Among the various wavelengths of radiation available at the surface of the earth, what part of the radiation can be harvested as electricity?
8. What do you mean by infrared radiation? What is its wavelength?
9. What do you mean by UV rays? Give its wavelength.
10. What is the speed of light?
11. What is light made of?
12. Define Energy. Give its units.
13. Define Power. Give its units.
14. Define Work. Give its units.
15. Define current. Give its units.
16. What is electric potential?
17. What is voltage? Give its units.
18. Define resistance. Give its units.
19. What are the different classifications of sources of energy?
20. What do you mean by a renewable source of energy? What is it also known as?
21. What do you mean by a non-renewable source of energy? What is it also known as?
22. What do you mean by conventional sources of energy?
23. What do you mean by non-conventional sources of energy?
24. List out a few renewable sources of energy and give their merits and demerits.
25. List out a few non-renewable sources of energy and give their merits and demerits.
26. What do you mean by artificial fuels?
27. What is sustainable development? Why is it necessary?
28. What is solar energy?
29. What are the limitations of solar energy?
30. What is the aim of this project?
31. Why should we focus on this project?
32. How is solar energy converted into electricity?
33. What is a photovoltaic cell? What is its function?
34. What is photoelectric effect?
35. What are the different components being used in this project?
36. What is an LDR?
37. How many LDRs are needed for this project?
38. Explain the positioning of the LDRs.
39. What is the size of the solar panel being used?
40. What is the output of the solar panel?
41. What is a motor?
42. What is the type of the motor being used in this project?
43. What is a microcontroller?
44. What is the microcontroller being used in this project?



45. What is the need to use a microcontroller?
46. What is the efficiency of a normal solar panel?
47. What is the efficiency of solar panel achieved by using the additional equipment?
48. What is the costs incurred per panel due to using additional equipment?
49. What is the total cost of this project?
50. What is the total potential of solar power that can be harvested throughout the world?
51. What is the total potential of solar power that can be harvested in India?
52. What is the total electric power that is currently being harvested in India?
53. What is the biggest solar plant in the world in terms of electric power producing capacity?
54. What is the biggest solar plant in India in terms of electric power producing capacity?
55. Which state in India is a leading producer of electric power using solar energy?
56. What is the total power requirement of our country?
57. What is the nearest solar power plant to your town?
58. What is an IC?
59. What is a semiconductor?
60. Name the different semiconductor elements.
61. State the law of conservation of energy.
62. Who is the father of electricity?
63. Who is the father of physics?
64. How do you collect solar energy?
65. What is the units used for measuring solar energy?
66. What is the biggest solar plant in Andhra Pradesh?
67. What is the capacity of the biggest solar plant in Andhra Pradesh?
68. What is the total power requirement of Andhra Pradesh?
69. What is a microprocessor?
70. What is the property of an LDR?
71. Who proposed the photoelectric effect?
72. What is the size of the solar panels being used in the solar power plants?
73. What is the power output of each of the solar panels being used in the solar power plants?
74. What percentage of the captured light is efficiently converted into electricity using the existing solar panels?
75. What is the material used to manufacture the solar panels?
76. What are the limitations of thermal and diesel power plants?
77. What is a hydropower plant?
78. Why can't we depend entirely on hydropower plants?
79. Why do we need to generate electricity from various sources? Why can't depend entirely on either solar power or hydropower or coal ?
80. What is the power rating of the motor being used?
81. What is the power input of the microcontroller?
82. If all the existing solar panels throughout the country are modified to facilitate solar tracking, what would be the increase in efficiency obtained?
83. What is pollution?
84. How is the environment polluted due to thermal and diesel power plants?
85. How will this project aid in reducing pollution?



86. In adding the additional equipment so as to facilitate the solar tracking, will large extra space be necessary?
87. What is the price of the motor?
88. What is the price of each LDR?
89. What is the price of the microcontroller being used?
90. What is the price of a solar panel used in the power plants?
91. If tracking is used on the solar panel used in power plants, what is the power rating of the motor to be used?
92. With the increased efficiency obtained due to tracking, can these solar panels be now used extensively at homes?
93. Why is the efficiency of conversion of solar power to electricity low?
94. Is it economical to put up solar panels at households to make the houses self-sufficient?
95. What are the solar powered devices currently being used?
96. What is the necessity of generating electricity using nonconventional sources of electricity?
97. What are the difficulties faced in establishing a solar power plant?
98. What is a solar heater? Name its applications.
99. Why are we not using solar powered vehicles?
100. What are the advantages of solar power plants over hydropower plants?



6. AUTOMATIC SIDE STAND RETRIEVING SYSTEM

1. What is Anveshana?
2. Where is it located?
3. Why are these types of programs conducted?
4. Who is the founder of Anveshana?
5. How many branches does it have throughout India?
6. Does it have any influence over India and world?
7. How does it help students?
8. Are there any benefits for graduating engineering students?
9. What was the main reason to build up this type of organization?
10. What is the full form of NBKR?
11. Where is it located?
12. To which branch do you belong?
13. Can students from all streams of engineering participate in this fest?
14. Why should school students participate in this project expo?
15. Why are students from Government schools preferred to other schools?
16. Is any accommodation provided to the participants?
17. Which type of projects are likely to be selected?
18. How many projects do they select for one fest?
19. How many states can participate in this Anveshana program?
20. Do they give any prize money /certificates for winners?
21. How many projects are going to be prized?
22. What is the title of our project?
23. What concept is involved in this project?
24. What type of qualities they are expecting from students?
25. What is meant by automatic?
26. What is the origin of the word automatic?
27. In this project, what is meant by stand?
28. How many major components we need to complete this project?
29. What is the definition of spring?
30. Which type of material is used to manufacture a spring?
31. How does the spring work? What is the principle of it?
32. Why do we use stand?
33. What is the meaning of automatic stand?
34. Where we use this automatic stand?
35. Which type of mechanism was used in making the automatic stand?
36. How do accidents occur?
37. How can we define side stand?
38. How do we lift the stand automatically?
39. What is mean by gear?
40. Where do we use gears?
41. What is the function of a gear?
42. Which type of materials were used for this automatic stand?
43. How many processes do we need to complete this project?
44. What is mean by “comprises of kinematic links and springs”?
45. Which type of material was used to make spring?
46. what is mean by ignition
47. how ignition takes place
48. how we defined L-link
49. What is mean by ‘eye bolt’?
50. How can we define tension?
51. What is definition of force?
52. How can we define mechanical engineering?



53. To which type of gear shift bikes does this model belong?
54. What were the operations you performed while making this project?
55. Is this model suitable for real time applications?
56. How much money you spent in making this model?
57. Does this model have self-interlocking mechanism?
58. What is the name of the bolt you used for interlocking?
59. Which mechanism should the gear shifter rod and stand have?
60. Will the stand lift off even if the gear shifter rod is pressed when the stand is resting on the ground?
61. Can we place this model for a Scooty or Moped?
62. Will this model work when we park our bikes in sandy areas?
63. Will the mechanism automatically interlock when the stand is pressed down?
64. Will it work if the spring force is less than the weight of the stand?
65. Where is the other end of the spring is connected if it is used in bikes?
66. How many springs are needed for this model?
67. Can we apply this model to the existing stand model or a new design of stand to be introduced?
68. Which type of springs are used in this model?
69. Can it be used for Chetek vehicles?
70. How will this design reduce the accidents?
71. Will this additional fitting do any harm to the rider or co-rider?
72. Can we make this automatic stand using electronic sensor and motor?
73. Mostly which type of vehicles needed this automatic stand?
74. How are side stand alerts provided in bikes at present?
75. Why are these alerts unsuccessful in avoiding accidents?
76. How many people are allowed to ride on a bike?
77. What is the person sitting behind called?
78. How are the links changed in case of opposite gear patterns?
79. What are some of the main causes of accidents in bikes?
80. What is your idea for gear-less bikes?
81. What is the safety gear that is compulsory for bike riding?
82. Why is side stand removed in case of race bike?
83. Which gear is to be applied before starting the engine of a bike?
84. What happens when the bike is in neutral gear?
85. Briefly describe a gear box?
86. How many gears does a common bike have?
87. Why is clutch used?
88. How does a clutch work?
89. What is accelerator?
90. How does an accelerator work?
91. When clutch is applied, the accelerator is at what position?
92. How does Anveshna help in improving skills?
93. What is expected from the models being presented in Anveshna?
94. Why are simple models encouraged in Anveshna?
95. When is this mechanism unsuccessful?
96. How can one overcome defects in this model?
97. Is this mechanism helpful for power start bikes?
98. How can the mechanism be altered so that it is helpful for power start bikes?
99. What did you learn from the project?
100. Will you be able to design a similar simple model?



7. POWER GENERATION FROM VK0001 PANEL

1. What is the title of the project?
2. What is VK0001 panel?
3. What are photo voltaic cells made of?
4. What is the main idea of this project?
5. What are the keywords in the project?
6. What is the block diagram of VK0001 panel?
7. What does the VK0001 panel consists of?
8. What is the block diagram of the project?
9. What does the block diagram consist of?
10. How many stages does the block diagram consists of?
11. What is the main component in the project?
12. What is a solar cell?
13. What is the purpose of solar cell?
14. What is the importance of solar cell?
15. How does a solar cell is used as a transistor?
16. How many volts are produced by the cell?
17. Explain about the transistor connection the solar cell?
18. What is the best configuration for solar cell which is based + with emitter -?
19. How are the solar cells protected?
20. Is there any excess protection for the solar cells?
21. How many stages are there in the project?
22. What are the two stages?
23. What are the components required in the first stage?
24. What is the purpose of the standard circuit?
25. How the battery is used in this stage?
26. What is power amplifier transistor?
27. What is the use of diodes?
28. What is RPS?
29. What does RPS consists of?
30. What is rectifier?
31. What type of rectification is used in this stage?
32. What is the use of bridge of bridge rectifier?
33. Which type of voltage we are giving to this circuit?
34. What is capacitor?
35. What is the use of capacitor?
36. What is regulator?
37. What is the use of regulator?
38. Why LED is used?
39. What is the purpose of the switch?
40. How many volts are generated in this stage?
41. Which type of load is connected in this stage?
42. How many volts are required for the mobile to charge?
43. How the mobile charger is connected?
44. What is the conclusion of the first stage?
45. What is the second stage?
46. What are the components required in the second stage?
47. Why the second stage is required?
48. What is the main aim of the second stage?
49. What is inverter?
50. Why the inverter is used?
51. Which type of conversion does the inverter perform?
52. What is the capacity of diodes?
53. What is a transformer?
54. What is the conversion type of transformer?
55. What type of transformer is used?
56. What is the purpose of transformer?
57. What type of capacitors are used in this stage?
58. What is the capacity of the capacitors?
59. How the noises are reduced at the initial stage?



60. What type of filters are used?
61. How are the filters used to reduce the noises?
62. Which type of load is used in the second stage?
63. How many volts are generated in this stage?
64. How many volts are required for the activation of the CFL Bulb?
65. What is the range of conversion of the inverter?
66. How the switch is used in this stage?
67. What is the output of the second stage?
68. What is the conclusion of the second stage?
69. How the storage energy is used?
70. Is this storage energy useful in our daily life?
71. What is the difference between earlier solar panel and VK0001 panel?
72. What is the range of temperature to be maintained?
73. What is the purpose of heat sinks?
74. Are there any replacements in the system?
75. What is the use of sky lights in the home construction?
76. And how this solar cells are used in such type of conditions?
77. Which type of maintenance is required for the solar cells?
78. Explain about installation and optimization?
79. What are the conducting materials present in the panel logic?
80. What are other type of chemicals used the panel logic?
81. What are the characteristics of pH4 molecule?
82. What is the use of red phosphorous?
83. What is the crystal structure of red phosphorous?
84. What is the use of violet phosphorous?
85. What is the crystal structure of violet phosphorous?
86. What is the use of black phosphorous?
87. What is the crystal structure of black phosphorous?
88. Mention some of the allotropes of phosphorous?
89. How do we measure capacitance?
90. Why do capacitors store energy?
91. How the solar cells are connected?
92. How many solar cells are used in this project?
93. Without Solar power helps to slow/stop global warming?
94. What are the precautions should be taken while working with the project?
95. What are industrial applications of this project?
96. Mention some of the applications related to the home appliances?
97. What are the features of this project?
98. Mention the advantages without solar panel?
99. What are the disadvantages?
100. List out the references which are related?



8. PIEZO ELECTRICITY

1. What is Current?
2. What is Voltage?
3. What is AC supply?
4. What is DC supply?
5. What is a Diode?
6. What is a Rectifier circuit?
7. What is a Resistor?
8. What is a Capacitor?
9. What is Voltage regulator?
10. What is Battery?
11. How a battery can be charged?
12. How a battery can be discharged?
13. What is Half wave rectifier?
14. What is Full wave rectifier?
15. What is Piezo electricity?
16. What is Piezo transducer?
17. What is Series connection?
18. What is Parallel connection?
19. What is the principle of Piezo electric effect?
20. What is Filter?
21. What is Piezo?
22. What are examples of piezo materials?
23. How much voltage each Piezo sensor can generate?
24. What is transducer?
25. What are various sources of electricity?
26. What is Mechanical stress?
27. What is Piezo electric effect?
28. What are the applications of Piezo electricity?
29. What is Dipole moment?
30. What is the function of capacitor?
31. What is the output of piezo cell either AC or DC?
32. How the piezo cell generates AC?
33. What are the units of capacitance?
34. What is the function of each pin in voltage regulator?
35. What are the types of capacitors?
36. What are the units of resistance?
37. What is an inverter?
38. How a capacitor stores energy?
39. What is the use of capacitor at converter output?
40. What is the use of regulator circuit?
41. What is the use of converter circuit?
42. How much current could be generated by means of a single piezo electric crystal?
43. Can this electricity be trapped in a small battery?
44. What is Young's modulus?
45. What is Tensile strength?
46. What is Electric field?
47. What is poling/de-poling in piezo ceramic materials?
48. What is damping?
49. How to attach wires to the piezo ceramic cell?
50. What is Pyro-electric effect?
51. What is frequency limit of piezo ceramic sheet?
52. What are monopoles?
53. Can piezo ceramic actuators be used at cryogenic temperature?
54. Are piezo ceramic sheets fragile and easy to break?
55. If a sheet loses some properties can it be re-poled?
56. What is converse piezo electric effect?
57. What is ferro-electric polarization?
58. What is elasticity coefficient of a metal?
59. What is electric field?



60. What is permittivity?
61. What is curie temperature?
62. What is peizo voltage coefficient?
63. What is mechanical quality factor?
64. What is frequency coefficient?
65. What is peizo electric deformation coefficient?
66. What is electric flux density?
67. What is intrinsic effect of a peizo ceramic material?
68. What is extrinsic effect of a peizo ceramic material?
69. What are peizo actuators?
70. What is direct peizo electric effect?
71. What is inverse peizo electric effect?
72. What is peizo modulus?
73. What are types of electrodes used for peizo cells?
74. What is active vibration insulation?
75. What is passive vibration insulation?
76. Why a diode is connected in series with the charging line of battery?
77. What is charging current?
78. What is a transformer?
79. What is a potentiometer?
80. What is potential difference?
81. What is the effect of heat on peizo material?
82. Does peizo material can generate sound waves?
83. Does parallel connection boosts voltage?
84. What is transistor?
85. Does transistor work like switch?
86. What is emitter of transistor?
87. What is base of a transistor?
88. What is collector of a transistor?
89. Does the potentiometer act as a variable resistor?
90. What are the pins of a voltage regulator?
91. What is an LED?
92. How the regulator output voltage can be varied?
93. What is time constant of a capacitor?
94. What is a voltage booster?
95. What are different types of peizo cells based on layers?
96. Can we connect peizo cells in series?
97. How much charging current should be given to the battery to charge?
98. What is a multi-meter?
99. What are the materials that can be used to make a peizo cell?
100. How much voltage is required to make the transistor act like switch?



9. SMART WATER & WASTE MANAGEMENT

1. Current is measured in series or parallel?
2. Voltage is measured in series or parallel?
3. Device for measuring current?
4. Device for measuring voltage?
5. Device for measuring both voltage and current?
6. Unit of current?
7. Unit of voltage?
8. Unit of capacitance?
9. Unit of inductance?
10. Is current added in series?
11. Is voltage added in series?
12. Is voltage same in series or parallel?
13. Give the relationship between current and voltage.
14. What is the net resistance when resistors are connected in series?
15. Define Ohms law.
16. Which type of connection is used in house wiring?
17. What does capacitor do?
18. What is net capacitance when capacitors are connected in parallel?
19. Do we have AC or DC supply in house?
20. Frequency of domestic AC supply.
21. What is power?
22. What are the units of power?
23. What happens to power when either voltage or current is increased?
24. Device for measuring power?
25. What is a conductor?
26. What is an insulator?
27. Give examples of conducting and insulating materials?
28. What constitutes current?
29. What is the direction of current with respect to the direction of electrons?
30. What is the unit of energy?
31. What is resistance?
32. What is the unit of resistance?
33. What is LCD?
34. What is LED?
35. What is a sensor?
36. What is the difference between analog and digital?
37. Are the sensors you are using analog or digital?
38. What are semiconductors?
39. What is voltage rule?
40. What is current rule?
41. What is a multimeter?
42. What is a transformer?
43. What are the types of transformers?
44. How to convert AC to DC?
45. What is IOT?
46. Give some common used cloud services?
47. Give a daily application of IoT?
48. What is open circuit?
49. What is short circuiting?
50. What is closed circuit?
51. What are active devices?
52. What are passive devices?
53. Name some active components?
54. Name some passive components?
55. What is a diode?
56. What is forward bias?



57. What is reverse bias?
58. What is a processor?
59. What processor are you using?
60. Explain the block diagram of your model.
61. What is a depletion region?
62. When will the voltage influence current?
63. What are temperature sensitive devices?
64. Which part of atom has no electrical charge?
65. What is EMF?
66. What is a magnetic field?
67. What is Farady's law?
68. What is electromagnetic induction?
69. What is the problem statement in your project?
70. What is your proposed solution?
71. How does this help in water conservation?
72. How is the proposed model of waste management helpful to GHMC?
73. What are the input devices your project?
74. How is the output measured?
75. Why IOT?
76. What is a p-n junction?
77. List the sensors used in your model.
78. How are you converting analogy sensing devices into digital in your model?
79. What is the cloud platform used?
80. How is it coded?
81. How is your model relevant to the current situation of the city?
82. How easily can your model be adapted into our daily lives?
83. What was your motivation in selecting this project?
84. The water level sensor is in contact with water. Is there any possibility of short circuit?
85. How do you manage to keep the model working incase of any power cuts?
86. What is the lifetime of the sensors being used?
87. What is the principle of the ultrasonic sensor?
88. What are the other applications of ultrasonic waves you've learnt in school?
89. Which electrical parameter is being measured using the water level sensor?
90. What is the scientific principle being involved in the water flow sensor?
91. What are the other applications of these principles?
92. What happens if any component undergoes a short circuit?
93. How will you protect all the components from short circuit?
94. How do you protect various components from getting rundown by the environment?
95. What is the working principle of an lcd?
96. Things used in everyday lives that use lcd?
97. Why are leds being used?
98. How does an led work?
99. Why are you attaching a resistor before the led?
100. How do you determine the resistance value that needs to be attached?



10. A HIGH SENSITIVE ALCOHOL SENSOR WITH AUTO CAR IGNITION

1. What is Anveshana?
2. What is a project?
3. Why we should do this?
4. What is ECE?
5. What is electronics?
6. Is this model inserted in a car?
7. Where is this model inserted in a car?
8. How does this model help to stop a car if person is an alcoholic?
9. How much distance must be kept between the driver and the devise?
10. If it is kept far does it senses less than when it is place near?
11. What does 'disable' mean?
12. Can we use this project for any other purpose?
13. What is a chip?
14. How are the components connected?
15. What is soldering?
16. How is soldering done?
17. What is an embedded system?
18. What is a system?
19. What are hardware and software ?
20. What is a program?
21. How is a program put into circuit?
22. What is dumping?
23. What is a circuit?
24. What is a current?
25. What is AC?
26. What is DC?
27. What is voltage?
28. What is a resistor?
29. What is a diode?
30. What is a capacitor?
31. What is the unit of capacitor?
32. What does capacitive mean?
33. What does efficient mean?
34. What is reliability?
35. What is sensitivity?
36. Is sensitivity high and low?
37. How it is measured?
38. How is power supply given?
39. How does power flow through a circuit?
40. What is RPS?
41. Which type of voltage do we get in our homes? Is it AC or DC?
42. What is the voltage level we get in our homes?
43. What is a transformer?
44. What is a stepdown?
45. What are turns?
46. What are windings?
47. What are primary and secondary windings?
48. What is a rectifier?
49. Why are only bridge rectifiers used?
50. What is a filter?
51. What is an unwanted component?
52. What is noise?
53. What is regulator?
54. What is regulation?



55. What is electric shock?
56. How much voltage, current, and power can produce a shock?
57. What is ignition?
58. Now how we can show car ignition?
59. What is a DC motor?
60. How does a motor works?
61. What is a sensor?
62. How does the sensor detect alcohol?
63. How it is sensed?
64. What is a buzzer?
65. What is a buzzer drive circuit?
66. What is a micro?
67. What is a controller?
68. What is a microcontroller?
69. Do microcontrollers control everything?
70. What is PIC?
71. What are pins?
72. What are ports?
73. What is memory?
74. What are RAM & ROM?
75. What is ADC and expand?
76. What does inbuilt mean?
77. What is I/O?
78. What is analog?
79. What is digital?
80. What is an interrupt?
81. What is a timer?
82. What is an LCD?
83. What is an alpha numeric display?

84. What is 2^{*16} ?
85. Full form of LCD?
86. How is text displayed one after other?
87. What is delay?
88. What is LED?
89. Full form of LED?
90. What is a relay?
91. What is a switch?
92. What is relay drive circuit?
93. What is PCB?
94. What is ground?
95. What is load?
96. What is a crystal oscillator?
97. What is oscillator?
98. What is synchronization?
99. Does a model like this already exist? Where can we find it?
100. Is it only used in cars?



11. AUTOMATED SOLAR POWERED DRAIN CLEANER

1. How does solar-powered automatic drain cleaner work?
2. How are you going to fix this project into drainage system?
3. For what kind of drainage system have you designed this project?
4. How is a drain cleaned in general?
5. What is meant by solar energy?
6. Can you generate this energy in all seasons?
7. What is a solar panel?
8. What are types of solar panel?
9. What is a photovoltaic cell?
10. What is photon?
11. How much voltage of current can we produce from one solar panel?
12. At what angle should the solar panel placed to get maximum energy conversion?
13. What is the need of changing the solar panel angle?
14. What is battery?
15. What are the types of batteries?
16. What is transformer?
17. What is function of transformer?
18. What are the Types of transformer?
19. What is automation?
20. What is motor?
21. What are the Types of motors?
22. What is a DC motor?
23. What is the difference between DC and AC current?
24. What is the Principle of DC motor?
25. What is the capacity of DC motor?
26. What is meant by Torque?
27. What is RPM of a motor?
28. What is the function of bearing?
29. How does a bearing work?
30. What is lubricating oil?
31. What are the types of lubricating oil?
32. What is shaft?
33. What are the types of shafts?
34. Reason behind using hollow shafts?
35. What is gear?
36. What are the types of gears?
37. What is the Reason behind using gears?
38. What type of drive have you used?
39. What is chain drive?
40. What is the need of lubrication in chain mechanism?
41. What are the limitations of using chain drives?
42. What is the strength of chain material?
43. What material is chain made of?
44. What is the maximum load chain drive can withstand?
45. Why is belt drive and rope drive not used in this project?
46. How is the bearing fixed on to the frame?
47. What is meant by welding?
48. Can welding be done for all materials?
49. What is metal used for making the frame of this project?
50. What is the reason to use this metal for making frame?
51. What kind tools were used to cut tubular sections of the frame?
52. What is breadboard?
53. Why it is used?



54. What is meant by PIR sensor?
55. What is microprocessor?
56. Difference between microprocessor and microcontroller?
57. What is a microcontroller?
58. What is meant by input program?
59. What is hardware?
60. What is software?
61. Types of memories used in microcontroller/microprocessor?
62. List out some Features of 8051?
63. What is power input to the microcontroller?
64. What is IC?
65. What is resistor?
66. What is rectifier?
67. What are the types of rectifiers?
68. What is meant by LED?
69. How does it work?
70. What is meant by diode?
71. What is meant by rusting?
72. What is meant by corrosion?
73. What are types of corrosion?
74. What are the preventive measures taken to protect the metal from corrosion?
75. What are the other kind of metal that can be used in this project instead of this metal?
76. What is maximum load this metal can sustain?
77. Why have you painted the frame?
78. How is this project helpful to the society?
79. What kind of drainage system is used in India?
80. Can this project fit into Indian drainage system?

81. Can this project eradicate manual scavenging completely?
82. Problem faced due to manual scavenging?
83. What is the cost of operating this machine?
84. What is the weight of this machine?
85. Will this machine run continuously throughout the year?
86. What if the chain gets block by dirt and slit?
87. What is time period of servicing this machine?
88. How is the slit and waste collected in bin?
89. How can we know that bin is full?
90. Is changing of bin automatic?
91. What is the necessity of providing a mesh in bin?
92. What happens to the water collected in the bin?
93. What are the problems that people face due to overflowing of drainage systems?
94. And what is reason behind overflowing of drainage system?
95. Can this machine work without using solar energy?
96. What will be the market price of this project?
97. How much efficiently can this machine work?
98. How much power does this machine consume?
99. What is the indication given when bin fills up?
100. What is the strength of frame?

12. BIO-PAPER

1. What is bio paper?
2. What are bio-degradable materials?
3. What is Anveshana?
4. At what base will it help?
5. What is the cost of each paper?
6. How high of a temperature can the paper resist?
7. Is the paper waterproof?
8. What is melting point of the paper?
9. What is use of egg yolk?
10. What is egg yolk?
11. What is the use of pellets?
12. What are pellets?
13. What is ratio of vegetable waste?
14. What is the ratio of corn powder?
15. What is the ratio of pellets?
16. What is ratio egg yolk?
17. What is ratio the milk?
18. What is ratio canola oil?
19. What are advantages of bio paper?
20. What are disadvantages of bio paper?
21. What is life of paper?
22. Where can these be used?
23. How long does it take to make the paper?
24. What is cost of 100 papers?
25. What type of inks is used?
26. Is it good for printing?
27. Does it support laser printing?
28. Is colour photocopying possible?
29. Are any harmful material used?
30. Can it be recycled?
31. Is it affordable for everyone?
32. Is it used for binding?
33. Does it smell when it decomposes?
34. What kind of smell will this paper emit when it decomposes?
35. Is this paper useful for our next generation?
36. How this is used for government offices?
37. Is this is used for currency?
38. Is this paper can be written by pen?
39. Is this paper used for stickers?
40. Is this paper safe for children to use?
41. How can we use this paper in printers?
42. Is it possible to make it waterproof?
43. Is this paper heat resistant?
44. Can it be used in making certificates?
45. How will the paper react on contact with water?
46. How did you manufacture this paper?
47. Does other paper in this material exist?
48. What is the history of old paper?
49. What is the relevance of this paper?
50. What is the main difference between this paper and normal paper?
51. What is the material used for stiffness of paper?
52. What is the main material in this paper?
53. Are there different varieties of this paper?
54. What are the science principles involved in making this paper?
55. What are the chemicals used in old paper?



56. Are the chemicals used in old paper also used in this paper?
57. How is this paper used in government offices?
58. How can this paper can be used in making envelopes?
59. What is weight of this paper?
60. What is the largest size this paper can be made in?
61. What is the smallest size this paper can be made in?
62. How is this paper manufactured by hand?
63. What is makes this paper water resistance?
64. How is this paper used in libraries?
65. Can we use glue on this paper?
66. Is this paper used in making books?
67. Can we write on this paper with pencil?
68. Is this paper easy to cut?
69. Is this paper easy to tare?
70. How is this paper stored?
71. What are the qualities of this paper?
72. List out any three materials in this paper?
73. What are some of the problems we might face if this paper is used for food packing?
74. Is this paper available easily?
75. What are the implications of wasting this paper?
76. Will this paper decompose inside the earth?
77. Can we write on this paper with markers?
78. Is this paper available in different colours?
79. Is this paper available for rough work?
80. How the silicone gel is used?
81. What is the percentage of silicone gel used in this paper?
82. Can this paper be made using any other materials?
83. What is the manufacturing process for this paper?

84. How can this paper be manufactured by machine?
85. How did you get this idea to make this?
86. How is this paper tested?
87. How will you introduce this paper into market?

13. SMART SANITATION SYSTEM FOR SUSTAINABLE SANITY

1. What are the names of the engineering students?
2. What is the name of our project?
3. Did we present projects from our college in previous years?
4. In which year are the students studying?
5. Which branches are they in?
6. What is the name of the educational institution?
7. How is the institution helping the students in the projects?
8. Are there any special labs in school?
9. What are the names of the students involved in the project?
10. Which school are they from?
11. How is the school helping the students in the project?
12. Which class are they from?
13. How did they know about ANVESHNA?
14. Did the students know about IOT before?
15. How much time is being spent on each day for the project?
16. What are their names?
17. Where are they from?
18. Where is the school located?
19. Who is the principal of the school?
20. Who is the ma'am associating the students with the project?
21. What is the goal of the project?
22. How did we come up with that idea?
23. What are its various benefits?
24. How are we trying to make our projects successful?
25. How is it useful to the society?
26. How is it useful for environment?

27. How is it useful for animals?
28. How are the health problems reduced?
29. How does it help in improving sanitation?
30. What is the problem that is to be overcome?
31. How is it useful for the government?
32. Why will municipality take up our project?
33. What is the technology used in it?
34. Why did we take up this project?
35. What is the innovation in this project?
36. Why did we choose this project?
37. How did we settle on our approach to the problems?
38. Are there any competitors?
39. Who are the competitors?
40. How do we use it?
41. How is back-up facility being provided?
42. Where can we use this project?
43. Is our project related to SWACHH BHARAT?
44. How is it helping in SWACHH BHARAT?
45. How is it useful for the municipality?
46. What are the advantages?
47. How can they utilize all the facilities provided?
48. What is the time taken to complete our projects?
49. Do we have to bring awareness about our project?
50. Will government accept or project?
51. How to bring awareness?
52. How is it helpful to the society?
53. Will people accept our project?
54. Is there complexity in the project?
55. Is the complexity more or less?



56. Does this project already exist?
57. If it exists, are there any new features?
58. Is the project idea a new one?
59. What is our project idea?
60. How is our project helpful to the local area residents?
61. Explain our prototype working.
62. What are the components needed?
63. How many components are required?
64. Explain about the components needed.
65. What is a sensor?
66. Explain working of sensor.
67. How many types of sensors are there?
68. Which type of sensor is used in your project?
69. How you are going to use sensor in project?
70. Name some sensors you know.
71. What is a level sensing sensor?
72. How does a level sensor help in our project?
73. How do your sensor for monitoring?
74. Is there any other way to detect the level?
75. If so, what is it?
76. What is a microcontroller?
77. Explain working of a microcontroller.
78. Which type of microcontroller is used in your project?
79. How you are going to use microcontroller in project?
80. Why should we use microcontroller in our project?
81. Name some microcontrollers you know.
82. Difference between microprocessor and microcontroller?
83. What is interfacing?
84. How do you interface?

85. How does MC communicate with municipal people?
86. How is the alerting done?
87. How are the dustbin levels checked?
88. What is IOT?
89. Can any other module be used other than IOT?
90. If it can be used, why are we not using that?
91. What are the advantages of IOT?
92. Why IOT?
93. How do you use IOT?
94. How to interface IOT module?
95. Use of IOT.
96. Name some IOT devices.
97. Can real time monitoring done?
98. If real time monitoring can be done, how is it done?
99. How much does our project cost on the whole?
100. How much will we price it to?



14. AUTOMATIC CULTIVATION SYSTEM USING MICROCONTROLLER

1. What is meant by innovation?
2. What is meant by automatic?
3. What is electronics?
4. What are the applications of electronics?
5. What is an embedded system?
6. What are the applications of real-time embedded systems?
7. What are the advantages of an embedded system?
8. What is hardware?
9. What is software?
10. What are the basic languages used to design an embedded system?
11. What is a microprocessor?
12. What is a microcontroller?
13. What is the difference between microprocessor and microcontroller?
14. Why do we use microcontroller?
15. What is RAM?
16. What is ROM?
17. What is power?
18. What is voltage?
19. What is current?
20. What are the difference between the various types of power supplies?
21. What is an alternating current?
22. What is a direct current?
23. What is threshold?
24. What is a rectifier?
25. What is a regulator?
26. What is a conductor?
27. What is an insulator?
28. What is a semi-conductor?
29. What kinds of impurities are used for making a semi-conductor device?
30. What are electronic components made of?
31. What are the passive components?
32. What are the active components?
33. What is the role of active and passive components?
34. What is a resistor?
35. What are types of resistors?
36. What is capacitor?
37. What are the types of capacitors?
38. What is an inductor?
39. What is diode?
40. What are the types of diodes?
41. What is a transistor?
42. What are the two configurations that are available in transistors?
43. What is biasing?
44. Applications of transistors?
45. What is a relay?
46. What are the types of relays?
47. What is generator?
48. What is a motor?
49. What is a pumping motor?
50. What is a solenoid valve?



51. Difference between pumping motor and solenoid valve?
52. Where do we use solenoid valve?
53. What is a PCB?
54. What is PCB designing and tracking?
55. What is connectivity?
56. What is soldering?
57. What is flux?
58. What is lead?
59. What is mounting?
60. Difference between SMD's and leaded components?
61. What is a switch?
62. What are the types switches?
63. What is LED?
64. What is LCD?
65. Number of data lines in 16x2 Matrix LCD?
66. What is a GSM?
67. What is a transmitter?
68. What is a receiver?
69. Applications of GSM?
70. What is crystal oscillator?
71. What is a current-driver circuit?
72. What is reset?
73. What is a sensor?
74. What is an actuator?
75. What is the difference between buck and boost?
76. What is the software used to implement the project?
77. What is an automatic cultivation system?
78. In how many modes does you system works?
79. What are the components used in the project?

80. Which microcontroller are we using?
81. How many microcontrollers do we have in our project?
82. What are the basic connections required for a microcontroller?
83. 89S52 is a _____bit microcontroller?
84. How many ports are present in 89S52?
85. How many I/O Pins does 89S52 have?
86. What is the operating frequency of microcontroller?
87. Which type of communication does 89S52 supports?
88. What are the specifications of 89S52?
89. Specifications of the project?
90. Features of the project?
91. Explain the working of project?
92. What is advancement done in our project?
93. Why do we need over-head tanks?
94. What are applications of our system?
95. What are the differences between existing systems and our system?
96. How can our project give a solution for the problems facing by the farmers?
97. What is the future scope of our project?
98. What are advantages of the project?
99. Limitations in our project?
100. Conclusion of the project?



15. ROCKER BOGIE ROBOT FOR PLANT IRRIGATION

1. Who invented the first digital and programmable robot?
2. In which year the first digital and programmable robot was invented?
3. What is methodology?
4. What do you mean by hardware architecture?
5. What are the examples of wireless communication?
6. Which sensor did we use for this robot?
7. What is IC?
8. What is the main component in the robot?
9. What do you mean by applications?
10. In which type of places we can use this robot?
11. What is irrigation?
12. What is meant by portable?
13. What do you know about future scope?
14. Which sensor is used to monitor the moistening level?
15. What is Vernier?
16. To which part the relay driver is connected?
17. What is the use of GP2 sensor?
18. What is meant by microcontroller?
19. How many motors are used in the robot?
20. What is the power supply given to the robot?
21. What do you mean by image processing?
22. What is moistening level?
23. At what % the soil is considered to be “too dry” in Vernier soil moisture sensor?
24. At what % the soil is considered to be “wet” in Vernier soil moisture sensor?
25. Water pump is connected to which component?
26. How many ground pins are there in AT MEGA 16 micro controller?
27. Why microcontroller is used in this robot?
28. How many pins are there in the micro controller?
29. How many pins are used in this project?
30. For which pin in microcontroller we will get the output?
31. What is the use of AVR boot loader?
32. What is the use of AVR studio 4?
33. What is meant by debugging?
34. What is the need of debugging?
35. Which type of supply is given to microcontroller? Either AC supply or DC supply?
36. When any obstacle is detected which component gets activated?
37. When any obstacle is detected what happens to robot?
38. How many motors are used in this robot?
39. How many relay drivers are used in this robot?
40. What do you mean b prototype?
41. What happens if the capacity of storing water increases?
42. What are the advantages of rocker bogie robot?
43. What are the applications of rocker bogie robot?
44. What is the code size of ATMEGA 16 microcontroller?
45. What is use of microcontroller?
46. Which type of setup is used in this robot?
47. How many L298 drivers are used in the robot?
48. Can we use this robot in the absence of human?
49. Is there any future scope for this robot?
50. What is the use of rocker bogie set up?



51. Where was the first use of Rocker Bogie design?
52. Who invented Rocker Bogie?
53. On what basis is the name Rocker Bogie derived?
54. What does Rocker stand for?
55. What does Bogie stand for?
56. How is Rocker Bogie different from Rocker Bogie Robot for plant irrigation?
57. What is irrigation?
58. What does NASA stand for?
59. What exactly do you mean by autonomous?
60. What is Integrated monolithic circuit?
61. How does mission of rocker bogie robot for plant irrigation differ from vision of rocker bogie robot for plant irrigation?
62. Is it a small scale prototype or a large scale?
63. In what way will it be useful for farmers?
64. How can a Vernier soil moisture sensor be used?
65. What software do we require for image processing?
66. What is the capacity of the water storage?
67. What is the height of the rocker bogie robot for plant irrigation?
68. What are stub axles?
69. What is centre of gravity?
70. What is the speciality of Rocker bogie design?
71. What is ATMEGA in ATMEGA16?
72. What is 16 in ATMEGA?
73. Why have you chosen ATMEGA16?
74. How is a micro controller different from microprocessor?
75. What is power? And what are its units?
76. What is voltage and what are its units?
77. How is a motor different from motor driver?
78. What type of motor driver is used here?
79. What is the functionality of motor driver?
80. What is the purpose of using a motor driver?
81. What does L298 indicate?
82. What is a relay?
83. How is a relay different from a switch?
84. Are we using relay drivers in rocker bogie robot for plant irrigation?
85. What is IC?
86. What is IC driver?
87. What is the purpose of using relay driver?
88. Specify the pins in ATMEGA16 micro controller?
89. What is a sensor?
90. What is the working of a sensor?
91. What is the type of sensor used in rocker bogie robot for plant irrigation?
92. What is GP2 mean in GP2 sharp sensor?
93. Mention the range of GP2 sensor?
94. What is the amount of input voltage provided for rocker bogie robot for plant irrigation?
95. what is rpm?
96. how much rpm does rocker bogie robot for plant irrigation have?
97. What is AC and DC?
98. What does AVR studio do?
99. Why are we using Bootloader software here?
100. How many inputs and outputs are given to the microcontroller?



16. PELTIER AIR COOLER

1. What is the main aim of the project?
2. Why should we switch to Peltier cooler instead of conventional cooler?
3. What is a Peltier effect?
4. What is a Seeback effect?
5. What is the basic difference of between Seeback and Peltier effect?
6. What are the advantages of Peltier cooler?
7. What are main components used in this prototype?
8. What is the basic principle of brushless DC motor?
9. What is the reason behind using BLDC motor?
10. What are the draw backs of conventional dc motor?
11. What are ratings of BLDC motor used in this prototype?
12. On what criteria did you choose the specifications of BLDC motor?
13. What are the specifications of Peltier module?
14. What are the disadvantages of the present Peltier module used in this prototype?
15. How can you reduce the power consumption of Peltier module?
16. What is the purpose of Electronic Speed Controller?
17. Which type of speed control is used in BLDC motor?
18. On what criteria did you choose the torque of BLDC motor?
19. Why did you choose copper as a heat exchanger?
20. What is the thermal conductivity of copper?
21. What are the specifications of ESC?
22. What are specifications of SMPS?
23. On what basis should we choose the specifications of SMPS?
24. How much cost?
25. How much space it occupies?
26. Did you incur any losses in making this project?
27. Which type of microcontroller was used?
28. How many parts are there in your microcontroller?
29. What is Arduino?
30. What is your program Id?
31. How does the cost compare to all microcontrollers?
32. How much Kv does your brushless motor have?
33. How much does your project weigh?
34. Is this a commercial project?
35. What are the profits in your project?
36. Does your project case sound pollution?
37. How much voltage does your project require?
38. How much power does your project consume per month?
39. Does it run on an AC or DC motor?
40. Is the assembly of this project simple or complex?
41. Why did you choose a Peltier air cooler?
42. How many BLDC motors are used?
43. How many ESC are used?
44. How much does it cost for its maintenance?
45. Why did you choose this project?
46. What is the main theme of this project?
47. Why are you interested to do this project?
48. Why did you choose it?



17. REDUCTION OF ACCIDENT BY ALCOHOL DETECTOR IN VEHICLES

1. Define voltage?
2. What is meant by current?
3. What is meant by power?
4. What is potential?
5. What is resistance?
6. What is resistor?
7. Define capacitance?
8. What is capacitor?
9. Define inductance?
10. What is an inductor?
11. Define AC?
12. What is DC?
13. What is a relay?
14. What is operation of relay?
15. What is magnetic flux?
16. What is magnetic flux density?
17. What is magnetic flux intensity?
18. What is self-inductance?
19. What is mutual inductance?
20. What is ohm's law?
21. What is faradays law?
22. What is faradays 2nd law?
23. What is electromagnetic induction?
24. What is an electromagnet?
25. What is NO in relay?
26. What is NC in relay?
27. What is meant by flux linkages?
28. Which is a machine?
29. Which material is used to make core in motor?
30. What is a motor?
31. What is principle of motor?
32. What is meant by turns ratio?
33. What are the types of motor?
34. What are the losses present in a motor?
35. What is transistor?
36. What is rectifier?
37. What is filter?
38. What is crystal oscillator?
39. What is voltage regulator?
40. What is rectification?
41. What are the terminals of transistor?
42. What is peak inverse voltage?
43. What is form factor?
44. What is peak factor?
45. What are the types of transistor?
46. What is switch?
47. What is principle of working of alcohol sensor?
48. What is principle of working of comparator?
49. What is peak inverse voltage value of full wave rectifier?
50. What is comparator?
51. What is a sensor?
52. What are the two types of sensor?
53. What is the full form of LCD?
54. Define LED?
55. What is the full form of LCD?



56. Define LCD?
57. What is stator?
58. What is buzzer?
59. What is an alcohol module?
60. What is a coil?
61. What is op-amp?
62. Define VCC?
63. What is conductor?
64. What is a semi-conductor?
65. What is a diode?
66. What is forward bias?
67. What is reverse bias?
68. What are the parts of relay?
69. What is potentiometer?
70. What is armature reaction?
71. What is a commentator?
72. Define commutation?
73. What is winding?
74. What is SI unit of voltage?
75. What is SI unit of current?
76. What is SI unit of power?
77. What is unit of resistance?
78. What is unit of inductance?
79. What is unit of capacitance?
80. What is frequency?
81. What is time period?
82. What is unit of frequency?
83. What is material used for soldering?
84. What is scalar quantity?

85. What is vector quantity?
86. What is meant by distance?
87. What is meant by displacement?
88. What is meant by speed?
89. What is meant by velocity?
90. What is meant by mass?
91. What is volume?
92. What is density?
93. What is force?
94. What is centrifugal force?
95. What is centripetal force?
96. What is dielectric?
97. What is Newton's 1st law?
98. What is Newton's 2nd law?
99. What is Newton's 3rd law?
100. What is permittivity?



18. TECHNOLOGICAL AID FOR DYSCALCULIA USING OPEN CV AND MINTER SYSTEM

1. What is dyscalculia?
2. What are its symptoms?
3. What are the common problems faced by those suffering from dyscalculia?
4. What is the percentage of people suffering from dyscalculia?
5. What are the traditional aids available?
6. What does the project propose to do?
7. How does that solve the problem of mathematical inability?
8. How different is it from the other products in the market?
9. What is a programming language?
10. What is object oriented programming?
11. What is Java in a nutshell?
12. What are API's?
13. What is a mobile application?
14. What are the various operating systems for hand-held devices?
15. What is android operating system?
16. How to develop an android application?
17. How can Java be used to develop an android application?
18. What is an open source software?
19. What is the functionality of OpenCV?
20. Is OpenCV an open source software?
21. How to use the software?
22. What is a 'Minter' system?
23. What is RFID technology?
24. What are RFID tags?
25. How do RFID tags work?
26. How to design an android app that can decode RFID tags?
27. Are barcodes and RFID tags the same?
28. How easy and adaptable is the 'Minter' system?
29. What is a database?
30. What are the various databases available in the market?
31. What is a query language?
32. How does the designed application retrieve data from the database?
33. What is data integrity?
34. How essential is it for a system to be integral?
35. Is integrity a part of the designed system?
36. How is it achieved?
37. What are the principles used in the system design?
38. What are the miscellaneous features of the system?
39. How are the designed to work in cohesion?
40. What is an interface?
41. What is the difference between a hardware interface and a software interface?
42. How are interfaces implemented?
43. What are design principles?
44. What is a stimuli?
45. What are sensors?
46. What are the various types of sensors available in the market?
47. What is a wave?
48. What is a signal?
49. What are digital signals?
50. What are analog signals?
51. How does a sensor work?
52. How does a sensor recognize a signal?



53. How does a sensor respond to a signal?
54. What are the working components of a sensor?
55. What are the uses of sensors?
56. What is a processor?
57. What is a micro-controller?
58. How does a micro-controller work?
59. What are the uses of a micro-controller?
60. How does a sensor communicate with a micro-controller?
61. How can the various components be integrated?
62. Can the data be effectively uploaded to the database?
63. What is the use of the data being captured?
64. What are algorithms?
65. What are the classes of problem solving algorithms?
66. What are generic algorithms?
67. Where are algorithms used in the current project?
68. What are the algorithms used in the current project?
69. How are they implemented?
70. How does the controller establish connectivity with the database?
71. What is Wi-Fi module?
72. What are the components of a Wi-Fi module?
73. How does a Wi-Fi module work?
74. Is this technology consistent?
75. What are the other technologies that can be used for connectivity?
76. What is the difference between other technologies and the Wi-Fi technology?
77. What are the added advantages of the Wi-Fi technology?
78. What are the drawbacks of Wi-Fi technology?
79. How to compensate for those drawbacks?
80. What is NFC?
81. How can NFC be used in the project?
82. How are we going to control the money?
83. How will they recognize my device?
84. What if my guardians are not available, can I still purchase my items?
85. Does the system have any association with the corporate banks?
86. Who else can use this device?
87. How big is it going to be?
88. What are the complexities associated with the system?
89. How can the complexities be addressed?
90. What are the various system failure conditions the user might face?
91. How does the system respond to these failures?
92. What is IOT?
93. What is VCC and ground?
94. What is the cost of the product?
95. What is the full form of GPS?
96. What is an Operating System?
97. Will it be easy to operate?
98. Will it be easy to understand?
99. What is C,C++?
100. What is DBMS?



19. E DUSTBIN

1. What is meant by E-Dustbin?
2. What is meant by “E” in E-Dustbin?
3. What is dustbin?
4. What is dust?
5. What is waste management?
6. What is the aim of the project?
7. What is overflow of garbage?
8. What is a message alert?
9. What is auto-dialing?
10. What does the Municipal Corporation do?
11. How is the environment effected by waste management?
12. How does garbage accumulate in the streets?
13. Who monitors the garbage collection?
14. What is meant by PIC microcontroller?
15. What is meant by GSM?
16. What is the full form of GSM?
17. What is LCD?
18. What is full form of LCD?
19. What is LED?
20. What is full form of LED?
21. What are the applications of PIC Microcontroller?
22. What are the applications of LED?
23. What are the applications of LCD?
24. What is meant by RPS?
25. What is the full form of RPS?
26. What does an RPS consists of?
27. How do you give power supply to an RPS?

28. What is meant by transformer?
29. What are its applications?
30. What is a rectifier?
31. What is a filter?
32. How many types of filters are there?
33. What is a regulator?
34. How many types of regulators are there?
35. What is the memory of PIC Microcontroller?
36. How many pins does a PIC microcontroller consists of?
37. On what principle does the PIC microcontroller work?
38. On what principle does the total kit function on?
39. How is the AC supply given to RPS converted into a DC supply?
40. What is the length of the LCD?
41. How many rows does LCD consists of in this project?
42. What is voltage?
43. How many columns does the LCD consists of?
44. How is the program integrated into PIC Microcontroller?
45. Which PIC Microcontroller is used in this project?
46. What is the function of the sensors?
47. What does white LED represent?
48. What does black LED represent?
49. White LED is also known as what?
50. Black LED is also known as what?
51. What is the function of the comparator?
52. Which comparator is used here?
53. What is the function of the ON & OFF button on RPS?
54. Why is the reset button used?
55. What is meant by antenna?
56. At what frequency does the GSM module work?



57. Why is the GSM port present in GSM module?
58. How is GSM module connected?
59. How is the power supply given to GSM?
60. What does the red LED on GSM indicate?
61. What does black LED on sensors indicate?
62. When there is no signal, how long does it take for the green signal to blink?
63. How does the sensor work on logic 1 and logic 0?
64. What is programmed in the PIC Microcontroller?
65. Which rays are emitted from the LED's connected to the sensors?
66. How IR rays get deflected?
67. How is solar energy trapped?
68. How is solar energy stored?
69. To which part of the system does the sensors send information?
70. What information is sent to GSM module?
71. From where does the GSM module receives information?
72. What is the frequency range of the antenna?
73. How does the antenna give information to GHMC?
74. How does it find the location of the dustbin?
75. What is a capacitor?
76. What is a resistor?
77. What is the principle of a transformer?
78. What is a step up transformer?
79. What is a step down transformer?
80. How does a buzzer work?
81. What is the principle of buzzer?
82. At what intervals of time does it send messages and calls?
83. What is the purpose of the filters in GSM module?
84. How many filters does the GSM module have?
85. Which comparator are used in the project?
86. Which software is used to write program?
87. What type of transformer are used?
88. What is the voltage of the transformer?
89. What is the frequency of the transformer?
90. In which language we are writing program?
91. What format is the program code in?
92. How is the kit protected against the environmental temperatures?
93. Where is the kit implemented?
94. Where are the sensors placed?
95. How is it implemented?
96. In which areas it is used mostly?
97. What are the uses of this project?
98. What are the advantages of this project?
99. How does this project help in maintaining a clean and green environment?



20. QUAD WHEEL OMNI-DIRECTIONAL ROBOT

1. What is the name of the robot?
2. What is a robot?
3. What are the different types of robots present?
4. Why and where are these robots used?
5. Why did you think of making this robot?
6. What work does this robot accomplish?
7. What are the applications of this robot?
8. What are the dimensions of the robot?
9. How much weight can the robot carry?
10. How does the robot work?
11. How many wheels does the robot have?
12. In what directions does the robot move?
13. What is the speed of movement of the robot?
14. How will you use this robot in your home?
15. How can this robot be used in the industries?
16. How do you need to control this robot?
17. Is this robot automatic or needs to be controlled manually?
18. How many days did it take to make this robot?
19. What is the cost of implementation of this robot?
20. Why is it called Quad Wheeled Omni Directional Robot?
21. What is meant by Omni Directional?
22. What is meant by Quad wheeled?
23. How is your product different from the ones existing in the market?
24. What is the special part of the robot?
25. What is a microcontroller?
26. How many microcontrollers are used in the robot?
27. What are the names of the microcontrollers used in the robot?
28. What is the device used for communication in this robot?
29. What is the IEEE standard of the communication device used?
30. What is the range of the ZigBee module?
31. What is the amount of load it can carry on it?
32. From where does the robot get power?
33. What are the applications of your robot?
34. What is the material used to make the outer body of the robot?
35. What is the weight of the robot?
36. How are the wheels different from the conventional wheels used?
37. What types of materials are used to make the robot?
38. List out the major things required for making this robot.
39. Mention the different parts of the robot.
40. What are the advancements you can make to this robot?
41. What are the different areas of applications of this robot?
42. What is the cost of implementation?
43. Are there any defects in the device?
44. How are you planning to overcome those problems?
45. How does the whole device work? Explain briefly.
46. Suggest some areas where this device can be used?
47. What is the R.P.M of the wheels?
48. How are the wheels aligned?
49. Why are the wheels aligned at the corners?
50. In how many directions can the robot move?
51. What are the major parts of the robot?
52. What is the means of communication?
53. How the direction of robot is changed?
54. In how many directions can the robot move?



55. Why it is called Quad wheeled Omni directional robot?
56. What is the purpose of Omni-directional wheels?
57. How much power is to be given to drive the robot?
58. How much is to be provided to drive the remote?
59. Which types of batteries are used to supply power?
60. How many buttons present on the remote?
61. What are the functions of the keys on remote?
62. Which microcontroller is used in remote?
63. What are specifications of the microcontroller?
64. How many pins are there in microcontroller used in remote?
65. What is the range of Zigbee?
66. Sensors are used in this robot or not?
67. Which sensor is used?
68. Why sensor is used?
69. What is the range of the sensor?
70. How many motors are used?
71. How many motor drivers are used?
72. Why motor drivers are used?
73. What is a regulator?
74. Why regulator is used?
75. Why is only Zigbee used?
76. Zigbee is wired communication or wireless communication?
77. What are the advantages of Zigbee over other wireless communication?
78. What is the supply voltage to sensor?
79. Which software is used to write code?
80. Which coding language is used?
81. How to dump the code?
82. How many in/out pins are present in microcontroller ATMEGA 16?
83. How many in/out pins are present in microcontroller ATMEGA 8?
84. Which microcontroller is used in robot?
85. How many pins are there in microcontroller used in robot?
86. How many ports are present in ATMEGA 16?
87. What is the configuration of each port present in ATMEGA 16?
88. Why XTAL1 and XTAL2 pins present?
89. What is AVCC?
90. What is AREF?
91. Give the specifications of Zigbee.
92. Which software is used to dump code?
93. Why Proteus software is used?
94. How many ports are present in ATMEGA 8?
95. What is the configuration of each port present in ATMEGA 16?
96. Which type of microcontroller package is used?
97. What are the advantages of this robot?
98. How the information is passed from remote to robot?
99. What is the working of the robot?
100. Is serial communication used or parallel communication used?



21. MICROSTRIP ANTENNA

1. What is an antenna?
2. What is a UWB?
3. What is a microstrip antenna?
4. What is an EM wave?
5. What is the relationship between antenna height and frequency?
6. What is frequency?
7. What are units of frequency?
8. What is bandwidth?
9. What is a network?
10. What is a WLAN?
11. What is a FCC?
12. Where is the headquarters of FCC located?
13. What is function of a FCC?
14. How does an antenna work?
15. What are the different types of antennae?
16. What is a WIMAX?
17. Bandwidth of a UWB?
18. What frequency is used by Wimax?
19. What frequency is used by WLAN?
20. What is a patch antenna?
21. What are the layers of a patch antenna?
22. What is a feed element?
23. What are dielectric materials?
24. What is an impedance?
25. What is impedance mismatch?
26. What is the use of impedance mismatch?
27. What is current?
28. What is voltage?
29. What is the voltage wave standing ratio?
30. What happens when the VSWR is high?
31. What is a notch?
32. What is a filter?
33. What filters are used in the micro strip antenna?
34. What is a dual band rejection?
35. Why is there a need for dual band rejection?
36. What is the use of dual band rejection?
37. What software are we using?
38. What is the full form of the software?
39. What is radiation pattern?
40. What role does the transmitter play?
41. What role does the receiver play?
42. What are the different radiation patterns?
43. What is resonance?
44. What is an active antenna?
45. What is the importance of VSWR ratio?
46. What is a passive antenna?
47. What is a gain and what are its units?
48. What is directivity and what are its units?
49. How do you calculate gain?
50. What are the features of microstrip antenna?
51. Why we are using microstrip antenna and not other antennae?
52. What are the antenna's parameters in a dual band rejection antenna?
53. What is a driven element of an antenna?
54. What is the need of asymmetric placement of feed line?
55. What is a far field region?



56. What are the similarities between a practical antenna and a proposed antenna?
57. What is permittivity?
58. What is relative permeability?
59. What is permeability?
60. What is effective area?
61. What is the relationship between effective area and directivity?
62. What is polarization?
63. What are the types of polarization?
64. What are the lengths of different parameters in this antenna?
65. What is bandwidth?
66. What is the bandwidth requirement of UWB system?
67. What is a correlation factor?
68. What is a stretch ratio?
69. What is an electric field intensity?
70. Why are we using CST software?
71. Why are we using different filters for same rejection frequency?
72. What is the shape of the patch in this antenna?
73. What is the material used for cutting of filters in the patch?
74. What is the substrate used?
75. What is the spur line filter?
76. What does spur line filter consists of?
77. Why we are using probes?
78. Which method is used in CST software?
79. Why are we using four filters?
80. Which filters are used for rejection at 3.5GHZ?
81. What network is used to compute stretch ratio?
82. What are the supporting conditions for an antenna?
83. What are the antenna feed elements?

84. What are the antenna conductors?
85. What functions as the antenna's insulators?
86. What are the attenuation losses?
87. How is an antenna protected from weather conditions?
88. What type is microstrip antenna?
89. What is the pattern of microstrip antenna?
90. What is the range of microstrip antenna?
91. What are the uses of microstrip antennae in the society?
92. What are the advantages of microstrip antennae?
93. What domain are we using in CST software?
94. What is the input to antenna?
95. What are dimensions of filter and how they are determine?
96. What is the output of antenna?
97. What is vector network analyser?
98. What is the need of vector network analyser?
99. What are the methods to measure impedance?
100. What are the methods to measure directivity and gain?
101. How can we measure antenna parameters in compact test antenna range measurement?
102. What are the different field regions?
103. What is the formula for far field region?
104. What is reconfigurable antenna?

22. SMART BED -SMART SOLUTION FOR BED SORES

1. What is a resistor?
2. What is a capacitor?
3. What is an inductor?
4. What is a circuit?
5. Define potential difference.
6. What do you mean by passive elements?
7. What do you mean by active elements?
8. What is reactance of a device?
9. What is a fuse?
10. Define current and resistance.
11. What is more suitable to work with voltage or current?
12. How are basic parameters like voltage, current and resistance measured in practical way?
13. How much voltage is required to turn the LED on?
14. How much voltage is required to turn the LED off?
15. How to decode the theoretical value of resistors?
16. Explain open circuit and short circuit.
17. What is voltage divider circuit?
18. Draw the current divider circuit.
19. What are bedsores?
20. Explain the different stages of formation of bedsores.
21. What are the solutions available for prevention of bedsores?
22. What are the different terminologies used for bedsores?
23. List the places where bedsores are more likely to occur.
24. What are the causes and risk factors of bedsores?
25. How are we converting resistance from the sensors to voltage?
26. Why are we converting resistance from the sensors to voltage?
27. What are the sensors used in this project? Why?
28. What are the specifications of the sensors used?
29. Which microcontroller is used in this project?
30. List out the features of microcontroller.
31. How do we program a microcontroller?
32. What do you mean by burning a program into microcontroller?
33. What software is used for burning data into microcontroller?
34. What is keil software?
35. What is a multiplexer?
36. What is a de-multiplexer?
37. List out the difference between encoder and multiplexer?
38. What is the function of decoder?
39. What are the difference between decoder and de-multiplexer?
40. What is the use of multiplexer?
41. Which multiplexer is used in this project?
42. State Ohms law.
43. What is cloud computing?
44. What is internet of things?
45. List some examples of projects done based on IOT.
46. What is internet?
47. What are the different uses of internet?
48. Explain the block diagram of the project.
49. What are the applications of this project?
50. What is the Wi-Fi module?
51. Explain the working of the Wi-Fi module
52. What are the different types of communication networks?
53. List out the difference between LAN, MAN and WAN.
54. What areas of body are more prone to bed sores?
55. What are the factors that cause bed sores?



56. Mention the statistics studied.
57. What resistors are being used in this project?
58. How is the pressure distribution calculated?
59. Are flex sensors resistive or capacitive sensors?
60. How is a voltage divider circuit formed?
61. What are the advantages of this project?
62. Mention the drawbacks of the project.
63. Mention the various solutions available in market to cure bedsores.
64. Compare the developed technology with other solutions available.
65. What are the home remedies to help cure bed sores?
66. Why are the sensors arranged in array format?
67. How many sensors are being used in this project?
68. What are the dimensions of the model displayed?
69. What type of mattress is being utilized?
70. What are the advantages of using cloud computing?
71. Mention the disadvantages of cloud computing.
72. What are the fields where cloud computing is applicable?
73. Mention the pros of using atmega16 microcontroller?
74. Mention the importance of using flex sensors only?
75. What is the overall cost of the project?
76. Can the cost of the project be further reduced?
77. What is the estimated time taken to complete the project?
78. Describe the literature survey done on this project.
79. How can this project be helpful to the society?
80. Have you consulted any professionals?
81. What inspired you to opt this project?
82. How is the data transmitted in cloud?

83. What is a multi-meter?
84. How to convert AC to DC?
85. What is open circuit?
86. What is short circuit?
87. Explain the block diagram of your model?
88. What is a processor?
89. What processor are you using?
90. How is the output being measured?
91. How easily can your model be adopted in daily life?
92. List the electrical parameters being measured?
93. What happens if a component undergoes short circuit?
94. Why are the resistors being used?
95. What is power?
96. Is voltage same in series and parallel connection?
97. What is the power supply used?
98. Give examples of conducting and insulating materials.
99. What are the devices used to measure voltage and current?
100. Mention the units of electrical parameters being measured?



23. PHASE CHANGING MATERIALS (PCMS) USED AS BUILDING MATERIAL

1. In the past how did people consider PCMs?
2. Why did you choose “Phase Changing Materials (PCMs) to be used as building materials”?
3. What is the main application of Phase Change Materials?
4. Which properties of PCMs enable them to conserve energy in building?
5. What are some of the drawbacks of PCMs?
6. How can PCMs be stored?
7. Explain classification of PCMs?
8. Explain “Without latent heat, PCMs would not be able to act alone in controlling room temperature”?
9. Diagrammatically represent the PCM work – cycle?
10. Explain in detail the properties of PCM for a high efficient cooling system with thermal energy system?
11. How are PCMs placed for heating & cooling in buildings?
12. In which applications can PCMs be placed?
13. Write down the application of PCM – thermal energy storage solar energy?
14. Why we should use PCMs as a building material?
15. Where should PCMs be used?
16. How are PCMs incorporate in global energy management?
17. What do you mean by thermal energy storage (TES)?
18. What is sensible heat?
19. What is the main advantage of PCM?
20. Write down some important application of PCM?
21. Write down the operation of bio-PCM (or PCM)?
22. What are the full forms of the following?
 - a. (i)PCES
 - b. (ii)PCM
 - c. (iii) ss-PCM
23. What can PCMs simultaneously reduce?
24. What factors can reduce PCM prices in the future?
25. What do you mean by phase change process?
26. Write down some problems of PCMs used as building materials?
27. Where are PCMs most commonly used?
28. What are the types of PCMs currently in use?
29. Explain about water –based PCMs?
30. Write a short note on salt hydrants type of PCM?
31. Write a short note on paraffins type PCMs?
32. What factors determine the quality of a PCM?
33. What do you mean by encapsulation of the PCMs?
34. Classify advanced PCMs?
35. Which phase change is used in advanced PCMs?
36. What is the abbreviation of HVAC?
37. Which area is the largest market for advanced PCMs?
38. What is principle of PCMs?
39. Which types of PCMs are used in building?
40. Write down a short note on “PCM incorporation”?
41. What is micro-encapsulation?
42. What does the term “micro-capsules” represent?
43. What is the structure of a micro-capsule?
44. Explain “morphology”?
45. Diagrammatically represent morphology?
46. Write down building application of PCMs?
47. What is the meaning of thermal core?
48. What can conclude from this project?



49. Write down the references used for this project?
50. What is the order of your project?
51. What is the chapter of this project?
52. Write down some companies in the world, which offered verities of commercial PCMs?
53. How are PCMs incorporation in concrete?
54. What is latent heat?
55. Example of latent heat?
56. Determine the quality of PCM?
57. What is thermal cycle test?
58. What is special about pure temperature PCM?
59. What is the average heat of latent heat of pure temperature PCMs?
60. How do PCMs measure up against paraffin?
61. Are pure temperature PCMs biodegradable?
62. How long will pure temperature last?
63. How much do pure temperature PCMs cost?
64. Where can I find details on each pure temperature product?
65. Are pure temperature PCMs corrosive?
66. Who uses PCM in constructions?
67. Which type of PCM is good in saving energy?
68. How many cycles can be made in PCMs?
69. Can you suggest low cost Nano-particles to increase thermal conductivity of PCM?
70. Which PCMs are specifically used for low temperature applications?
71. Is there any alternate PCM for paraffin?
72. Which PCM can be used for 200 to 400 ranges?
73. Why is water used as PCM?

74. Why do gases have to specific heats of constant pressure & constant volume while solid & liquids have only one?
75. What is the best PCM could be used with photo static cells?
76. How can I apply PCM on lingo cellulosic fibers?
77. Are there toxic and nontoxic PCMs?
78. What standard PCM temperatures do you prefer?
79. Which PCM should I use?
80. Do the PCMs you use lose effectiveness over time?
81. Why does the cycle occur in reverse as the external temperature cools?



24. ROTATING BUILDING USING ENERGY

1. What is rotational building?
2. What are materials required for rotational buildings?
3. What is order of your project?
4. What is cost of your project in rotational buildings?
5. Which type of grades of cement used in the project?
6. Write down the references used in this project?
7. What are the advantages of rotational buildings?
8. What are the draw backs of rotational buildings?
9. In past stages how rotational buildings are used?
10. What are applications of rotational buildings?
11. Explain rotational building process?
12. Explain the principles of rotational building?
13. Explain the flow chart process of rotational building?
14. Where rotational buildings are used?
15. Which type of land is suitable for rotational buildings?
16. Explain dynamic architecture buildings?
17. How rotational buildings are constructed?
18. Explain rotational motions?
19. What is finite element analysis?
20. Which type of analysis is used for the rotational buildings?
21. What is mean by rotation?
22. What is difference between rotational building and r.c.c. building?
23. Which type of loads is applied on the rotational buildings?
24. What are loads taken in the rotational buildings?
25. Explain the rotational ground motions?
26. Which type of motors are using in rotational building?
27. Which types of shafts are used in rotational building?
28. What is the r.p.m of motor?
29. How you measure the speed of motor?
30. At which speed the building will rotates?
31. What are the forces applied on the rotational building?
32. How you will resist the dynamic loads?
33. What is dynamic load?
34. Which power is used to the motor?
35. How solar energy converts to electric power?
36. What mechanism is involved in the solar energy converts to electric power?
37. Which types of solar panels are used?
38. What capacity of solar panels is used?
39. Where the solar panels are arranged in the rotational building?
40. Which types of columns are used in the rotational building?
41. Which type of foundations is used in the rotational buildings?
42. Basic Effects on Rotational Ground Motions?
43. How you will compare the distribution of loads?



44. What ratio between the acceleration and the vertical rotation rate?
45. Is amplitude ratio is related to the local phase velocity?
46. Explain design considerations for rotational buildings?
47. Explain low seismic design?
48. Explain high seismic design?
49. Explain the seismic design considerations?
50. Explain the methods of analysis?
51. Explain deflection characteristics?
52. What are the deflections used in the rotational buildings?
53. Explain lateral load resisting systems for rotational buildings?
54. What is column?
55. What is shear wall?
56. Explain steel plate shear wall?
57. Explain detail analysis of rotational buildings?
58. What is the conclusion of rotational buildings?
59. What is rotational dynamics?
60. Explain rolling motion?
61. How many seismic zones are there?
62. Which seismic zone is critical?
63. Which code is preferred for seismic design?
64. What are the chapters involved in rotational buildings?
65. What are the IS codes used for rotational buildings?
66. Which types of shafts are used in rotational building?
67. What is the thickness of slab as per is code method in rotational building?
68. What is passive solar design?
69. What is the curing process of the rotational building?
70. What is passive solar heating?
71. What is the workability of concrete that is used in rotational buildings?
72. Which types of admixtures are used in the rotational buildings?
73. Which workability tests adopted in rotational buildings?
74. What are the corrosion admixtures used in rotational buildings?
75. Which grade of steel is used in rotational buildings?
76. What is thermal storage wall systems?
77. Rotational building is economical or not?
78. What is mean by green house building?
79. What is an isolated gain passive system?
80. Which types of aggregates are used in rotational buildings?
81. Explain sunspace design?
82. Explain the types of sunspace design?
83. What is integrated sun space?
84. Explain passive solar design tools?
85. Explain rotational building applications in world?
86. Explain the previous constructions of rotational buildings?



87. What are the ceiling components used in rotational buildings?
88. Which type of window components used in rotational buildings?
89. What is the main conclusion of the project?
90. Explain ventilation system design?
91. Explain design parameters of rotational building?
92. Explain thermal loss coefficients for the building?
93. What are the building components of rotational building?
94. What are the insulation materials used in rotational buildings?
95. Explain the constructions of rotating houses?
96. Explain rigid window insulation?
97. Explain direct gain passive systems?
98. Explain the examples of sunspace design?
99. What is the cost of your project?
100. What is the final conclusion of the project?



25. ENERGY EFFICIENT ENGINES

1. What is the diesel capacity of fuel tank?
2. How does diesel flow from diesel tank and to where?
3. Why do we use breaks?
4. Why was this booster designed?
5. Why are we using bumper?
6. From where were these parts collected?
7. Why are we using a light system?
8. What is the purpose of the horn?
9. Why are we using a lock system?
10. What is the mileage of the booster (car)?
11. What is the load capacity of the booster?
12. How many tires are on this car?
13. Why are we using steering system?
14. What happens when we turn the steering wheel to the left when the car is in motion?
15. What happens when we turn the steering wheel to the right when the car is in motion?
16. Why are we using an air filter?
17. Where are the filters placed?
18. Why are we using a diesel filter?
19. What is the length of the car?
20. What is the width of the car?
21. What is the height of the car?
22. What is the wheel base of the car?
23. What is the tire size of the car?
24. Which type of breaking system arrangement are used on the front wheels?
25. Which type of breaking system arrangement are used on the back wheels?
26. Where is the gear rod placed?
27. What is the turning radius of the car?
28. What is the efficiency of the engine?
29. What is the bore length of engine?
30. What is the strock length of engine?
31. What is the compression ratio of engine?
32. What is the self-motor used for?
33. Where are all the parts fixed?
34. What is the weight of the engine?
35. What is the unit of speed for this car?
36. What unit is the diesel level shows in?
37. What is the purpose of the hand brake?
38. How much oil does the engine require?
39. What is the maximum speed of the vehicle?
40. What is the front suspension system of the vehicle?
41. What is the back suspension system of the vehicle?
42. How many people can this vehicle seat?
43. Which materials are used in the construction of the body of the vehicle?
44. Where are the dampers are placed?
45. Where are the Macpherson strut coil springs placed?
46. What is the total weight of the vehicle?
47. How much does the engine of the vehicle weigh?
48. What kind of air is filled in tires of the vehicle?
49. How much air is sufficient in the tires?
50. How many drive shafts are used in the vehicle?
51. What are the drive shafts fixed with?



52. Where in the vehicle is the battery placed?
53. Where does the self-motor get its power from?
54. Where are the disk brakes placed?
55. Where are the drum brakes placed?
56. Where is the brake pedal placed?
57. Where is the accelerator pedal placed?
58. Where is the clutch pedal placed?
59. How many leaf springs does this vehicle have?
60. Where are the leaf springs placed?
61. How many lights does this vehicle have?
62. How many indicators does the front of the vehicle have?
63. How many indicators does the back of the vehicle have?
64. How many dampers are used in this vehicle?
65. From which car was the steering system taken from?
66. What is the model of the engine used?
67. Where was this car made?
68. How many days did it take to manufacture this car?
69. Where was the suspension system taken from?
70. Why do we use back indicators?
71. Why do we use front indicators?
72. Why do we use gears?
73. What is the tube size of the vehicle?
74. Which type of steering system is used in the vehicle?
75. From where are the exhaust gases released?
76. Where were the spare parts taken from?
77. How much oil does the gear box require?
78. How much oil is preferred in the differential?
79. What kind of bolts are most commonly used in the vehicle?
80. Where are the drive shafts fixed?

81. Where is the step-in tire placed?
82. Where is the power produced in the engine?
83. What type of power is produced in the engine?
84. Why do we use self-motor?
85. Why do we use suspension system?
86. How many members were on the team that made this vehicle?
87. Which kind of fuel is used in this engine?
88. How much does the booster cost?
89. Which type of cooling system is used in the vehicle?
90. What is the gear box connected with?
91. How many disk plates are in the car?
92. Where are the disk plates are placed?
93. Where is the brake system taken from?
94. What is the turning radius of the vehicle?
95. Where is the engine generating power stored?
96. How many strokes occur in the engine?
97. Which type of air cleaning system is used in this vehicle?



26. TWO WHEELER BLIND SPOT DETECTION SYSTEM

1. What is your project?
2. How it is useful to us?
3. What is mechanical engineering?
4. Who is an engineer?
5. Who is scientist?
6. What does mechanical engineering deal with?
7. What is a blind spot?
8. What is Arduino board?
9. Why are Arduino board used in this project?
10. How do the Arduino board work?
11. What is a Microcontroller?
12. What happens inside microcontroller?
13. What is a sensor?
14. Why do we use sensors?
15. How do sensors work?
16. What is an ultrasonic sensor?
17. How do ultrasonic sensor work?
18. What is the cost of an ultrasonic sensors?
19. What are the particular specifications needed to use ultrasonic sensor?
20. What is the range of the signal in ultrasonic sensor?
21. What is the principle behind sensor?
22. What is resistance?
23. What is PCB?
24. What is general purpose of PCB?
25. What is grounding?
26. What is an analog signal?

27. What is a digital signal?
28. Why we should convert analog to digital signal?
29. What is a resistor?
30. What type of resistor used in this project?
31. Why there are different colours on it?
32. Why are resistors is used in this project?
33. What is a diode?
34. What is LED?
35. Why are LEDs used?
36. Why is a battery used?
37. Which type of battery is used for this project?
38. What is an actuator?
39. What is a current?
40. What is a voltage?
41. What is the unit of current?
42. What is the unit of voltage?
43. Why do LED lights consume less power?
44. How does an actuator work?
45. Why are actuators used in this project?
46. Is it portable?
47. How long can this system work?
48. What do you mean by Anveshana?
49. When did Agastya Foundation start?
50. Why do they need school students to take part?
51. What is the role of this foundation?
52. How is our project helpful to the society?
53. What is the purpose of colour coding a resistor?
54. How do we know the terminals of resistor as well as capacitor?
55. Where did you get this idea?



56. What are the disadvantage of this project?
57. When we fix this model on the bike, can we expect any problem?
58. Can our project further modified?
59. What is base?
60. What is collector?
61. What is emitter?
62. What are the things used in our project?
63. What is millimetre?
64. What is micro?
65. What is controller?
66. What is DC?
67. What is AC?
68. What is difference between AC & DC?
69. What type of batteries can be recharged?
70. How do rechargeable batteries work?
71. How do rechargeable batteries work differently from normal batteries?
72. What is microcontroller and Arduino board?
73. What is relay?
74. How do relays work?
75. What are the benefits of doing the project?
76. When does current flow?
77. Where will current flow?
78. How are AC and DC produced?
79. Why are LEDs required only DC motors?
80. What type of voltage do we get in our homes? AC or DC?
81. How does a sensor actually sense the movement of vehicles?
82. Has it been done in India before?

83. How is it useful for the society?
84. What is soldering?
85. Is it a permanent joint?
86. How are we measuring the current?
87. Can we set the speed limit of actuator?
88. What are pins on Arduino board?
89. How is the program transferred to the Arduino board?
90. What happen to the system if sensor is damaged?
91. What do you mean by open source hardware?
92. What are the different boards in the Arduino?
93. Which board do we use for this project?
94. What is a buzzer?
95. How does the buzzer work?
96. How do breadboard work?
97. What is the need of breadboard?
98. Can we alter the range of sensor later?
99. Where can we use this device or vehicles other than bikes?
100. Can we expect future enhancement for this project?



27. SMARTER LEVEL CROSSING SYSTEM

1. What is the use of ultrasonic sensor?
2. Why did you choose ultrasonic sensor?
3. How do ultrasonic sensors detect the presence of object?
4. How do they measure the distance?
5. Do they work at high temperatures and high pressures?
6. Do they work well thick foams or vapours?
7. Do they locate objects moving about in a large area?
8. How much distance can they measure?
9. Can they be designed for layer distances?
10. How do you select the right sensor range for your application?
11. What is the accuracy of the sensor?
12. In this sensor affected by opaqueness?
13. What is the beam angle of ultrasonic wave and its shape?
14. Does the load audible noise affect the working of sensor?
15. What are the main parts of the sensor?
16. What is the minimum sensing distance of your sensor?
17. What is the frequency range of ultrasonic sensor you used?
18. What is the microcontroller you used?
19. Why did you choose it?
20. How much it costs for its maintenance?
21. Does the detection of object possible in curved paths?
22. How much power supply does it needs?
23. How does information go to loco pilot?
24. Is there any problem to the passengers from this project?
25. What kind of valve used in this project?
26. What is the main theme of this project?
27. What is the use of ATMEGA 328 microcontroller?

28. Specifications of ATMEGA 328 microcontroller?
29. What is the difference between ultrasonic sensor and IR sensor?
30. What is efficiency of this project?
31. Does it give accurate values or not?
32. How much time does it takes to detect an object?
33. Does it work during rainy seasons?
34. At what temperature does it work?
35. Why you are using Arduino board why not other board?
36. Does it easy to operate or not?
37. What kind of software you are used in this project?
38. How does fire really system works?
39. How does the sensor detect flammable objects?
40. Does the loco pilot get the information in time or not?
41. What is the installation cost?
42. How you have written the code of a program in microcontroller?
43. How can dump program in microcontroller?
44. Can we able to rectify the problem occurs in this project?
45. In this project will that sensors work properly?
46. What is the name of the project?
47. All the participants coming from which place?
48. What is the meaning of this project name?
49. Educational details of participants?
50. Why you are interested to do this project?
51. Have you exhibit this project before else?



28. 3-AXIS MEMS CONTROL WHEEL CHAIR FOR PATIENTS

1. What do you mean by wheel chair?
2. What is micro controller?
3. What do you mean by 3-axis?
4. What is the full form of MEMS?
5. What is the name of the sensor we are using in MEMS?
6. Which type of micro controller we are using to operate the wheel chair?
7. How many bit micro controller we are using?
8. Which type of architecture we are using in micro controller?
9. What is the operating voltage of micro controller?
10. What is the operating temperature range of micro controller?
11. How many ports are there in micro controller?
12. How many pins are there in micro controller?
13. How many working registers are present in micro controller?
14. What is the use of ALU?
15. How program flow is provided?
16. Program flash memory section is divided into how many sections?
17. What is the use of status register?
18. What is the main use of stack pointer?
19. How many types of addressing modes are there for data memory cover?
20. What do you mean by input output memory in the micro controller?
21. What is the use of general purpose registers?
22. How is the clock distributed in the system?
23. What is the use of cpu clock?
24. What is the use of input output clock?
25. What is the use of ADC clock?
26. What are the different clock sources?
27. What is the use of crystal oscillator?
28. How many crystal oscillators are used in the micro controller?
29. What is the use of system clock prescalar?
30. What is the use of sleep mode in micro controller?
31. What do you mean by ideal mode?
32. When does system enters into ADC noise reduction mode? And what does it do?
33. When does the system enters into power down mode? And what is the use of this mode in the system?
34. When does system enter into power save mode?
35. What do you mean by standby mode?
36. What do you mean by regulated D.C power supply?
37. What is the use of transformer?
38. What is the use of rectifier?
39. What are the different types of rectifiers?
40. Which type of rectifier we are using in our system?
41. What is the use of filter?
42. What is the use of capacitor as a filter?
43. What is the use of regulator?
44. Which type of regulator we are using in our system?
45. At what package regulators are available?
46. How much power supply we are giving to the system?
47. What type of transformer we are using the system?
48. What is the difference between step down and step up transformer?
49. How many diodes are present in bridge rectifier?



50. What are the different types of filtering methods used to remove ripples?
51. What are the features of regulator (which we are using in our system)?
52. What do you mean by accelerometer?
53. What are the applications of accelerometer?
54. How MEMS sensor performance is beneficial rather than using temperature sensor?
55. What is a motor?
56. What are the different types of motors?
57. What do you mean by shunt motors?
58. What do you mean by series motors?
59. What do you mean by compound motors?
60. What are the applications of series motors and shunt motors?
61. What are the applications of compound motors?
62. What is the principle of operation of D.C motors?
63. What is a generator?
64. What is a transistor?
65. Which type of transistor we are using in our system?
66. How many pins are there in voltage regulator?
67. What are the pin names of voltage regulator?
68. How we connect voltage regulator to the power supply?
69. What are the important features of D.C motors?
70. What is the name of the motor drivers which we are using in the system?
71. How many motors are used in the system?
72. Which type of software is used for coding?
73. Based on what principle does motor drivers work?
74. Explain the principle of h-bridge?

75. 75.how mems sensor is operated to move wheel chair?
76. How sensor should be placed to move chair forward?
77. How sensor should be placed to move chair in backward direction?
78. How sensor should be placed to move chair in left?
79. How sensor should be placed to move chair in right?
80. How sensor should be placed to stop chair in any position?
81. How sensor is connected to the patient?
82. What is the main difference between normal wheel chair and this type of wheel chair?
83. Can we use battery instead of power supply?
84. What is the difference between power supply and battery?
85. Can we use solar panel to run wheel chair?
86. Who used first wheel chair?
87. Who invented first electrical wheel chair?
88. What are the different types of wheel chairs?
89. Is there any wheel chair for disability athletes?
90. What do you mean by smart wheel chair?
91. How many input pins are there for motor driver?
92. What do you mean by transfer or stretcher wheel chair?
93. What are universal motors?
94. What are the different types of batteries? Which type of battery is preferred?
95. What will happen if two batteries are connected in series?
96. What will happen if two batteries are connected in parallel?
97. What do you mean by transformer turn ratio?
98. What is a relay? How relay is used in wheel chair?
99. What is the advantage of using this type of wheel chair?
100. Can we modify this wheelchair for future scope?



29. BOMB DETECTION AND DIFFUSING ROBOT CONTROL

1. What is a wireless bomb disposal robot?
2. What is robotics?
3. What are the types of robots?
4. What is a sensor?
5. What is GSM?
6. What is a metal detector?
7. Draw the block diagram of this project?
8. What is frequency?
9. What is a transmitter?
10. What is a receiver?
11. What is VLF?
12. What is an electric motor?
13. What is a coil?
14. What is pi technology?
15. What is BFO?
16. What is a micro controller?
17. What is RAM?
18. What is ROM?
19. What is a micro-processor?
20. What is the difference between a microprocessor and a microcontroller?
21. What is SRAM?
22. What is a register?
23. What is a general purpose register?
24. What is flash memory?
25. How does Bluetooth work?
26. What is a Bluetooth module?
27. Describe the working of a DC motor?
28. What is I293D?
29. What is a buzzer?
30. What is a piezo buzzer?
31. What is RISC?
32. What is CISC?
33. What is AVR?
34. What is a compiler?
35. What is an android operating system?
36. What is ICD display?
37. How does an ICD display work?
38. What is GSM module?
39. Describe the types of sensors?
40. What are the advantages of this project?
41. What are the applications of the project?
42. What are the uses of the project?
43. What is a chip?
44. What is debugging?
45. What is multitasking?
46. What is a process?
47. What is an ATM (automatic teller machines)?
48. What is an operating system?
49. What is a gripper?
50. What is AI (artificial intelligence)?
51. Describe the working of sensor?
52. What are used in sensor?
53. Where are sensors used?
54. What is a thermocouple?
55. What is a voltmeter?



56. What is an ammeter?
57. What is a humanoid robot?
58. What is an algorithm?
59. What is dumping of program?
60. How is dumping done?
61. What are choppers?
62. What is a mixer?
63. What is a cutter?
64. What is a grinder?
65. What is a pulse?
66. What is oscillation?
67. What is BFO (beat- frequency oscillation)?
68. What is a transmitter coil?
69. What is a receiver coil?
70. What is polarity?
71. What is a metal detector?
72. How do metal detector work?
73. What is sampling?
74. What is an echo?
75. What is an integrator?
76. What is direct current?
77. What is a radio wave?
78. What is the frequency of radio waves?
79. What is epROM?
80. What is ADC?
81. What is DAC?
82. What is ALU (arithmetic logical unit)?
83. What is a timer/counter?
84. What are emulators?
85. What is a modulation?
86. What is demodulation?
87. What is a PWM?
88. What is a bit?
89. What is USART (universal synchronous asynchronous receiver transmitter)?
90. What is armature?
91. What is set and reset?
92. What are GND, VCC ND VDD?
93. What is a program counter?
94. What is a stack pointer?
95. What is IP (instruction pointer)?
96. What is a multiplexer?
97. What is a de-multiplexer?
98. What is a buffer?
99. What is a carrier?
100. What is bandwidth?



30. TEEKA

1. What is Teeka?
2. What is the use of Teeka?
3. What is the main objective of Teeka?
4. What are vaccinations?
5. What is immunity?
6. What is the normal procedure for vaccination?
7. What is the need for vaccinations?
8. Who should take vaccinations?
9. Who is a user?
10. How does the user register for the service?
11. What are the fields in registration?
12. What are the privileges given to registered users?
13. What information can an unregistered user access?
14. How does the user login?
15. What are the fields in login?
16. What is user name?
17. What is the cost of vaccination?
18. Where should a person take vaccination?
19. What is the most important field of the user?
20. Why is date of birth necessary?
21. Which vaccinations should be taken?
22. From which source is the vaccination information taken?
23. What is WHO?
24. Who is a pediatrician?
25. What is home page?
26. When does the user take vaccinations?
27. What is date of vaccination?
28. What are the age groups for vaccination?
29. How does the system identify the user uniquely?
30. How does the user know when to get vaccinated?
31. What is email notification?
32. How can the system send email to the user?
33. From where does the system get the email id of the user?
34. What message is sent to the user in the mail?
35. When will user get an email?
36. Which domain email address should the user have?
37. How is the mailing system used?
38. How does the system calculate the date to send notification?
39. What is immunization report?
40. How is the report generated?
41. What details does report contain?
42. Why are only few vaccinations provided in the default list?
43. How does the system calculate the date of vaccinations?
44. How does the user update the vaccinations that he has taken?
45. What if the user doesn't update vaccinations taken by him?
46. Can user add new vaccinations?
47. How does the user add new vaccinations?
48. What are the details the user should enter while adding a new vaccine?
49. How can user update the new vaccinations to the report?
50. How the details of new vaccination are stored and displayed?
51. Does the user get notifications for new vaccinations?
52. Why does the user add new vaccinations?
53. How many times is the user notified?
54. When will the system send an email?
55. How does the system know when the user has to be notified?



56. How does the system know whether the user has taken the vaccination?
57. Is the user required to give input to the system?
58. What is user profile?
59. Can the user change his details?
60. Can the user change the email id to some other one?
61. Are the extra fields such as height and weight mandatory?
62. What is vaccine information?
63. How is the vaccine information helpful to the user?
64. Any unregistered user can access the vaccine information?
65. Why the vaccine information is accessible to any user?
66. How can the user know what are the mandatory vaccinations?
67. What are the details provided in vaccination information?
68. What is dashboard?
69. Why dashboard is required to the user?
70. Which type of articles are provided?
71. What is star baby?
72. What is star rating?
73. Why rating is required?
74. On what basis the rating is given to the user?
75. What is game up?
76. What kind of game is provided?
77. Why is a matching game provided?
78. How to play the game?
79. What motivates the user to use our website?
80. What details are provided in contact us?
81. How can the user contact the admin?
82. How can the user logout?
83. What are the basic requirements to interact with this system?

84. What are the details that the admin stores?
85. Which database is used by Teeka?
86. How many tables are required in the database?
87. What are the fields in the user table?
88. Why a new table is created for every user?
89. What are the front end technologies used?
90. What is the backend coding language used?
91. What protocol is used to send email to the user?
92. How many emails does this protocol support per day?
93. Does the system have any email id?
94. How is it useful for sending email?
95. Was any IDE used?
96. What is an IDE?
97. What are the advantages of Teeka?
98. What are the limitations of this system?
99. How is Teeka different from any other system?
100. What are the future enhancements for Teeka?



31. ONLINE ORGAN BANKING SYSTEM

1. What is online an organ banking system(OBS)?
2. What are the different modules of the system?
3. What is a login module?
4. What is a registration module?
5. What is a Normal User Login Module?
6. What is a Doctor Login Module?
7. What is a Admin Module?
8. What is Post a Request Module?
9. What is Find an Organ?
10. What is Get an Organ Module?
11. What is Patient Module?
12. How many types of services are provided by this system?
13. How many types of users are present in this system?
14. Who can search for organs in OBS?
15. How many types of organs are present in OBS?
16. Which users have the facility of finding an organ?
17. Which users have the facility of posting a request for the organ?
18. What is required to get an organ from OBS?
19. Who has the rights to enter the organ details in OBS?
20. What is the advantage of registering in OBS?
21. Is email confirmation available in OBS?
22. Which user has to enter the patient details?
23. What are the requirements of a patient to get an organ from OBS?
24. What are the main services provided by OBS?
25. What happens if the requested organ is not available?
26. How are successful registrations notified?

27. What will the system do if the posted organ is available?
28. Who has the rights to remove the organ details?
29. What facilities are available for a normal user?
30. What facilities are available for a doctor?
31. What facilities are available for admin?
32. Can a doctor post a request?
33. Can a normal user get an organ?
34. What will be returned on unsuccessful registration?
35. How many types of forms are available in OBS?
36. What are the data fields of login form?
37. What are the data fields of registration form?
38. What are the data fields of the get an organ form?
39. What are the data fields of find an organ form?
40. What are the data fields of post a request?
41. What are the data fields of organ form?
42. What are the data fields of patient form?
43. Are organ and tissue transplants experimental?
44. How are organs and tissues for transplantation obtained?
45. How are organs from deceased donors distributed?
46. Who can become an organ or tissue donor?
47. Which organs and tissues can be donated after death?
48. Does organ and tissue donation after death cause any disfigurement to the donor?
49. How many types of donors will be available?
50. What organs can be donated by live donor?
51. What organs can be donated by a non-living donor?
52. How organ donation is helpful?



53. What are the disadvantages of previous OBS?
54. What are the advantages of our OBS?
55. When will user get an email?
56. Which domain email address should the user have?
57. How is the mailing system used?
58. What is a website?
59. How do you create a website?
60. What are the programming languages used in OBS?
61. When will the system send an email?
62. How does the system know when the user has to be notified?
63. What is user profile?
64. Can the user change his details?
65. What is a servlet?
66. What is JSP?
67. What is the full form of html?
68. What is a database?
69. How data gets stored in database?
70. How many tables are there in OBS?
71. What is a username?
72. What is a password?
73. What is a form?
74. What are the fields in a form?
75. What motivates the user to use our website?
76. What details are provided in contact us?
77. How can the user contact the admin?
78. What are the basic requirements to interact with this system?
79. What are the details that the admin stores?
80. Which database is used by OBS?
81. How many tables are required in the database?

82. What are the fields in the users table?
83. What are the front end technologies used?
84. What is the backend coding language used?
85. What protocol is used to send email to the user?
86. How many emails does this protocol support per day?
87. Does the system have any email id?
88. How is it useful for sending email?
89. Was any IDE used?
90. What is an IDE?
91. How is OBS different from any other system?
92. What is login?
93. What is an eclipse?
94. What are the different IDE's present?
95. How many blood groups are present?
96. How many types of organs can be donated?
97. What is the restriction on organ donation?
98. What are the future enhancements for online OBS?



32. QUAD COPTER

1. What is the difference between copter and planes?
2. What are the different types of drones?
3. What is a tricopter?
4. What is a quadcopter?
5. What is a hexacopter?
6. What is a octacopter?
7. What is the principle involved in drones?
8. What is UAV?
9. What are the components that make us a quadcopter?
10. What is meant by a micro controller?
11. What is meant by a micro-processor?
12. What is the difference between a microprocessor and a microcontroller?
13. How does quadcopter get power supply?
14. What are the different types of batteries that can be used for quadcopter?
15. What do you mean by ESC?
16. What are the motors used?
17. What is meant by RPM?
18. What is meant by torque?
19. What is meant by voltage?
20. What is meant by current?
21. What are the units of voltage?
22. What are the units of current?
23. What is the power rating of the motors used in quadcopter?
24. What is meant by dc current?
25. What is meant by ac current?
26. What is meant by principle of aviation?
27. What is meant by Bernoulli's principle?
28. What are the units of pressure?
29. What is the effect of temperature on drones?
30. How is a drone made water resistant?
31. Can a drone have both Ac as well as DC motors?
32. What is meant by propellers?
33. What is the configuration of the propellers used in quadcopter?
34. What are air flights controllers?
35. Which is most commonly used air flight controller?
36. What is a transmitter?
37. What is a receiver?
38. What is meant by bandwidth?
39. What is meant by charging?
40. What is meant by discharge?
41. What is meant by lipo?
42. What is the power rating of lipo battery?
43. What is meant by C rating?
44. What is the effect of C rating on flight of quadcopter?
45. What is the arm length of our prototype?
46. What is the angle of our prototype?
47. What is the propeller length?
48. What is the angle of propeller?
49. How do we calculate flight time?
50. What are the standard channels present in the receiver?
51. What is aileron?
52. What is elevator?
53. What is throttle?



54. What is rudder/yaw?
55. What are the different models present in the transmitter?
56. Why do we prefer model -II?
57. What is the radius of our prototype?
58. What is the maximum height can be achieved by our prototype?
59. Why do two motors spin clockwise while the other two spin anticlockwise?
60. How can we differentiate an anticlockwise propeller from a clockwise propeller?
61. What are the connections need in the quadcopter?
62. What type of pins are used in connection of components?
63. Why we use only pins?
64. What is parallel connection?
65. What is serial connection?
66. What should be the rating of ESC 's?
67. What is meant by antenna?
68. What is meant by frequency?
69. What are the units of frequency?
70. What is frequency of radio transmitter?
71. What is meant by safe mode?
72. What is meant by arm mode?
73. What are the settings required for a general air flight controller?
74. What are the settings required in our prototype?
75. What are precautions need to be taken while flying the copter?
76. Why can't a drone be in flight during bad weather conditions?
77. What is a spy camera?
78. What is the major application of drones?

79. What is meant by pixel?
80. What type of camera we are using for our drone?
81. Why it is not possible to fly the copter for long duration of time?
82. What are the materials used in making the arms of quad copter?
83. What is the disadvantage in using wooden frame?
84. What is the advantage is using wooden frame?
85. What is the disadvantage with aluminum frame?
86. What is the advantages with glass fiber?
87. What is the disadvantage with the glass fiber?
88. What is the use of servos?
89. What is meant by servos?
90. What does an aileron do?
91. What does an elevator do?
92. What does a throttle do?
93. What does a rudder do?
94. What is an auxiliary channel?
95. How does the drone fly?
96. What are the extended applications of drones?
97. In what way the drones are useful?
98. Can drones be effective in their application?
99. What would be future of drones?
100. What is a drone/copter?



33. DIGITAL WATERMARKING

1. What is watermarking?
2. How many types of watermarking are there?
3. What is visible watermarking?
4. What is invisible watermarking?
5. Where visible watermarking is used?
6. Where invisible watermarking is used?
7. Why watermarking should be done?
8. Who will use this watermarking?
9. How watermarking is done?
10. What is meant by pixel value?
11. Range of pixel values?
12. What are Different types of invisible watermarking techniques?
13. What is domain?
14. What is the use of domain?
15. What is spectral domain?
16. What is spatial domain?
17. How two images can be combined in spatial domain?
18. Does both images are visible after combining?
19. What is hybrid domain?
20. Why this project is done using spatial domain?
21. Why we are not using hybrid domain?
22. When to use spatial domain?
23. When to use spectral domain?
24. When to use hybrid domain?
25. What is video?
26. Can watermarking applicable to an video?
27. Where this watermarking is useful?
28. Is watermarking applicable only on images?
29. Can only text type of message is inserted in the other image?
30. In real life, where we can see watermarking?
31. What is meant by grey scale image?
32. What is RGB image?
33. What is decimal value?
34. What is binary value?
35. Why we have to convert RGB to grey scale image?
36. What is software?
37. What is hardware?
38. What is an application?
39. What is MatLab?
40. What is command window?
41. What is command history?
42. What is workspace?
43. What is the use of editor?
44. What is image processing?
45. What is an image?
46. What is resolution?
47. What is bit?
48. What is byte?
49. What is meant by process?
50. What is digital signal?
51. What is digital watermarking?
52. What is analog signal?
53. What can be done using MatLab?



54. What is meant by program/code?
55. What is embedding?
56. What is the use of command?
57. What is JPEG format?
58. What is the message?
59. In which format it should be?
60. Is there any size limit to the message?
61. Can the watermarked image is identifiable by strangers?
62. Will there be any change in watermarked image?
63. How to extract message?
64. What is a plane?
65. What is meant by bit plane?
66. Why only 8 bit planes are created?
67. Why all bit planes are not similar?
68. Why text/message should be converted to decimal?
69. How it is converted?
70. What is ASCII value?
71. How to convert decimal to binary?
72. Where are message bits placed in the image?
73. What is the use of 'bitget' command?
74. What image will be received by the receiver?
75. How will the receiver read the message?
76. How to send the watermarked image to receiver?
77. What is noise effect?
78. What is robustness?
79. What is imperceptibility?
80. How to increase robustness of an image?
81. What is editing?
82. What is meant by compression?

83. What is cropping?
84. What is meant by intensity?
85. What is image exposure?
86. What is fading of image?
87. What is extraction?
88. What is program execution?
89. What is the need of watermarking?
90. What is for loop?
91. How to calculate rows and columns for image?
92. Where to insert the message bits in the image?
93. How watermarking is used in copy prevention?
94. How watermarking is useful in providing ownership to an image?
95. Who are stake holders?
96. What are the applications?
97. What is the most used application?
98. What is meant by copyright protection?
99. Why it should be done?
100. Can we use any other method instead of watermarking?



34. PROVIDING SECURITY TO THE VEHICLE AND HUMANS USING GPS TRACKING SYSTEM

1. When was Anveshana started and in which year?
2. In this year, how many cities was Anveshana conducted in?
3. How many teams qualified for the finals in Hyderabad Anveshana?
4. On what dates was the the finals of Anveshana conducted last year?
5. How many teams was shortlisted to the final round in the last year?
6. What is a sensor?
7. What are the different types of Sensors?
8. Who invented the sensors and when?
9. What are the sensors present in their natural form?
10. What is an AC current?
11. What is a DC current?
12. What is LED?
13. Who invented LED and when?
14. What is energy?
15. What is power?
16. Please draw a block diagram of project
17. What is a computer?
18. Who and when it was invented?
19. What is a PC?
20. What are the components present in the computer?
21. What are input devices?
22. What are output devices?
23. What is a mother board?

24. What is a hard disk?
25. What does RAM stand and what does it mean?
26. What does ROM stands and what does it means?
27. What is Arduino and what are its uses?
28. Who developed Arduino and when?
29. What does GSM stand for?
30. What does GPS stand for?
31. What is the use of GSM + GPS 908 module?
32. What are the uses of a vibrator sensor?
33. What are the uses of a flame sensor?
34. What is a satellite?
35. What are the uses of a satellite?
36. What are the application of this project?
37. What are the use of our project?
38. What is the cost of our project?
39. What is programming?
40. What is coding?
41. What is a joystick?
42. What is the use of a joystick?
43. What is a breadboard?
44. What is the use of a breadboard?
45. What is a USB port?
46. What is a MAC address?
47. What is a URL?
48. What is meant by an IP address?
49. What is DNS?
50. What is a Client-Server Model?
51. What is the difference between a webpage and a website?
52. What is meant by bandwidth?



53. What is a router?
54. What purpose does a gateway serve?
55. What is a hub?
56. What is a modem?
57. What could cause a fixed disk error?
58. Which peripheral port provides the FASTEST throughput to laser printers?
59. What is the 34-pin connection on an I/O card used for?
60. The terms "red book", "yellow book", and "orange book" refer to?
61. What command is used to reset a MODEM when using the "AT Command Set"?
62. What tool is used to test serial and parallel ports?
63. What voltage does a Pentium system use?
64. Which provides the fastest access to large video files?
65. A 25-pin female connector on the back of your computer will typically be?
66. On the PC side, the printer port is a?
67. What is the latest version of windows released in market?
68. What is SMTP?
69. What is HTTP?
70. What are hyperlinks used for?
71. What is HTTP?
72. What is meant by Web 2.0?
73. What is the latest version of HTML?
74. What is a cookie?
75. What is XAMPP?
76. What is the use of TOMCAT?
77. What is a microcontroller?
78. What is the difference between IPV4 and IPV6?
79. What is TCL?
80. What is a struts framework?
81. What are the uses of struts framework?
82. From what location are the 1st computer instructions available on boot up?
83. Which Motherboard form factor uses one 20 pin connector?
84. A hard disk is divided into tracks which are further subdivided into?
85. What is OIBEE?
86. What is meant by Microsoft CRM?
87. What is salesforce.com?
88. S3 stands?
89. What is meant by Amazon AWS?
90. What is traditional database?
91. What is meant by WEKA?
92. Who developed Weka and were?
93. What is PaaS?
94. What is SaaS?
95. What is SQL?
96. What is database?
97. What is relational database?
98. What is non-relational database?
99. What is PLSQL?
100. What is cloud?
101. What are the advantage of cloud?

