H2O Matters: Protecting Our Water Resources

Water Quality Awareness Competition

for Students of Jyothi Engineering College

Water is life! **Never Vater Second Secon**

Department of Civil Engineering









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Department of Civil Engineering





CREATING TECHNOLO LEADERS OF TOMORR

ABSTRACT

Water quality awareness competition was held for all the students of Jyothi Engineering College as a part of creating awareness among the students. It was conducted in the form of Multiple-choice questions and the exam was held on 14.2.25and the number of students participate was 185. Co coordinators were appointed from all the departments. Prizes were won by Anjana Chandran Sreelakshmi K.G and Farzana C.Y in the S8civil batch. In the non s8 civil batch the prizes were won by Kuriyan Andrews, Anakha .C Aneena. O.T, Manju P.M and Avanthika Ramesh. Prizes include both cash prize and certificate and the amount is Rs 4000, Rs 3000, Rs 2000 respectively. Prizes were distributed during the college council meeting on 18.3.2025 by the Manager of the college Fr Jose Konikkara

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1.0 Introduction

Next to air water is the second primary requisite for sustenance of life on earth. It is important not only for human beings but for all living things in the world such as plants, animals' bacteria virus etc . All the human activities require water. Water is essential for all living things, including humans, plants, and animals. Without water, life cannot exist, and everything will perish. Water is crucial for all living things because it's essential for carrying nutrients, removing waste, regulating body temperature, and is a key part of many chemical reactions that keep us alive.

Water is an essential resource for human survival. According to the 2021 World Water Development Report released by UNESCO, the global use of freshwater has increased six-fold in the past 100 years and has been growing by about 1% per year since the 1980s. With the increase of water consumption, water quality is facing severe challenges. Industrialization, agricultural production, and urban life have resulted in the degradation and pollution of the environment, adversely affecting the water bodies (rivers and oceans) necessary for life, ultimately affecting human health and sustainable social development. Globally, an estimated 80% of industrial and municipal wastewater is discharged into the environment without any prior treatment, with adverse effects on human health and ecosystems. This proportion is higher in the least developed countries, where sanitation and wastewater treatment facilities are severely lacking.

Contaminated water and poor sanitation are linked to transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio. Absent, inadequate, or inappropriately managed water and sanitation services expose individuals to preventable health risks. As per UN estimates worldwide unsafe drinking water, sanitation, and hygiene are responsible for the deaths of about 3.5 million people each year. Water quality is a subject of common importance for everybody and it is postulated that creating awareness among the people is of prime importance. CWRE Jyothi Engineering College is a system under the Civil Engineering Department involved with various steps for helping people for remediation of water related issues. For that objective CWRE in association with ISTE is in line to conduct a water

quality awareness competition for all students of Jyothi Engineering College. The features of the competition and the brochure are as follows



Features of the Competition:

- Separate competitions will be held for S8 civil students and all other students.
- Attractive cash prize for winners and participation certificates for all first Prize. ₹ 4,000, Second Prize, ₹3,000, Third Prize: ₹ 2,000 (Prizes will be awarded in both groups)
- The competition will consist of 100 multiple-choice questions (MCQs) with special "Star questions' to resolve tie-breakers. No negative marking will be applied.
- 50% of the questions will be repeated from previous years' questions papers.
- Registration fee ₹50 per participant.
- Tentative date and time: February 12, 2025, from 1: 15 PM to 2.00 PM
- For study materials and additional details, visit cwre.jecc.oc.inor access the link through the Jyothi Engineering College website.
- Last date for registration: February 4, 2005. Participants must registers through the faculty assigned to their respective departments.
- Students are eligible for Activity points (KTU 10).

2.0 Domestic Polluting sources that cause water pollution

Pollution of water is a serious issue of the present era. The development in all spheres of life polluted the water sources. There are plenty of sources responsible for water pollution. To make a complete list of these sources is not easy. How ever, in general, the following sources are generally responsible for pollution.

- 1. Human excreta.
- 2. Domestic solid waste.
- 3. Domestic source of waste water.
- 4. Solid waste from factories and hospitals.
- 5. Waste water from factories and hospitals
- 6. Leak in the pipe carrying waste water.
- 7. Leak from underground tanks storing oil, chemicals or water.
- 8. Leak from vehicles carrying diesel, petrol, phenol etc. due to accident or other reasons.
- 9. Pollution sources from excreta of pet animals.
- 10. Stagnant waste water pools near water sources.
- 11. Water trickling down to wells from spaces filled by poor quality soil.
- 12. Natural minerals or salts (iron, fluoride, arsenic, chloride etc.)
- 13. Salt water seeping in from the sea.

The effects of water pollution are manifested as diseases in the following forms

Cholera,

Cholera is a bacterial disease usually spread through contaminated water. Most dreadful disease which killed enormous people in world history



Diarrhea,	
Diarrhea means having a loose, watery stool during a bowel movement.	
Typhoid	
Typhoid fever is caused by the bacteria Salmonella Typhi. It's spread by	Typhoid Fever
eating contaminated food or drinking contaminated water	Rash
Hepatitis,	HEPATITIS B
hepatitis A and E are waterborne diseases, meaning they can be transmitted through contaminated water.	
Gastroenteritis,	Gastroenteritis
Transmitted through water	

Giardiasis	
Caused by Contaminated	Giardia lamblia parasite
water	
	Drinking contaminated water can lead to infection
Leptospirosis	LEPTOSPIROSIS
is a disease caused by bacteria that affects	
people and animals.	
It's spread in the urine (pee) of infected	
animals.	
Excess fluoride causes	
Methemoglobinemia	
Caused by nitrate in	
drinking water	6 230
	TAS M
Keratosis	
Caused by arsenic in drinking water	
	P

Fig 1 Water Related Diseases

3.0 Objective of the competition

Creating awareness among the students on water quality and related subjects

4.0 Modality for the competition

Centre for Water Research and Education (CWRE) and Indian Society for Technical Education (ISTE) jointly organize Water quality awareness competition for all the students of Jyothi Engineering College jointly organize water quality awareness Competition for water quality awareness for all students of Jyothi Engineering college

- 1. Separate competition for S8 civil and all other students
- Cash prize for winners and certificate for all (Cash prize Rs 4000, Rs 3000, Rs 2000) for both groups
- 3. 100 questions (MCQ) with star questions for tie breaker. No negative marks
- 4. 50 % of previous year question will be repeated
- 5. Entrance fee @Rs 50 per each
- 6. Tentative Date and time for the competition 12.2.2025 at 1.15 pm to 2.00pm
- 7. For details visit cwre.jecc.ac.in or through link from Jyothi website for materials and other information
- 8. Last date for registration 5.12.2025 and register through the assigned faculty in the department

5.0 Department Coordinators

For each department there were co-ordinaters and their list is given below

Sl. No Department Name of co-ordinators 1 Artificial Intelligence and data Anjali science 2 Civil Jeffy Johny 3 **Mechatronics** Nini 4 Computer science Neenu Francis 5 Robotics and automation Leo Mathew **Electrical and Electronics** Dr Shijo P 6 7 Mechanical Nice Menacherry

Table 1. Department Co coordinators

8	Electronics and communication	Saritha
9	First year	Bindu K.S



Fig 2 Students Writing the Examination in the CWRE



Fig 3 Students writing the examination in the S4 class room

6.0 Attendance for the competition

Total students participated in the competition are 185 and the branch wise details are given below

Sl No	Branch and class	Number
1	First years	55
2	AD	13
3	Civil	51
4	EEE	9
5	EC	40
6	Computer science	17
	Total	185

Table 2 No of participants from each department

7.0 Winners

S8 Civil

I st prize -Anjana Chandran	84 marks
2 nd prize – Sreelakshmi K	82 marks
3 rd prize – Farzana C.Y	81 marks

Students other than s8 civil

1 st prize -Kuriyan Andrews S	54 civil-76 marks
2 nd prize - Anakha .C S	4 EC-75 marks
3 rd prize - Aneena. O.T	S4 CSE – 70 marks
Consolation prize	
1. Manju P .M S	4 CSE -68 marks

1.	Manju P .M	S4 CSE -68 marks
2.	Avanthika Ramesh	S4 AD – 68 marks



Fig 4 winners of the competition

8.0 Distribution of Prizes

Prize distribution was done during the college council meeting on 18.3.2025. Fr. Jose Konikkara , Manager distributed the prizes



Fig 5Anjana Chandran First prize winner for S8 students receive prize from Fr. Jose Konikkara, Manager "Jyothi Engineering College



Fig 6 Kurian Andrews first prize winner for non-civil S8 students receive prize from Fr. Jose Konikkara , Manager

9.0 Water quality awareness competition for 2023-24

During the year 2023-24 also we have conducted water quality awareness but it was limited to civil s8 students only. The details in respect of the competition are appended as appendix

10.0 Conclusion

All the departments co-operated with the programme. students also realized the need for water quality assurance and related aspects

Appendix A

CWRE & ISTE student Chapter, Jyothi Engineering College

Water Quality Awareness Competition

Date 14.2.2025

Time 45 minutes

Note: - No negative marks

Starred (*) questions will have more weightage for a tie-breaker

General information Instructions

- a) Water quality deterioration is the most catastrophic situation in modern world. It is postulated that 50 % of hospital beds are occupied by patients suffering from water related diseases
- b) The objective of this endeavour is to increase the water quality awareness of the people

Instruction for the exam

- c) Select the best answer out of the given four
- d) Answer sheet only need be handed over to the invigilator. Question paper can be taken away by the participant
- e) Time management will be crucial
- f) Key for the answer will be published within 1 hour on completion of the exam
- g) One week time will be given for challenging the key
- h) Result will be published within 2 weeks thereafter
- i) Prizes will be awarded on a suitable occasion in the college ie world water day etc
- j) Certificate will be given only those registered and written the exam
- k) No claim for refund of registration fee will be entertained under any circumstances
- 1) Questions 1 to 13 are starred

Questions

1. Eutrophication in rivers is caused by

a) Discharge of sediment in to the river b) Excessive discharge of nutrients c)Discharge of chlorides e) Discharge of toxic substances

- 2. Which of the following are the primary causes of water pollution?(a) Plants(b) Animals(c) Human activities(d) None of these
- 3. Which of the following techniques is used for reducing the total dissolved solids (TDS) in the water?

(a) Osmosis(b) Ion exchange(c) Distillation(d) Both b and c

4. Which of the following techniques is normally used to remove fluorides in drinking water?

(a) Osmosis(b) Reverse osmosis (c) Activated alumina (d) b and c

- 5. Which of the following is a waterborne disease?(a) Typhoid(b) Cholera(c) Diarrhoea(d) All of the above
- 6. In most freshwater lakes, the algal productivity is limited by the availability of which of the following inorganic ions?
 - (a) Carbon (b) Nitrogen(c) Phosphorus (d) b and c
- 7. The characteristics of fresh and septic sewage respectively area) Acidic & Alkalineb) Alkaline & Acidicc) Both acidicd) Both Alkaline
- 8. Which of the following is the main cause of temporary hardness?
 - (a) Calcium sulphate(b) Magnesium sulphate(c) Magnesium chloride
 - (d) Magnesium carbonate
- 9. Which of the following units is used for measuring the turbidity of water?a) mg/litre (b) centimetre (c) NTU (d) All of the above
- 10. Which of the following is not a waterborne disease?
 - (a) Measles(b) Typhoid(c) Cholera(d) Hepatitis
- 11. As the water quality index (WQI) of a stream improves, the biodiversitya) increases b. decreases c. remains the same d. No effect
- 12 Hardness in water is generally represented by the amount of...a) Ca2+ b) Zn2+ c) Mg2+ d) a and c
- 13. What present of earth's total global water is approximately freshwater?a.) 67.9% b.) 4.8% c.) 2.5% d.) 98%

14. Which method is commonly used to measure turbidity in water samples?

a) Spectrophotometry b) Gravimetric analysis c) Nephelometry d) Titration

15. Which of the following is not a standard parameter to assess the drinking water quality?

a) Total coliforms b) alkalinity c) Turbidity d) Methane concentration

16. Which analytical technique is commonly used to detect and quantify sodium and potassium in water samples?

a) Chromatography) Infrared Spectroscopy) Flame Photometry) Electrochemical analysis

- 17. Which water quality parameter needs to be analysed in situ only?a) pH b) Temperature c) Turbidity d) Conductivity
- 18. Colour of water sample is measured in _____unit.a) mg/lb) Hazen c) NTU d) mho/cm
- 19. What is the acceptable limit of E. coli or thermotolerant coliform bacteria in all water intended for drinking as per the Indian Standards of Drinking Watera) 0 CFU/100ml b) 100 CFU/100mlc) 1 CFU/100mld) Undetectable/100ml
- 20. The Biological oxygen demand measures the
 - a) Amount of oxygen required for chemical reactions in wastewater
 - b) Amount of oxygen required for growth of microorganisms in water
 - c) Amount of oxygen required to oxidize the calcium present in wastewater) Amount of oxygen that would be removed from the water to oxidize pollution
- 21. Conductivity of the water sample is measured in ______unit.a) mg/lb) Hazen c) NTU d) mho/cm
- 22. What would be the pH of a solution with a hydroxide ion $[OH^-]$ concentration of 10^{-8} M?
 - a) 2 b) 6 c) 8 d) 10
- 23. What is the full form of GAP?
 - a) Ganga action pre distribution b) Ganga action plan c) Ganga affected plan d) Ganga Authority plan
- 24.As per the government rules an excreta disposal system is to be located at how much distance from the well-used for drinking
 - a) 14meter b) 20 meter c) 10meter d) 7.5 meter

25. The structure given below is soak pit. what is the use of it?



a) Disposal of waste water b) Disposal of solid waste c) Disposal of septage d) all of the mentioned

26. Trees around houses are beneficial due to

a) Shade b) absorption of CO_2 and release of Oxygen c) fertilization of soil c) none

27. Black colour in well water is due to

a) organic matter b) chloride presence c) nitrate d) iron

28. Identify the correct relation between the following?

a) Dissolved solid = Total solid + Suspended solid b) Dissolved solid = Total solid
- Suspended solid c) Total solid = Dissolved solid / Suspended solid d) Dissolved

solid = Suspended solid – Total solid

29. Which coagulant is mainly used for water treatment?

a) chlorine b) copper sulphate c) Aluminium sulphate d) none of the above

30. Chloride concentration in drinking water will be more in.

a) rural area b) urban area c) coastal area d) none of the above

- 31) Cholera is a dreadful disease. Which bacteria is responsible?
 - a) bacillus b) staphylococcus c) Vibrio d) none

32) Consumption of arsenic containing water results is

- a) Keratosis b) blue baby syndrome c) cholera d) none
- 33. Name the Indian born British doctor who discovered that malaria is transmitted through mosquito ?
 - b) a) Robert Koch b) Ivanosky c) louis paste d) Ronald ross
- 34. What is WHO standard for chemical oxygen demand ?
 - a) 20mg/litre b) 10mg/litre c) 5mg/litre d)nil

35. pH of a water sample is 5.9 is it acceptable for drinking?

a) Yes b) No

36. It is observed that certain vessels in a household is getting corroded fast. What would be the reason

a) high pH b) low pH c) excess presence of iron d) b and c

- 37. Water tank over a house for drinking should not be kept open due toa) algae growth b) entry of birds c) lack of aeration d) a &b
- 38. Drinking water quality standard in India is proclaimed by

A) Central Pollution control board b) BIS c) NEERI Nagpur d) CWPR

39. Which of the following is not a water borne disease?

a) Dysentery b) Cholera c) Typhoid d) Malaria

40. Best quality pipe presently used in water supply system

A) PVC b) Cast-iron c) Ductile iron d) HDPE

41.For deep water pumping what type of pump is used ?

a) centrifugal pump b) submersible pump c) Rotatory pump d) HT pump

42. pH values of shallow well water is normally ------ compared to deep well

A) Low b) high c) equal d) no relation

43. Organic pollution in water can be reduced by

A) Filters b) activated carbon c) bacterial treatment d) none

- 44. Acceptable standard for sulphate in mg/litre?
 - A)400 b)200 c)250 d) 450
- 45. Permissible limit for hardness in mg/litre?

A)500 b) 600 c) 700 d) 650

46. Iron is having similarity with the following mineral in character

A) magnesium b) nitrate c) manganese d) chloride

- 47. In a water treatment system fluoride removal is normally ascertained by
 - a) Sand filter b) activated carbon filter c) Reverse osmosis d) none
- 48. What is the important health significance of hardness?

A) on boiling white deposit is deposited b) hard water is good for heart diseasesc) lather is formed with soap d)scaling in boilers

- 49. Approximate quantity of dissolved oxygen in mg /litre in drinking water is around
 - A) 5 b) 7 c) 9 d)8

- 50. When iron containing water is used for preparation of tea, black colour is formed due to
 - a) tannin in teab) oxidation of ferric to ferrous c) due to mud in irond) oxidation of ferrous to ferric
- 51. The figure below shows symptom of which disease ?



a) Keratosis b) fluorosis c) methemoglobinemia d) leptospirosis

52. The child below is affected by blue baby syndrome. Which salt is responsible for that ?



a) chloride b) fluoride c) Nitrate d) none of the bove What is the name of the structure given below?



53.

- a) Sanitary pit
- b) Leach pit
- c) Septic tank
- d) None
- 54. Name the popular scientist who dedicated his effort and life for protection of human health by continuous research?



a)Ronald ross b) Louis paster c)Antony Leevanhalk d)Alexander fleming

55. The picture below is a water treatment system ? what is its the most appropriate name



a) Sand filter b) activated carbon filter c) pressure filter d) Purolite filter

56. What is the name given for the water treatment system used in Africa?



- a) water filter b) carbon filter c) LifeStraw d) none
- 57. Below given photo is of popular scientist in water sector namely SPL Sorenson. His contribution related to what?



a) bacterial analysis b) pH meter c) water treatment systems d)all mentioned

58. The below picture gives the cause for a particular dangerous disease name it.



- a) Dengue fever b) leptospirosis d) vomiting e) tuberculosis
- 59. Name the pipe fitting given below



- a) Elbow
- b) Union
- c) Coupling
- d) Valve
- 60. A water tank is having a size of 10.5mx4.8m x 3m with _ _____ Find the capacity in litres

A) 126000 b) 151200 c) 150000 d) none of the above

61. Pressure pump in household work is required

A) Decrease pressure b) Increase pressure c) control pressure alteration

d) measure the pressure

- 62. Salty taste for water is due to the presence ofa) nitrate b) chloride c) sulphate d) iron
- 63. Chlorination of water supply is essential fora) oxidation of organic matter b) disinfection c) reducing metals d) none
- 64. Hardness is caused by.....
 - a) Multivalent metallic captions b) calcium C) magnesium d) calcium and magnesium
- 65. Who discovered virus?a) Louis pasterb) Robert Kochc) Ronald Rossd) Ivanosky
- 66. Conductivity of water depends on the
 - a) Dissolved ions b) Suspended and dissolved ions c) Suspended ions in waterd) none of the above
- 67. Who invented microscope ?
 - a) Antony van leevanholk b) Ronald rossc) arrehenius d) henry cavendish
- 68. National green tribunal(NGT) is formed for?

a) Protecting forest resources b)protecting rivers c) protecting environment and natural resources d) all of the above

- 69. Decrease in pH Value can be accomplished by addinga) Nitric acid b) NaOH c) lime d) KOH
- 70. Acceptable quality standard for chloride in mg/litre is

a) 250 b) 300 c) 200 d) none of the mentioned

71. Treatment for algae growth in wells is

a) Copper Sulphate b) prevention of sunlight c) both of the mentioned d) None of the mentioned

72. Chlorine demand can be reduced by treatment of water

a) Yes b) No

73. Isotherm is a term associated

a) Activated carbon b) pH of water c) conductivity of water d) sand filter for water

- 74. Theory of ionization was invented by
 - a) Arrhenius b) Henry Cavendish c) Ronald ross d) Antony Levonchuck

75. Eutrophication is caused in rivers by discharge of

a) discharge of sediment in to the river b) excessive discharge of nutrients c) discharge of chlorides e) discharge of toxic substances

- 76. Which is the latest Indian standard that describes water quality?a) IS10500-2016 b) IS10500-2012 c) IS10500-2014 d) IS10500-2015
- 77. The maximum permissible presence of chloride in drinking water in the absence of other sources is.....

a)1500mg/litre b) 2000mg/litre c)1000mg/litre d) 2500mg/litre

- 78. Which of the following salts is the main cause of permanent hardness of water?(a) Magnesium sulphate(b) Magnesium bicarbonate(c) Magnesium carbonate(d) None of the above
- 79. What is the main objective of artificial recharging?

a) To increase the water availability in water sources b) to reduce the contamination of traditional water sources c) To satisfy the existing rules and regulations d) none

- 80. Organic matter in water cannot be estimated by
 - a) COD test b) BOD Test c) TOC Test d) conductivity test
- 81. What is the minimum quantity of residual chlorine that should be present in water supply

a) 0.3mg/litre b)0.2mg/litre c) 1 mg/litre d) 0.8mg/litre

82. Smell of rotten egg is due to

a) Hydrogen chloride b) hydrogen sulphate c) hydrogen sulphide d) hydrogen

- 83. In a conventional water treatment plant slow mix is performed in which parta) Clarifierb) Flocculatorc) aeratord) none of the mentioned
- 84. When chlorine gas is added to water pH willa) increaseb) decreasec) No effectd) none
- 85. Suitable pH for coagulation to occur is
 - a) 6-8 b)4-5 c)9-10 d) 4.5 5.5
- 86. What is the normal contact period given for chlorination of water?
 - a) 120 minutes b) 10 minutes c) 30 minutes d) 60 minutes
- 87. Chlorine demand for distilled water is 1 mg/l The above statement is a) true b) false

88. In a water sample chlorine demand is 0.8mg/litre and residual of 0.2 is to be maintained. What is the requirement of bleaching powder 10000 litres of water that contains 30% chlorine?
a) 0.33 kg
b)0.8kg
c) 0.2 kg
d) 1.0 kg

89. The government department basically responsible to take steps for controlling domestic pollution is a) Police department b) pollution control board c) Health department d) local self-government department 90. Which is not an Alkalinity form? c) hydroxide d) chloride a) carbonate b) bicarbonate 91. Volatile solids represent a) inorganic solids b) organic fraction c) both d) none 92. Permissible water quality standard for nitrate in mg/litre is..... a) 45 b) 100 c) 125 d)55 93. Permanent hardness can be removed by..... b) Softener c) Alum a) Boiling d) Lime 94. What is the source of Dissolved Oxygen in water? a) from ground b) atmosphere c) from living organisms d) none 95. What is the permissible limit for fluoride in drinking water in mg/litre? a)1 b)1.5 c)2 d) 1.8 Colour change in bathroom floors is due to 96. a) chloride b) iron c) nitrate d) phosphate 97. What is the hydrogen ion concentration in moles /litre if pH is 5.6? A) 10^{-3} b) $10^{-5.6}$ c) $10^{-4.4}$ d) $10^{-9.4}$ 98. What is the effect of temperature on conductivity of water ? A) increase b) decrease c) remains same d) none 99. Smell in water sample is generally associated with A) Chloride b) nitrate c) sulphate d) hardness 100. White deposit on boiling water indicates presence A) Iron b) hardness c) chloride d) nitrate

Appendix B

Key for water quality awareness competition

Centre for Water Research and Education & ISTE Jyothi Engineering college

WATER QUALITY AWARENESS COMPETETION

Sl.No	Answer	Sl. No	Answer	Sl No	Answer
1	b	35	b	68	b
2	с	36	d	69	с
3	d	37	d	70	с
4	d	38	b	71	b
5	d	39	d	72	b
6	d	40	с	73	b
7	b	41	b	74	а
8	d	42	а	75	Removed
9	с				
10	а	43	с	76	b
11	а	44	b	77	с
12	d	45	b	78	а
13	с	46	с	79	а
14	с	47	с	80	d
15	d	48	b	81	b
16	с	49	b	82	с
17	b	50	a	83	b
18	b	51	a	84	b
19	а	52	b	85	а
20	b	53	b	86	с
21	d	54	b	87	b
22	b	55	а	88	Removed
23	b	56	d	89	d
24	d	57	a	90	d
25	а	58	a	91	b
26	b	59	с	92	а
27	а	60	а	93	b
28	b	61	а	94	b
29	с	62	с	95	b
30	с	63	a	96	b
31	с	64	a	97	b
32	a	65	b	98	а
33	d	66	с	99	с
34	b	67	с	100	b

Answer key Provisional

Now out of 98

S4 civil students

Appendix C

Names of students participated and marks scored by each

Reg	Student Nome	University	Marks out of
No	Student Manie	Register No	98
1	ABHISHEK V A	JEC23CE001	36
2	ADHUL PRAKAASH MARATH	JEC23CE002	А
3	AKHIL BAIJU JOHN	JEC23CE003	41
4	ANNLIN MARIYA A B	JEC23CE005	33
5	BASTIN KT	JEC23CE006	41
6	BEBETTO BABU	JEC23CE007	23
7	JEWEL VARGHESE	JEC23CE008	47
8	KURIYAN ANDREWS	JEC23CE011	76
9	NANDHANA PS	JEC23CE013	32
10	NOYAL TB	JEC23CE014	33
11	RAHNA JAHAN VM	JEC23CE015	43
12	SEETHAL SEBASTIAN C	JEC23CE016	51
13	SHIBIL VAZEEM P S	JEC23CE017	32
14	UJWAL KRISHNA V	JEC23CE018	30
15	VAISHNAV M R	JEC23CE019	38
16	ANJALI A K	LJEC23CE020	40
17	ANSEENA PAUL	LJEC23CE021	36
18	AUSTIN JAMES	LJEC23CE022	32
19	BENITO KOLLANNUR	LJEC23CE023	38
20	GOPIKA V	LJEC23CE024	35
21	KRISHNAPRIYA V	LJEC23CE025	41
22	LEO Y VELLARA	LJEC23CE026	49
23	MISHEL MOHAMED E A	LJEC23CE027	34
24	NAYANA V R	LJEC23CE028	49

S4 CIVIL

S4 EEE

Reg. No	Name	KTU reg number	Marks
25	Akshay Kumar R D EEE	JEC23EE	А
	(S4)		
26	Abhinav D EEE (S4)	JEC23EE001	64
27	Abhishek Sankar T EEE (S4)	JEC23EE002	58
28	Sadrisya M K EEE (S4)	JEC23EE023	40
29	Devika p EEE (S4)	JEC23EE011	38
30	Anitta Rose C R EEE (S4)	JEC23EE007	39
31	Gayathri EEE (S4)	JEC23EE013	36
32	Hiba Jasmin EEE (S4)	JEC23EE017	37
33	Amel Shaju EEE (S4)	JEC23EE033	А

First year

Reg. No	Name -EC	Uni reg number	Marks
34	Afna .K.S	JEC24EC006	56
35	Bassila .A	JEC24EC017	56
26	Adhithya .V	JEC24EC002	36
30	Chaithra DSanthash	IEC24 EC018	12
57	Charuna .F.Sanulosh	JEC24 EC016	15
38	Malavika .c	JEC24 EC034	38
39	Ridha Nowrin	JEC24 EC046	36
EEE			
40	Niranjana. A.V	JEC24 EE030	А
CSE -C			
41	Niveditha .N	JEC24 CS155	61
42	Swathi.S.Nair	JEC24 CS181	61
CSE-B			
43	Jonathan Sabu	JEC24 CS105	43
44	Gopika .V.V	JEC24 CS098	66
45	Jagan.K.Satheesh	JEC24 CS110	35
46	Enosh P.R	JEC24 CS087	43

47	Jimi Ousaph	JEC24 CS114	36
48	Athira .M.A	JEC24 CS064	65
49	Liya Roy	JEC24 CS126	37
50	Avani .M.M	JEC24 CS070	А
51	Devikrishna .P.S	JEC24 CS082	А
52	Gowry .M.V	JEC24 CS095	57
53	Lina M.S	JEC24 CS125	56
54	Katherine .c.shine	JEC24 CS118	36
55	Jeslin Giby	JEC24 CS113	48
56	Barkath Asiya	JEC24 CS072	56
AD-A			
57	Jesna .C.J	JEC24 AD046	53
58	Ameya .Jose Chahzoor	JEC24 AD014	34
AD-B		-	
59	Niranjana PP	JEC24 AD066	37
60	Maria Ann Mathew	JEC24 AD 060	43

First year mechatronics

Reg. No	Name	Uni reg no	Marks
61	Navaneeth jwellara	JEC24MC036	41
62	Benson P padua	JEC24MC013	30
63	Evan P Sunil	JEC24MC016	62
64	Joel Jacob	JEC24MC022	36
65	Feliza shevit	JEC24MC047	62
66	Naina Nijo	JEC24MC035	42
67	Sniya Davis	JEC24MC041	45
68	Joel siby	JEC24MC016	39
69	Jincy K.J	JEC24MC020	22
70	Fidha Nowrin .R.A	JEC24EC022	38

S8 AD

Reg. No	Name	Uni register no	Marks
110			
71	SHANE SUNNY	JEC21AD044	59
72	ASHLIN PARAKKAL	JEC21AD016	37
73	ALAN DAVIS C	JEC21AD006	44
74	ABHISHEK AJAYKUMAR	JEC21AD002	41
75	VINEETH K	JEC21AD052	42
76	JEESON DAVIS	LJEC21AD055	35
77	EBIN BABU	LJEC21AD054	29
78	JOHN DAVIS	JEC21AD030	А
S4	1	L	
79	AVANTHIKA RAMESH	JEC23AD021	68
80	ABIRAMI S	JEC23AD003	45
81	PARVATHY KRISHNA M	JEC23AD045	50
82	ANN LIA SUNIL	JEC23AD015	43
83	NANDHANA V P	JEC23AD042	39

Computer Science A, B, CY-EEE Seminar hall

Reg.No	Name	Uni reg number	Marks
84	ANILA BENNY	S4 CSE A	44
85	ANAMIKA PRINCE	S4 CSE A	28
86	ANGEL THOMAS N	S4 CSE A	51
87	JWELIN JOSEPH	S4 CSE B	53
88	MOHAMMED ZAYAF N A	S4 CSE B	34
89	MERIN BOBBY	S4 CSE B	59
90	MANJU P M	S4 CSE B	68
91	CISNA ANNA SAJI	S4 CSE B	67
92	IMENE MARY M J	S4 CSE B	59
93	JEAS MARIA JOBY	S4 CSE B	31

94	ASHNA K P	S4 CSE B	54
95	ANGEL VARGHESE A	S4 CSE A	62
96	ANEENA O T	S4 CSE A	70
97	DIYA RAMESH MENON	S4 CY	44
98	SHELIN LAVIN MARATH	S4 CY	45
99	AMRUTHA SURESH	S4 CY	38
100	PRANAV MANOJ	S4 CY	39

EC seminar hall

S4 Electronics and Communication department

Sl.No	Name	University registers no	Marks
101	ABISHEK C M	JEC23EC002	34
102	ADARSH T	JEC23EC003	40
103	AJIN V	JEC23EC005	38
104	ALAN C J	JEC23EC006	28
105	ALAN PAUL M P	JEC23EC007	30
106	AMRITHA P M	JEC23EC008	55
107	ANAKHA C	JEC23EC010	75
108	ANASWARA GOPINATH	JEC23EC011	33
109	ANJANA J	JEC23EC013	46
110	ARCHANA K S	JEC23EC015	А
111	ARDRA A M	JEC23EC016	35
112	ASWATHY N R	JEC23EC019	38
113	ASWATHY V M	JEC23EC020	39
114	ATHUL KRISHNA C	JEC23EC021	56
115	CHRISTO BIJU	JEC23EC022	36
116	DEVIKA C D	JEC23EC023	43
117	EDWIN JAISON	JEC23EC024	34
118	GODWIN A S	JEC23EC026	30

119	ISRA FARHA K	JEC23EC028	26
120	JOHNPAUL M M	JEC23EC029	34
121	JOSIYA C J	JEC23EC030	27
122	JOVIYA JELPHY	JEC23EC031	35
123	KEVIN ELDHOSE	JEC23EC032	53
124	MOHAMED ZAYAN N A	JEC23EC034	А
125	MUHAMED NIHAL AFSHAN P	JEC23EC035	37
126	NIKHIL BHANU	JEC23EC036	46
127	RANI VARGHESE	JEC23EC037	36
128	SANJAY MANOJ A	JEC23EC039	31
129	SANUSHA S	JEC23EC040	28
130	SREE HARI K	JEC23EC041	37
131	AFIN ABRAHAM C	LJEC23EC045	35
132	ARUN R	LJEC23EC046	А
133	BLESSON STOY	LJEC23EC047	42
134	DIYON WILSON	LJEC23EC048	27
135	ELFINSTEN C A	LJEC23EC049	29
136	JAYAKRISHNAN H	LJEC23EC050	26
137	NIRMAL KRISHNA K K	LJEC23EC051	41
138	N SANDHEEP KRISHNAN	LJEC23EC052	32
139	SANDRA E	LJEC23EC053	22
140	VISHNU MOHAN C	LJEC23EC054	43

First year computer Science -A- EC seminar hall

Sl.No	Name	Uni registration Number	Signature
141	ADITHYAN T U	JEC24CS014	43
142	ANUGRAHA BABU	JEC24CS047	27
143	ALEENA ROSE JOJI	JEC24CS026	38
144	AKSHAYA P MATHEW	JEC24CS020	38
145	AKSA P K	JEC24CS019	37

146	ABEL JOSEPH JAMES	JEC24CS003	42
147	ANJANA RAVI	JEC24CS044	29
148	ALAINA PAULY	JEC24CS021	50
149	ASHWIN SANKAR K R	JEC24CS062	31
150	ABIJITH K U	JEC24CS007	34
151	ALAN M JOSE	JEC24CS023	41
152	AMRITA SHINOD	JEC24CS036	24
153	ADHYA KRISHNAN	JEC24CS009	45
154	ABHISHEK V NAIR	JEC24CS006	40
155	ARUNGOPAL R	JEC24CS056	30
156	ASWIN MANOJ	JEC24CS063	32
157	ADITHYAN MANOJ	JEC24CS012	44
158	ANANDHA KRISHNAN P	JEC24CS041	34

S8 Civil students -EC seminar hall

No	Name	KTU registration	Marks
1	AADHARSH KM	JEC21CE001	54
2	ABHINAND PS	JEC21CE003	72
3	AMAL SANAF S	JEC21CE006	52
4	ANJANA CHANDRAN V	JEC21CE007	84
5	ANTON JOHN ISSAC	JEC21CE008	52
6	DON PAULSON	JEC21CE010	43
7	EMILDA JOHN	JEC21CE011	75
8	GOKULKRISHNA M S	JEC21CE012	73
9	JERIN GEORGE	JEC21CE013	59
10	KRISHNA K S	JEC21CE014	А
11	MEGHA A B	JEC21CE015	76
12	MUHAMMED SINAN P A	JEC21CE017	58
13	RUBY JOSEPH	JEC21CE018	74
14	RUBY MARIYA JOSHY	JEC21CE019	72

15	SHIBLA V S	JEC21CE020	68
16	SHIVIN JOSEPH	JEC21CE021	А
17	SREELAKSHMI K G	JEC21CE022	82
18	SREELAKSHMI.P	JEC21CE023	А
19	THEJUS KRISHNA C S	JEC21CE024	26
20	ATHIRA K R	LJEC21CE029	А
21	ATHUL K R	LJEC21CE030	50
22	JACKSON VK	LJEC21CE032	80
23	JOE P WILLIAM	LJEC21CE033	44
24	MAGH SHAJU PUTHUR	LJEC21CE036	62
25	FARSANA C Y	LJEC20CE045	81
26	AGNA ROY	JEC21CE 004	74
27	NEERAJ MOHAN	LJEC21CE 038	38

Appendix D

Water quality awareness competition for final year civil students during 2023-24

Water quality awareness competition for civil final year students. 100 oneword questions were given and based on the mark's prizes were given as follows. The purpose of the competition is to improve the knowledge of students on water issues and last year it was conducted only for civil S8 students. Prize was distributed by Fr. David Nettikkaden, fiancé manager in a function arranged along with PTA meeting.

SI No	Name	Mark out of 99	Cash prize
1	Seethal Anna Korulla	71	Rs 2500
2	Janet George	63	Rs 1500
3	Gopika P	62	Rs 1000
4	Anjali.M.M	61	Rs 1000
5	Vishnu Vijayan	58	Rs 1000
6	Akshaya Viswanathan	58	Rs 1000
7	Manu E.M	56	Rs 1000
8	Pavithra .P.V	55	Rs 1000
9	Aswanth Asokan	52	Rs 1000

Table Winners of water quality quiz completion 2023-24



Fig Students writing the exam 23-24



Fig Seethal Anna Korulla receiving first prize from Fr. David Nettikkadan ,Finance Manger for the year 23-24



Objectives of Centre for Water Research and Education (CWRE)

- > Testing water samples on physical, chemical and biological parameters as per the approval of KSPCB.
- Inspection of water sources and guiding people for remediation of quality and related issues
- Training engineers and supervisors in water supply, water quality
- Providing training to faculty and students from engineering colleges/ Polytechnique / firms working in water supply / health inspectors etc.
- Dissemination of knowledge through publications like newspaper / online books / WhatsApp group
- Conducting water quality awareness competition among students
- Taking up student project related to water
- All other activities to involve in research and awareness creation in water sector

Water Quality Awareness Competition

for Students of Jyothi Engineering College