

Research Paper Presentation

Best paper Award (III Prize) awarded to



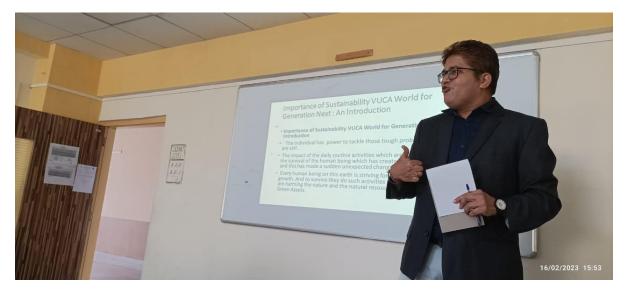
Assistant Professor, Finance Department

Congratulations!

About the Session

Dr Sudhir Purohit, Assistant Professor, Finance presented his research work on the topic "IMPORTANCE OF SUSTAINABILITY IN THE VUCA WORLD FOR GENERATION NEXT" in International Conference on Science Technology Engineering & Mathematics for Sustainable Development (ICSTEMSD 2023) organised by Atharva College of Engineering (NAAC A+).

He bagged the Best Paper Award III Prize out of 100 participants. Atharva Institute of Management Studies congratulate him for his outstanding performance!





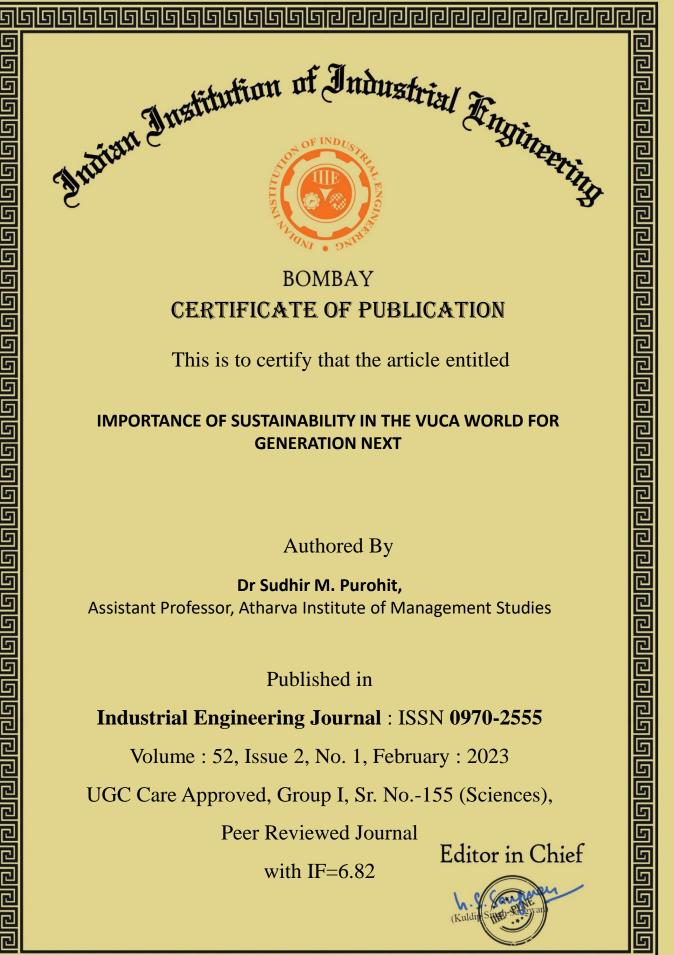














Industrial Engineering Journal ISSN: 0970-2555

Volume : 52, Issue 2, No. 1, February : 2023

IMPORTANCE OF SUSTAINABILITY IN THE VUCA WORLD FOR GENERATION NEXT

Dr Sudhir M. Purohit, Assistant Professor, Atharva Institute of Management Studies

Abstract : The Research paper discusses about the importance of sustainability in the VUCA world for the coming generation in future . The research paper discusses about the continuous changes which are happening in the world with reference to survival and growth and how to combat them by following the principles of Volatility, Uncertainty, Complexity and Ambiguity. Carbon emission calls for the concern to the whole world. This problem of sustainability which may be solvable with the principles of VUCA is being discussed here.

Key words : Need and Greed Theory , Voluntary or Innocent Activities , Irrational or Deliberate Activities

1.Introduction

Let there be peace in the heavens the earth, the atmosphere, the water the herbs, the vegetation, among the divine beings and in Brahman, the absolute reality. Let everything be at peace and in peace. Only then will be find peace". Atharava Veda

Life is all about Decisions. And decisions are all about choices! Life gives us a choice. If we choose one path to move on in the life, the another path is automatically rejected. However, it is very important that if we choose a wrong path, is it possible to revert back and change the path ? if not then what ? This is a matter of concern !

With the advent of a Human Being as creation of Nature , it took a long time to make this Earth habitable but with a very small passage of time, the Humans made this earth inhabitable by emitting carbon and other elements and thus created a huge problem of survival and sustainability.

2. Importance of Sustainability VUCA World for Generation Next : An Introduction

The individual has power to tackle those tough problems while they are still. The impact of the daily routine activities which are undertaken for the survival of the human being which has created Carbon emission and this has made a sudden unexpected change. Every human being on this earth is striving for its very survival and growth. And to survive they do such activities which so many times are harming the nature and the natural resources termed here as Green Assets. It is human nature that what we have is not enough even though it is fare enough for our survival but the theory of NEED when gets converted to the theory of GREED nobody knows. Here the volatility in the behavior of human towards the Need to Greed leads to the uncertainty of the Future of next Generation! This leads to increase in the Complexities of the problems since one problem is interviewed with another and the whole thread gets interlocked and creates confusion and becomes Ambiguous . The Human nature is first they create problem and then they interconnect one problem with another and gets confused at the end between finding solution to all of them together.

3. Analysis of data and Conclusion

The continues changes which are happening in the world with reference to survival and continuous growth and how to combat them by following the principles of Volatility, Uncertainty, Complexity and Ambiguity



Industrial Engineering Journal ISSN: 0970-2555

Volume : 52, Issue 2, No. 1, February : 2023

Chart: The following chart shows the daily routine activities of the individuals for their survival and sustainability and growth. These activities are classified on the basis of their age group based on their daily routine and how these necessary and habitual activates affect the environment through soil erosion, water contamination, noise pollution, air pollution and environment pollution. The activities are classified as 1. Rational or voluntary activities (which are necessary for survival) and 2. Irrational or Deliberate (Which will harm the Mother Nature.

Activity/ Age group		0- 0			0		
	0-10	11-20	21-30	31-40	41-50	51-60	61-70
1. Medicine (soil, atmosphere, water, air)	~	~	~	~	~	~	✓
2. Toilet (water, soil, atmosphere, air)	~	~	~	~	~	~	✓
3. Stool(water, soil, atmosphere, air)	~	✓	~	✓	~	~	✓
4. Diaper atmosphere, soil	✓						\checkmark
5. Cry (loudly) noise, air	\checkmark	?	?	?	?	?	?
6. School/college/ education Books, trees, paper, pen, pencil, rubber	√	√	✓ ✓	•	✓ ?	?	?
7. Cracker festival/games atmosphere, air, soil, water	~	~	~	~	~	?	?
8. Water balloon/color water, soil, atmosphere	~	~	✓	✓	✓	~	✓
9. Shaving water, soil, atmosphere		~	~	~	~	~	✓
10. Watching TV Electricity, noise	✓	✓	\checkmark	\checkmark	\checkmark	✓	\checkmark
11. Traveling air, atmosphere, natural, reasonable, noise	~	~	~	~	~	~	✓
12. Gossiping Noise	?	\checkmark	\checkmark	\checkmark	√ ?	√ ?	√ ?
13. Listening Music, noise, electricity	?	✓	~	~	~	~	~
14. Playing outdoor soil, noise	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	?
15. Going to gym noise, electricity		\checkmark	\checkmark	\checkmark	\checkmark	?	?
16. Driving car air, atmosphere, natural resource		~	~	✓	~	~	√ ?
17. Riding bike air, atmosphere, natural resource		√	✓	✓	√	~	?
18. Sex atmosphere by contraceptives		√ ?	~	~	~	✓?	?
19. Sociality Marriage (all type of pollution)	✓	√ ?	~	~	~	✓	√ ?
20. Funeral (all type of pollution	1	1	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
21. Fart/ sneezes air, atmosphere, noise	~	✓	~	~	~	~	√ ?
22. Perfume air, atmosphere		✓	\checkmark	\checkmark	✓	\checkmark	\checkmark

UGC CARE Group-1, Sr. No.-155 (Sciences)



ISSN: 0970-2555

Volume : 52, Issue 2, No. 1, February : 2023

Activity/ Age group							
	0-10	11-20	21-30	31-40	41-50	51-60	61-70
23. Going office water, soil, atmosphere		√?	~	~	~	~	√ ?
24. Jogging air, soil				\checkmark	✓	\checkmark	\checkmark
25. Reading newspaper \rightarrow trees		?	\checkmark	√ ?	✓	\checkmark	√ ?
26. Hospitalized air, soil, atmosphere	√	~	~	~	~	~	~
27. Bathing water, soil	\checkmark	✓	\checkmark	\checkmark	✓	\checkmark	√ ?
28. Brush	\checkmark	\checkmark	\checkmark	\checkmark	✓	\checkmark	\checkmark
29. Using electronic gadgets energy, atmosphere	√	~	~	~	~	~	~
30. Reading books paper(cutting trees)	~	✓	~	~	~	~	~
31. Chewing pan/Gutka	√ ?	\checkmark	\checkmark	\checkmark	✓	√ ?	√ ?
Chewing gum		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Smoking(Soil, atmosphere)		~	✓	~	√		
32. Washing clothes water, soil, atmosphere		✓	 ✓ 	✓	 ✓ 	✓	 ✓
33. Drinking soft. drink	\checkmark	√ ?	\checkmark	\checkmark	✓	\checkmark	\checkmark
Hard drink (water, soil, atmosphere)			~	✓	✓	~	√ ?
34. Hair Cut, Nail cut (Soil, water, atmosphere)	✓	~	~	~	✓	√	~

The tick mark (\checkmark) in the above chart shows the affirmation of the activity by the age group, where as the question mark (?) represent the doubt whether that particular activity is performed by a particular age group.

The above chart shows nearly all routine activities, which a human being exercises during his Life cycle. There are so many other activities which can also be added over here. The above activities are inclusive activities and not exhaustive activities. The activities relating job specification like mining, hunting, fishing, etc. of an individual which does affect the environment, are not noted down purposely as it involves earning lively hood and as a research topic, the professional activities are not covered here.

The above activities presented in the chart are more or less connected with the Human survival, hence these survival activities does have an impact on the environment.

The impact of the daily routine activities which are undertaken for the survival of the human being which has created Carbon emission and this has made a sudden unexpected change.

Activity/ Age group	0-10	011- 20	21-30	31-40	41-50	51-60	61-70	Total
1. Medicine (soil, atmosphere, water, air)	10	10	10	10	10	10	10	70
2. Toilet (water, soil, atmosphere, air)	10	10	10	10	10	10	10	70
3. Stool(water, soil, atmosphere, air)	10	10	10	10	10	10	10	70

UGC CARE Group-1, Sr. No.-155 (Sciences)



ISSN: 0970-2555

Volume : 52, Issue 2, No. 1, February : 2023

Activity/ Age group	0-10	011-20	21-30	31-40	41-50	51-60	61-70	Total
4. Diaper	10						10	
atmosphere, soil	10	5	5	5	5	5	10	45
5. Cry (loudly) 0ise, air	10	0	0	0	0	0	0	10
6. School/college/ education Books, trees, paper, pen, pencil, rubber	10	10	10	10	5	0	0	45
7. Cracker festival/games atmosphere, air, soil, water	10	10	10	10	10	0	0	50
8. Water balloon/color water, soil, atmosphere	10	10	10	10	10	10	10	70
		50						_
Activity/ Age group	0-10	011-20	21-30	31-40	41-50	51-60	61-70	Total
9. Shaving water, soil, atmosphere	5	10	10	10	10	10	10	65
10. Watching TV Electricity, 0ise	10	10	10	10	10	10	10	70
11. Traveling air, atmosphere, natural, reasonable, 0ise	10	10	10	10	10	10	10	70
12. Gossiping 0ise	0	10	10	10	5	5	5	45
Activity/ Age group	0-10	011-20	21-30	31-40	41-50	51-60	61-70	Total
13.ListeningMusic, 0ise, electricity	0	10	10	10	10	10	10	60
14. Playing outdoor soil, 0ise	10	10	10	10	10	10	0	60
15. Going to gym 0ise, electricity	5	10	10	10	10	0	0	45
16. Driving car air, atmosphere, natural resource	5	10	10	10	10	10	5	60
Activity/ Age group	0-10	011-20	21-30	31-40	41-50	51-60	61-70	Total



ISSN: 0970-2555

Volume : 52, Issue 2, No. 1, February : 2023

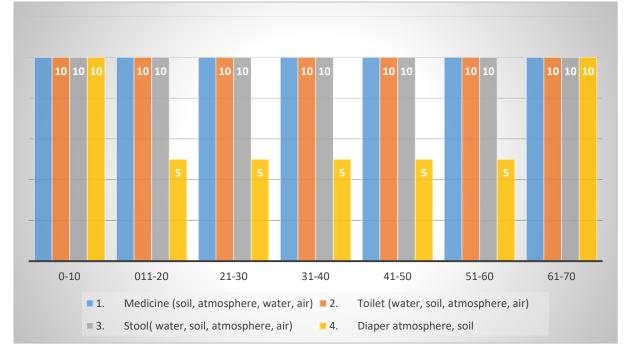
17. Riding bike air,		10	10	10	10	10	0	
atmosphere, natural resource 18. Sex atmosphere	5							55
by contraceptives	5	5	10	10	10	5	0	45
19. Sociality	10		10	10	10	10		- 0
Marriage (all type of pollution) 20. Funeral (all type		5					5	60
of pollution	5	5	10	10	10	10	10	60
Activity/ Age group	0-10	011-20	21-30	31-40	41-50	51-60	61-70	Total
21. Fart/ sneezes air, atmosphere, 0ise	10	10	10	10	10	10	5	65
22. Perfume air, atmosphere	5	10	10	10	10	10	10	65
23. Going office water, soil, atmosphere	5	5	10	10	10	10	5	55
24. Jogging air, soil	5	5	5	10	10	10	10	55
Activity/ Age group	0-10	011-20	21-30	31-40	41-50	51-60	61-70	Total
25. Reading newspaper □ trees	5	0	10	5	10	10	5	45
26. Hospitalized air, soil, atmosphere	10	10	10	10	10	10	10	70
27. Bathing water, soil	10	10	10	10	10	10	5	65
28. Brush	10	10	10	10	10	10	10	70
Activity/ Age group	0-10	011-20	21-30	31-40	41-50	51-60	61-70	Fotal
29. Using electronic gadgets energy, atmosphere	10	10	10	10	10	10	10	70
30. Reading books paper(cutting trees)	10	10	10	10	10	10	10	70
31. Chewing pan/Gutka	5	10	10	10	10	5	5	55
32. Chewing gum		10	10	10	10	10	10	65
	1	1	1					
Activity/ Age group	0-10	011-20	21-30	31-40	41-50	51-60	61-70	Total



ISSN: 0970-2555

Volume : 52, Issue 2, No. 1, February : 2023

33. Smoking(Soil, atmosphere)	5	10	10	10	10	5	5	55
34. Washing clothes water, soil, atmosphere	5	10	10	10	10	10	10	65
35. Drinking soft. drink	10	5	10	10	10	10	10	65
36. Hard drink (water, soil, atmosphere)	10	5	10	10	10	10	5	60
37. Hair Cut, Nail cut (Soil, water, atmosphere)	10	10	10	10	10	10	10	70



The above activities are broadly classified into :

1.Voluntary or Innocent Activities: These are these activities which an individual does rationally and voluntarily. These activities knowingly or unknowingly affects the environment. But the intention behind these activities is neither bad nor malicious. The intention is growth or satisfaction.

It makes a difference to the environment at a particular level, undoubtedly but the pollution caused is reversible and the Natural Assets can be reinstalled if we want to talk in e-language .i.e. electronic or computer language.

Since an individual fun loving, entertainment lover, kind of person, he by his fun loving nature, makes a mockery and sometimes crosses his limitations and afterwards apologizes for his doings.

These all activities are termed as Curable i.e. Reversible, Rectifiable, and Sound, unconsciously done without a bad intention and done negligently.

Where an individual throws color in the Air and enjoys the festival of colors, the color may go into others eyes.

These activities are undoubtedly constructive but somewhere or the other he will have to pay a price for exploring the environment.

2.Irrational or Deliberate Activities: These kind of are those activities are which an individual does to prove his Almightiness, his strength, his power, his existence and his greed to acquire more. Here starts tug of war between the Nature and the individual.



ISSN: 0970-2555

Volume : 52, Issue 2, No. 1, February : 2023

Where on one side of the rope the Human Being is holding and the other side he deliberately give to the Nature. This game of "Death" is being participated by the Human Being voluntarily but the Nature is being dragged into. Nature never wanted to participate in such Life threatening game, however the Individual deliberately, induces the Nature to participate. It's like playing with a deadly "sword" and that too with your own Mother?

The Irrecoverable activities by an individual, makes him stand against his own Mother Nature. The Nature which has supported him to be born, grow and survive is now helpless, is retaliating against him. Whoever wins the war between the mother and the son, ultimately the mother only is wounded and defeated.

But one thing to be noticed here is, the war starts only when one person challenges the other. Here an individual because of his reckless behavior challenges Mother Nature and she is bound to retaliate. The Roar of the Mother Nature takes in its Trap , innocent kids also along with the mischievous ones."

This problem of sustainability which may be solvable with the principles of VUCA the individual's power to tackle those tough problems while they are still doable. This concept can further be explained with help of Contribution and Contamination Account similar like Income and Expenditure Account and also by drawing a Green Balance sheet connecting an individual with the environment which is cakculated in Green points of *Harrit Aank*

Particulars	Carbon	dioxide	Particulars	Oxygen O ₂
<u>To Soil पृथ्वी</u> Use : xx Waste: <u>xx</u>	CO ₂		By Soil Irrigated or erosion saved e.g. value of soil per kg	XXX
<u>To Water जेल</u> Use xx Waste: <u>xx</u>	XXX		By Water conserved or saved during the year e.g. value of water per gallon	XXX
<u>To Air वायु</u> Use : xx Waste: <u>xx</u>	XXX		By Air pollution controlled or contributed to fresh air by saving trees e.g. value of oxygen cylinder	XXX
<u>To Fire अग्नि</u> Use : xx Waste: <u>xx</u>	XXX		By Energy generated Or conserved e.g. value of electricity per unit	XXX
To Space or Atmosphere आকাহা Use: xx Waste: <u>xx</u>	XXX		By Trees planted (Nos.) x age of the tree x value per year e.g. Rs. 75,000 per year per tree	XXX
To Addition to environmental capital(if any) Total	XXX		By Loss to Environmental Capital (if any) Total	

Contribution an	d Contamination	A/c for the life	e span ended

Further an individual's Green Balance sheet if drawn connected with environment will look something like shown below

Green Balance Sheet of Mr. as on.....

Green liabilities	Green	Green Assets	Green
			Point O ₂
	Point		Rs.



ISSN: 0970-2555

Volume : 52, Issue 2, No. 1, February : 2023

	CO ₂ Rs.		
Addition to Environmental	XXX	Trees planted or	Xxx
capital X		Natural Assets saved	
<u>Soil पृथ्वी</u>		Investment in environment protection	XXX
Use ie irrigated: xx		fund (if any)	
Waste: ie Erosion xx	XXX	Amount Spent for	XXX
		Soil Irrigated or erosion saved	
<u>Water जल</u>			
Use xx		e.g. value of soil per kg	XXX
Waste: xx	XXX		
		Water conserved or saved	XXX
Air वायु		during the year e.g. value	XXX
Use: xx		of water per gallon	
Waste: $\underline{x}\underline{x}$			XXX
<u></u>	XXX	Air pollution controlled or contributed to	
Fire अग्नि		fresh air	
Use: xx		by saving trees	
Waste: xx		e.g. value of oxygen cylinder	
	XXX		
Space or Atmosphere		Energy generated Or conserved	
<u> জাকা</u> (in the form of noise			
pollution)		e.g. value of electricity per unit	
Use: xx			
Waste: xx		Trees planted (Nos.) x age of the tree x	
Waste. <u>AA</u>		value per year e.g. Rs. 75,000 per year per	
		tree	
		Loss to Environmental Carital	
		Loss to Environmental Capital (if any)	
	XXX	Total	Xxx

Green Balance Sheet of Mr. as on.....

Green liabilities	Green	Green Assets	Green
			Point O ₂
	Point		Rs.
	CO_2 Rs.		
Addition to	XXX	Trees planted or	Xxx
Environmental capital		Natural Assets	
Contamination emitting		Investment in environment	XXX
CO ₂ in (foot prints) by		protection fund (if any)	
polluting or using		Amount Spent for	
Soil xx		Soil Irrigation xx	XXX
Water xx		Water Conservation xx	
Air xx		Air Pollution Control xx	
Fire xx		Energy Conservation xx	
Atmosphere <u>xx</u>		Others(if any) \underline{xx}	

UGC CARE Group-1, Sr. No.-155 (Sciences)



ISSN: 0970-2555

Volume : 52, Issue 2, No. 1, February : 2023

	XXX		
Total	XXX	Total	Xxx
I at the method is a second		41	41

Let there be peace in the heavens the earth, the atmosphere, the water the herbs, the vegetation, among the divine beings and in Brahman, the absolute reality. Let everything be at peace and in peace. Only then will be find peace". *Atharava Veda*

4.References

- 1. www.indiatimes.com/life-style/vedic-perspective-environment/articleshow/4613346.coms
- 2. www.timesofindia.indiatimes.com/life-style/redic-perspective-onenvironment/articles K.N. Sharma/June 30, 2009, 08:00 AM IST
- 3. Indiatimes.com/life-style/vedic-perspective-on-environment/articleshow/4613346.coms
- 4. Indiatimes.com/life-style/vedic-perspective-on-environment/articleshow/4613346.coms
- 5. http://www.greenfaith.org/religious_teaching/hindu_statements_on_the_environment Hindu Statement on the Environment:
- 6. N. Das Gupta Environmental Accounting, S. Chand & Company 2005 New Delhi 2005 p. 1
- 7. Development, U. N. (June, 2012). *the future we want*. Rio de Janeiro, , Brazil: The Indian Astrobiology Research Centre(IARC).
- 8. www.nationalgeographic.com/earthpulse/ecosystem_and_conservation.html
- 9. Earth will not remain habitable for long, time to find another planet, says new research.: By Sebastian Anthony an September 20, 2013
- 10. An Introduction, Edited by S. Vijay Laxkshmi Aparns Bellur, Icfai Books The Icfai University Press, Environmental Accounting By Prodeepta Kumar Samanta and Ashok Kumar Mohanty
- 11. Green Accounting and Sustainability: Past, Present and Future
- 12. By Jenni Gandhi LEED IEQ 3.2 Test Meter www.wolfsence.com
- 13. Fanger, O.P.: Introduction of the olf and the Decibal units to Quantify Air Pollution Perceived by Human Indoors. In: Energy and Buildings. 12, 1988, 1-6. 14What is noise pollution and why it is considered a source of pollution?
- 14. http://www.teachengineering.org/view_activity.php
- 15. www.humansandnature.org/humans_nature_the_right_relationship_article_38.php By Peter G Grown & Geoffrey Garver
- 16. www.sustainablebadystep
- 17. www.en.on.wikipedia.org/wiki/Decipol
- 18. www.en.m.wikipedia.org/wiki/radioactive_contamination
- 19. Calculate y. (2012, september). to Going Green Fast Track, 07 (09), pp. 19-21.
- 20. Choudhary Arup (2008) Environmental Accounting Concepts and Practices the ICFAI University Press.
- 21. Parikh, K.S. and Parikh J. (1997) Accounting and Valuation of Environment: Volume I: A premier for developing countries, Volume II: Case studies from the ESCAP Region, United Nations, New York.
- 22. Haripriya, G. S. (1998) Forest resource accounting for the state of Maharashtra in India, Development Policy Review
- 23. Haripriya, G. S. (2001) "Accounting for the forest Resources into the System of National Accounts in India" Environmental and Development Economics.
- 24. Atkinson and Gundimeda (2004)
- 25. S. Vijayalaxmi, Aparna Bellur. *Environmental accounting, Importance of Green accounting*. Hyderabad: The Icfai uiversity press.
- 26. J K Nandi (2008). Environmental Accounting. S. Vijaylakshmi and Aparna Bellur (Eds.) Environmental Accounting: *An Introduction*. Hyderabad, India : Icfai University Press, 2008. pp 3-11.
- 27. Mohanty, A. K. (2008). Environmental Accounting as a Management Tool. S. Vijaylakshmi and Aparna Bellur (Eds.) Environmental Accounting: *An Introduction*. Hyderabad, India : Icfai University Press, 2008. pp 12-26.
- 28. Dutta, B. (2008). Corporate Responsibility to Society with Special Reference to Environmental Protection- A Legal Perspective. S. Vijaylakshmi and Aparna Bellur (Eds.) Environmental Accounting: *An Introduction.* Hyderabad, India : Icfai University Press, 2008. pp 27-36.





Report of Valedictory Function of International Conference on Science Technology Engineering & Mathematics for Sustainable Development (ICSTEMSD 2023)

Valedictory Session of International Conference on Science Technology Engineering & Mathematics for Sustainable Development (ICSTEMSD 2023) was organized on February 17, 2023 from 2:00 PM to 3:30 PM.

Report of Rapporteur was presented by Prof. Prajakta Borole and Prof. Prajakta Pawar. Concluding speech was given by Principal ACE Dr. Shrikant Kallurkar. Vote of Thanks was given by Conference Chair Dr. Ritu Sharma. Valedictory function ended with prize distribution to the winners of poster and paper presentations.

I Prize Topic: Design and Implementation of Cyber Tipoff System S.no Name of student Year Name of college 1. Aniket 2023 Rajiv Gandhi Institute of Technology 2. Yogita 3. Divyanka 4. Shubham **II Prize** Topic:Cluster Decay of even-odd and odd-odd super heavy nuclei Name of student Name of college S.no Year 1. Bhagyashree Gaikwad 2023 Atharva College of Engineering

Paper Winners:





	Ι	II Prize		
Topic: Importance of Sustainability in the VUCA world for Generation next				
S.no	Name of student	Year	Name of college	
1.	Dr.Sudhir Purohit		Atharva Institute of Management Studies	

Poster Winners:

		Prize		
S.ne		Topic:		
1.	Name of student	Prear L.	Name of college	
2	Pranax Namdeo Adate	TE		
3.	Karan Mahindra Mhatre	EXTC	Smart Irrigation System	
4.	AKShay Naresh Natuskan		ACE	
	Buyay Navneet Tawde			
		I Prize		
5.00		Topic:		
	Name of student	Year &	TOPLC -	
1.	Mand Grufmond Hamidul Haque		Wave functions	
2.	Yash Rajesh Amberkan	CMPN		
З.	Mishra	Crapie	Story of Everything	
4.	Hamidul Haque		ACE	
	1	II Prize		
		Topic		
5.no	Name of student	Year&	Topic Name of college	
1.	Tilottama Ingale	SE	NanoTechnology in	
2	Mansi Derda		Display 2 Communication -	
з.	Deepansh Londhe	EXTE		
4.	Ayan Jadhay		ACE	





Glimpses of the Valedictory session of the conference:

