PROCEEDINGS OF THE DISTRICT EDUCATIONAL OFFICER (FAC), S.P.S.R. NELLORE DISTRICT.

Present: Smt. N. Usha, B.Com.,B.Ed.,

Rc.No. 3312/D3/2014. Dated 17-09-2014.

SUB: APCOST - 22nd NCSC. 2014 - State Level Training Programme to Science Teachers - Conducting of CSC - 2014 - Revised Permission Orders - Regarding.

REF: 1.Lr. dt. 19-08-2014 of the District Co-ordinator, NCSC, SPSR Nellore Dist.
2.Lr. dt. 09-09-2014 of the District Co-ordinator, NCSC, SPSR Nellore Dist.

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ORDER:

In pursuance of the ref. cited, permission is hereby accorded to conduct one day training programme as per schedule requested in the reference cited and also permit to conduct Scientific Project Competitions - 2014 on 30-10-2014 at C.A.M. High School, Mulapet, Nellore and also putup information about the programme captioned "understanding weather and climate change" in District Educational Officer's website.

In this regard all Govt.. Private, Aided, Municipal, Model, Gurukukla, Kasturibha High Schools are requested to depute one science teacher for the above said training programme as schedule shown below:

S.No.	Date	Place	Division	Resource Person
1	22-09-2014 at 09:30 AM	CAM High School, Mulapet, Nellore	Nellore	1. J.V. Ramesh, D.C. 2. B. Madhukar, DAC 3. Ch. Murali Kesava Kumar, R.P.
2	23-09-2014 at 09:30AM	L.K.R.V.B. High School, Kavali	Kavali	1. J.V. Ramesh, D.C. 2. B. Madhukar, DAC 3. Ch. Murali Kesava Kumar, R.P.
3	24-09-2014 at 09:30AM	Z.P. Boys High School, Gudur	Gudur	1. J.V. Ramesh, D.C. 2. B. Madhukar, DAC 3. Ch. Murali Kesava Kumar, R.P.

Further the concern teachers are requested to report before the District Co-ordinator, NCSC, SPSR Nellore District on the above said venues for the training programme.

Sd/- N. Usha,
District Educational Officer(FAC),
S.P.S.R. Nellore District.

// ATTESTED //

ASSISTANT DIRECTOR

To
Sri J.V. Ramesh, Dstrict Co-ordinator, NCSC-2014, Nellore.
Copy to Deputy Educational Officers and Mandal Educational Officers in the District for information and necessary action.

FORM - A

REGISTRATION FORM

22nd NATIONAL CHILDREN'S SCIENCE CONGRESS - 2014

(22nd NCSC-2014)

District: **State:**

Passport size photo of Group Leader

Particulars of Group Leader

1. **Name:**

2. **Date of Birth:**

3. **Age :**

Lower	Upper

Lower category - Date of birth on or between 31-12-2000 & 31-12-2004
Upper category - Date of birth on or between 30-12-2000 & 31-12-1997

4. **Class/ Std :**

5. **Residential Address**

Name	
Complete Address	
Mobile / Phone Number with STD Code (if any)	

6. **Sex : Male / Female**

7. **Area : Rural/Urban**

8. **Name and Address of School/Institution/Science Club/Others:**

Name	
Complete Address	
Mobile / Phone Number with STD code	

9. **Title of the Project :**

10. **Sub-theme Name :** **Sub-theme code :**

11. **Language used:**

(Sub theme codes : 1. Weather Around You. 2. Impact of Human Activities on Weather and Climate. 3. Weather, Climate and Ecosystems. 4. Weather, Climate-Society and Culture. 5. Weather, Climate and Agriculture. 6. Weather, Climate and Health)

12. Particulars of the Group Members:

S. No.	Name	Address with Pin code	Sex		Area		Class/ Std	Date of Birth	Age Lower / Upper
			M	F	R	U			
1									
2									
3									
4									

13. Name, Designation and Address of the Guide :

Name	
Designation	
Complete Address of the Guide	
Mobile / Phone Number with STD code	

14. Name, Designation and Address of the Head Master/ Head Mistress/ Principal of the school :

Name	
Designation	
Complete Address with pin code	
Mobile / Phone Number with STD code	
E-mail Id	

Signature of Group Leader
Name :

Signature of Guide
Name :

Signature of the Head of Institution

Name :

Signature of District Coordinator & Stamp

N.B.: ***A copy of this Completed Registration Form must be enclosed with the Project Report.***

22nd National Children's Science Congress-2014

Focal Theme:

Understanding Weather & Climate

Sub Theme 1 : Understanding Weather around you.

Sub Theme 2 : Human Impacts on Weather and climate.

Sub Theme 3: Weather, Climate and Ecosystems.

Sub Theme 4: Weather, Climate, Society & Culture.

Sub Theme 5: Weather, Climate and Agriculture.

Sub Theme 6: Weather, Climate and Health.

SUGGESTED PROJECT IDEAS

Sub Theme 1 : Understanding Weather around you.

1. Making calendar-onset of major events such as monsoons.
2. Making a Rain Guage; Human hair Hygrometer.
3. Measuring wind speed and direction.
4. Measuring maximum, minimum and average temperature in a particular period.
5. Correlate on temperature and electricity bills.
6. Rain and flower prices; seasons and illnesses; rain and mosquitoes.
7. Ants and prediction of Rain.
8. Monitoring weather through mini weather station.
9. Assessment of Air quality.
10. Wind mapping.

Sub Theme 2 : Human Impacts on Weather and climate.

1. Loss of forest/wilderness areas in the locality.
2. Loss of water bodies with time.
3. Changes in cropping pattern in the locality.
4. Loss of mangrove forest in coastal area and possible impact in terms of coastal erosion.
5. The effect of mangrove loss on the impact of cyclone in the coastal area.
6. Food wastage and carbon foot print.
7. Lifestyle and carbon foot print.
8. Aforestation and carbon foot print.
9. Use of fuel in industry and impact on weather and climate.
10. Artificial fish culture, fertilizing water and GHG emission.
11. Use of biowaste as compost and reduction in carbon foot print.
12. Replacement of non biodegradable plates, cups etc with bio degradable to reduce carbon foot print.

13.Use of bicycle in the place of motor vehicle and reduction in carbon foot print.

14.Energy saving devises to reduce GHG emission.

15.Use of natural light in place of artificial light.

16.Observation of thunder storm and assessing its impact on human activity.

17.Hazard damage mapping.

18.Urbanisation-Traffic pollution.

19.Environmental impact of thermal power plants.

Sub Theme 3: Weather, Climate and Ecosystems.

1.Effect of the pattern of weather parameters such as Rain,Temperature,Wind and Humidity on abundance of various Insects.

2.Changes of Behaviour of insects with respect to weather parameters.

3.Relationship between Dragon fly population changes and rainfall.

4.Relationship between movement of social insects and weather parameters.

5.Behaviour of birds in relation to weather parameters.

6.Behaviour and movement of spider in relation to the weather parameters.

7.Abundance and breeding of frogs in relation to the weather parameters.

8.Variation in weather and climate Vs presence and absence/abundance of plants such as weeds.

9.Behaviour of domestic animals in relation to the weather parameters.

10.Seasonality of occurrence of plants.

11.Weather pattern and flowering of plants.

12.Soil organisms and weather pattern.

13.Fish migration and weather pattern/tide pattern.

14.Fish catch and weather pattern.

15.Seasonality in fish catch.

16.Seasonality of behavior of costal animals/tide pattern.

17.Weather parameters and abundance of mushrooms.

18.Variable weather conditions can affect quality of air, water and soil. Some of the changes are measurable such as measuring pH amount of dissolved salts in water, organic matter in soil etc.

19.Quality of air in terms of air pollutants such as Carbon dioxide, methane, NO_X content in different seasons

20.Soil pH in different places/ different time.

21.Water pH in different places/ different time / rain water

22.Determination of dissolved minerals in different water samples in your locality

23.Comparing water quality before and after rain

24.Determination of organic matter present in soil in different periods of time.

25.Weather and soil erosion

26.Effect of light period, light intensity, atm. temperature, humidity and soil moisture on growth of plants

27.Stomatal count for as surrogate for the production of Oxygen – comparison of different plants

28.Calculation of Carbon sequestration in different urban and rural gardens

29.Relation between Wind pattern and seed production in wind dispersed seeds.

30.Relation between wind pattern and flowering of anemophilic plants.

31.Breeding of different species or amphibians in monsoon pools and puddles.

32.Breeding and dragon files and damselflies in mansoon pools and puddles.

33.Change the reproductive strategies in mangrove plants an effect of climate change.

34.Is burning an acceptable solution to waste management.

Sub Theme – 4
Weather, Climate – Society and Culture

- **Study the relationship between traditional/indigenous pest management practices and weather condition;**
- **Study the practices of traditional land use and land cover management and impact on weather and climate;**
- **Assess the impact of traditional water harvesting and management practices (like Johad, Vap, Kul, Longsor,Dong, etc) in developing sustainability of water resources in climate stress period and developing resilience system;**
- **Study the traditional practices of animal rearing and their health management, their relationship with weather condition and seasonality; identify components of adaptation and resilience;**
- **Study cultural priority on selection of food crop for cultivation in the locality and its relationship with local weather and climate induced disaster;**
- **Study on the efficiency of traditional utensil used for cooking and their contribution in reduction of energy and carbon emission;**
- **Comparative study of distribution of rainy days against month in traditional calendar system and English calendar system and find out the reliability aspects for agricultural planning;**
- **Study on fuel wood based cremation practices, assessment of carbon emission and developing alternative system for cremation;**
- **Assessment of energy requirement in traditional cooking and modern way of cooking, identify carbon emission factors and impact on weather and climate;**
- **Study on the alternative food sources of different cultural groups in disaster prone situation (like flood, drought, etc) and assessing its potentiality for building resilience and adaptation to climate change;**
- **Assess the energy consumption and pollution of air, water, noise during festival (like Diwali, Pongal, Magh Bihu, Durga Puja, etc) and impact on developing resilience and adaptation to climate change;**
- **Study on the traditional food storage practices among the community and its relation to weather and climate;**
- **Prepare community based culturally adaptable Disaster Management Plan with proper assessment of risk and vulnerability for climate induced disaster of your locality.**
- **Assessing climate resilient components in the seasonal food behavior and practices among the community of an area.**
- **Study on prediction of weather through phonology of tree or insect behavior.**
- **Study on thermal comfort of traditional housing assessing in door temperature .**
- **Understanding green building.**

Sub Theme – 5
Weather Climate and Agriculture

1. **How does organic component influence different Soil Properties?**
2. **Determining maximum loading limit for copper in agricultural land**

3. Evaluating filtration capacity of soil
4. Influence of vegetation cover on microclimate
5. Influence of mulch on soil physical properties
6. Study of the influence of tillage on soil physical properties
7. Effect of land use options on erosion loss of surface soil
8. Influence of tillage on ground water recharge from rice field.
9. Impact of saline water on soil properties like pH etc.
10. Germination of crop in soil with varying salinity level
11. Organic matter addition and crop growth
12. How pollutants affect soil biota?
13. The Impact of deposition of suspended particles on photosynthesis
14. Study of the seasonal variation weather parameters and its association with local agricultural practices.
15. Damage estimation of crops due to frost effects.
16. Economic analysis of climate change on agriculture
17. Study on traditional calendar system agricultural cycle and weather conditions.
18. Potential additional soil water loss due to climate
19. Study of impact of weather condition an animal change.
20. Conservation agriculture for sustainable use
21. Mitigate soil and water loss through sum off with suitable control measures.
22. Field study – monitoring micro climate of different land use systems. Crop land / Barren Land / Forest Land
23. Effect of weather an soil fauna
24. To study the impact of climate on sacred grave.

Sub Theme – 6
Weather Climate and Health

1. Mapping of weather related diseases in your locality
2. Studies on prevalence of vector-borne diseases (malaria / dengue)
3. Occurrence of communicable diseases due to extreme weather conditions
4. Effect of temperature and humidity changes on incidences of skin diseases
5. Impact of weather on production and/or health of animals
6. Effect of extreme weather on the health of women and children
7. Effect of summer, winter and monsoon on incidence of respiratory diseases
8. Effect of heat on the health of farmers / industrial workers in your area
9. Studies on weather patterns and income loss of workers with daily wages
10. Studies on air-borne infections during variable weather conditions.
11. Mapping of weather related disease patterns in your locality
12. Incidences of sunstroke in you locality
13. Prevalence of dengue fever in your locality is it weather related.

Chairman,NCSC-2014

District Educational Officer

SPSR NELLORE