

Sub : Quotations for Modification and Replication/Duplication of Activity kits on Biodiversity and Weather.

Sealed quotations are invited from the reputed vendors/firms or specialized agencies for modification and replication work of two Activity kits produced by Vigyan Prasar in prescribed format as per attached specification. You are requested to send technical and Commercial bid in separate envelope and both should be put up in a another sealed envelope and clearly marked on the cover of envelope Technical bid/ commercial bid , enquiry No. , date of opening. Sealed envelope should reach to Vigyan Prasar latest by dated 13 Feb 2012 up to 12:00 P.M. Technical bid will be opened on same day at 3:30 P.M and commercial/price bid of qualified vender will be opened on 15 Feb 2012. If technical and commercial bid not submitted separately, the same (Bid) will not be considered.

Specifications and Scope of Work

1. Number of kit to be developed (Weather+ Biodiversity)	:	10,000 (H) + 10,000 (E)
2. Specifications (Input)	:	Annexure I
3. FOR	:	Vigyan Prasar,A-50,Sector-62, NOIDA
4. Estimated Cost	:	Rs. 25 Lakhs

Note

- a) An agency can submit more than one technical bid along with the prototypes for each kit with different design and material duly numbered and price bid also to be numbered respectively.
- b) Along with each technical bid, submission of prototype of each kit is mandatory.
- c) **All the interested parties can collect a hard copy of each existing kits as sample**
- d) All the participants are required to make a presentation before the technical committee on the content and material of the kits.

Other terms and conditions of the tender:

1. All the kits must have to be developed as per attached Specifications.
2. Place of Delivery : FOR: Vigyan Prasar,A-50,Institutional Area, Sector-62,Noida-201309
3. Delivery Period : 15 Days from the date of PO

4. Validity period : 45 days from the date of opening of bid .
5. All bidders can be present at the time of opening the tender. No. separate intimation shall be given in this regard.
6. The opening of the tenders shall only be attended by an authorized representative of the firm whose name, designation and address should be indicated in the offer of the firm. Tendering firm shall issue a letter of authority to such representative indicating the tender no. date due on for the item. In no case un-authorized person shall be allowed to enter tender opening room.
7. **Payment** : 100% payment will be released after inspection and acceptance of item.
8. **Insurance** : Transit insurance covering all risk for all the items is to be arranged by the renderer/supplier.
10. **Special Cause** : **Any or All the tender can** be rejected by the order of the Director, Vigyan Prasar , Noida without assigning any reason whatsoever.
11. Prices should be quoted on F.O.R. VP, A-50,Institutional Area,Sector-62,Noida-201309 basis only.
12. Sealed tender should reach "Director, Vigyan Prasar,A-50,Sector -62,Noida-201309" by stipulated date. Tender received after due date and time by whatsoever reason will not be accepted at all.
13. Quantity mentioned are tentative and VP may change the quantity at time of issue of PO.

14. Penalty for Delayed Services

Penalty / Liquidated Damages shall be charged @0.5% of the contract value per day subject to maximum of 10% of total order value, in case of delay beyond the stipulated time period as given in Clause 3 above. In case of unavoidable reasons ,extension may be granted on request of vender subject to discretion of director VP.

15. **The bid should be accompanied with an EMD in the form of DD, drawn in favour of Director, Vigyan Prasar, which should be 5 % of the total value of the bid. The EMD of selected bidder(s) will be kept as security deposit till completion of the work and the rest will be released within 45 days from the date of opening of the bids.**

In case any deviation from the general terms and condition the bid is liable to be rejected.

16. Material must be properly packed against any damage and insured up to the destination. The material should be directly dispatched to SITE i.e. Vigyan Prasar, A-50, Institutional Area, Sector-62, Noida. All the expenses involved in delivering, unloading, loading, etc. the equipment at our site, shall be borne by the Bidder. All aspects of safe delivery shall be the exclusive responsibility of the Bidder. Vigyan Prasar will have the right to reject the material supplied, if it does not comply with the specifications.

Note: Please quote the tender no. and opening date on the top of the cover containing tenders.

Annexure-I

Biodiversity Kit:-

Modification/correction need to be included in the kits activity wise

Activity No	Title	Modification/correction/addition to be done
1	Activity 1: Genetic Diversity	<ul style="list-style-type: none">- Meanings of tough words may be explained by simplifying content.- Give clear instructions- Indianise the activity in terms of illustrations(like Common/ prominent differences – in context of India - e.g, ear lobes-
2	Activity 2: Species diversity (Observe the Seed Growth) -	<ul style="list-style-type: none">- The most common used names of Plants may be used.- Correlate Germination % with the question – “Why some seeds have better rate of Seed germination?”
3	Activity 3: Leaf book -	<ul style="list-style-type: none">- No Change
4	Activity 4: Leaf Art -	<ul style="list-style-type: none">- Illustrations in Indian context (girl and boy cartoon)- Elaborate steps of leaf printing methods by pictorial description
5	Activity 5: Tree Around	<ul style="list-style-type: none">- Describe by labeling illustration – what is canopy, trunk etc- Illustration of canopy shapes with names and types- Describe canopy shape on last page Explain bark print procedure
6	Activity 6:Recognise beaks and their functions	<ul style="list-style-type: none">- Description in one or two lines of filter feeding, grasping etc emphasizing usefulness of beak.
7	Activity 7: Recognise feet and their function	<ul style="list-style-type: none">- Description in one or two lines of filter feeding, grasping etc emphasizing usefulness of beak.
8	Activity 8: Do Different types of birds make same type of nests.	<ul style="list-style-type: none">- Redesigning to expand the scope of activity by adding<ul style="list-style-type: none">o nest heights – e.g. on ground, in shrubs, in treeso Materials used – leaves, straws, mud,

		<p>etc</p> <ul style="list-style-type: none"> o Types–tree cavity, mud etc
9	Activity 9: What is the difference in the eggs laid by different species of birds?	No Change
10	Activity 10: Look alike species	Some elaboration :- Why species look alike
11	Activity 11: Cut, fold and create insect	<ul style="list-style-type: none"> - 4th Para typo error - Reproduction - Bigger figures – helpful for children -
12	Activity 12: Find out camouflaged insects	<ul style="list-style-type: none"> - 2nd Para typo error – appendages - Deal camouflage and facts on insects separately adding more camouflaging animals picture
13	Activity 13: Life cycle of Butterfly	<ul style="list-style-type: none"> - Perforations difficult to cut - Difficult to make - - Poor paper quality - Factual info – <ul style="list-style-type: none"> o no. of days for each stage o Pest dealing – depending upon life stage - Confusing instructions!! - Change the format of the activity
14	Activity 14: Life cycle of Frog	<ul style="list-style-type: none"> - Do-
15	Activity 15: Looking at Pugmarks	<ul style="list-style-type: none"> - Common pugmarks - Uncommon/wild as supplement
16	Activity 16: Crating Shadows shapes	<ul style="list-style-type: none"> - Alignment of text in shadows (some are in right bottom corner, one in left bottom corner)
17	Activity 17: Spot the error	<p>: Alpha diversity</p> <ul style="list-style-type: none"> - Definitions of last page with example and appropriate illustrations - Error - Community def – Plural - ‘Organisms’ - Repeated text – Habitat def in 3rd para - Definitions with illustrations - Describe alpha only here <p>(Add one more activity for Beta diversity between 17 and 18th activity)</p>

18	Activity 18: Diversity of Ecosystems: Gamma Diversity	<ul style="list-style-type: none"> - Gamma diversity - Describe – Alpha, beta and Gamma with examples and illustration - Change Mahagony to Mango or other Indian species. -
19	Activity 19 : Food Chain	<ul style="list-style-type: none"> - Convert into Jigsaw puzzle format - Poor perforations - Linking arrow - Combined Rat confusing position in food chain
20	Activity 20: Food Web	<ul style="list-style-type: none"> - Convert into Jigsaw puzzle format - Poor perforations
21	Activity 21: Interdependence	<ul style="list-style-type: none"> - Operational problem – put two holes - Snake and cat comes to dead end - Elastic instead of thread so if one cuts it collapses -
22	Activity 22: Pyramid of Energy	<p>Activity 22, 23 and 24</p> <ul style="list-style-type: none"> - ‘Apply gum here’ instruction - Eagle picture unclear - Illustrations not appearing commonly in text books - Example replace cow , tiger lion - 24, pose questions than giving facts - Simplify language. -
23	Activity 23: Pyramid of Energy	<p>Activity 22, 23 and 24</p> <ul style="list-style-type: none"> - ‘Apply gum here’ instruction - Eagle picture unclear - Illustrations not appearing commonly in text books - Example replace cow , tiger lion - 24, pose questions than

		<ul style="list-style-type: none"> - giving facts - Simplify language. -
24	Activity 24: Pyramid of Energy	<ul style="list-style-type: none"> - Activity 22, 23 and 24 - 'Apply gum here' instruction - Eagle picture unclear - Illustrations not appearing commonly in text books - Example replace cow , tiger lion - 24, pose questions than giving facts - Simplify language. -
25	Activity 25: Make your own ecosphere	<ul style="list-style-type: none"> - Activity 25 - Typo mistakes – How to make mini eco system -
26	Activity 26: The major ecosystem I	<ul style="list-style-type: none"> - No Change -
27	Activity 27: Making Natural dyes	<ul style="list-style-type: none"> - Give examples of commercial dyeing method with pictures of pattern - Showing practical/professional application -
28	Activity 28: Leaf Skeleton	<ul style="list-style-type: none"> - Discuss diff types of venation - Monocot – dicot - Pictures of cards and other articles made out of dry leaves -
29	Activity 29: Architects of Nature	<ul style="list-style-type: none"> - Large picture of leaves – small ones difficult to stitch - Along with nest some more 'accessories' - Give more pictorial examples of Architects of nature –red ants, honey bee -

30	Activity 30 :Biodiversity as a source of Food and Income	- Visual info as a small booklet of lesser known biodiversity – Pictorial info -
31	Micro Biodiversity	Activity (Moulds on bread)
32	Fungi	Activity :- collection of Mushrooms ---posing some questions like why some mushrooms are poisonous
33	Algae	Activity Sheet:- Facts, Algae pigments-sea weeds
34	Coral reef	Activity Sheets: Facts, Major coral reef sites of worlds and Major threats
35	Mangroves	Activity Sheet:- Facts and major sites of Mangroves in India
36	Wetlands	Activity: Visit to a nearby wetland with teacher/parents
37	Activity 37: Ask your elders:	No Change
38	Activity 38: Extinct-endangered sp booklet	- No Change
39	Activity 39: Write a story based on Cartoon	No Change
40	Activity 40: Write a story based on Cartoon	- What is Diclofenac, explain
41	Activity 41: Magnitude of Biodiversity	- Draw clear plants - Illustration
42	Activity 42: Gradients of Biodiversity	- Write up and worksheet does not match – Separate the two - Some common examples leading to decline of the biodiversity as moving from equator to poles - Examples trees - from sea to mountain
43	Activity 43: Species richness and evenness	- Second last Para – “a question that opens discussion” - Try to correlate with habitat
44	Quadrat-Estimating Biodiversity	Activity 44: Remove the activity - text/language – improve engineering - What to do in the activity – give clear instruction

45	Biodiversity Hotspots	<ul style="list-style-type: none"> - Separate Biodiversity hotspots and the activities - Explain rare. Biodiversity hotspots, endangered, vulnerable species - Add plants as well as , all are animals - Update the number of hotspots
46	Activity 46: Flagship species of a given Sanctuaries National parks	<ul style="list-style-type: none"> - Make it frequently reusable - Use sturdy material - Check no.s 14 to 17 now - Add Kachchh with Wild Ass - No flagship species in Maharashtra and 3 in Gujarat? (Balancing need to be done)
47	Activity 47: Endemic Species.	<ul style="list-style-type: none"> - Cut outs in particular shape fitting complimentary shaped gap using material to make it for multiple use
48	Activity 48 to 51:	<ul style="list-style-type: none"> - Use bigger Map of India instead of small ones in each activity - State animals and State animals, trees and flowers and birds, :-e – improve engineering to make it for multiple use - Add clear instruction what to do in the is to be done in the activity -
49	Activity 52: Jewel in the crown	Provided in elastic material

The kit also include a magnifying glass 1”, with a cut-out paper holder

2 Posters

Poster		
1.	What is Biodiversity	Add Punch lines with bigger fonts
2.	Uses of Biodiversity	Add Punch lines with bigger fonts

Technical specification of Activity kit on Biodiversity Kit as per the prototype to be developed

1. Activity sheet of size 5.5" X 5.5" on 100 gsm card paper with 4 colours printing, 21 in number (as per sample given activity number are, 2,3,5,6,7,8,9, 12,15,16,17,27,28,29, 31,32,33,34,35)
2. Activity sheet of size 5.5" X 11" on 100 gsm card paper with 4 colours printing, 16 in number (as per sample given activity number are, 1,4,10,18,19,20,24,25,26,40,39,41,42,43,44,45)
3. Activity sheet of size 8" X 8" on 100 gsm card paper with 4 colours printing 5 in number (as per sample given activity number are, 14,13,21,22,23)
4. Activity sheet of size 14" X 11.5" on 100 gsm card paper with 4 colours printing 7 in number (as per sample given activity number are 30,46,47,49,50,48,51)
5. One Booklet of ten pages size 4" X 3"
6. Jewel in the crown in elastic material
7. Poster of size 24" X 16" on 100 gsm card paper with 4 colour printing 1 numbers

Weather Kit

Modification/correction need to be included in the kits activity wise

Activity no	Title of Activity	Modification/corrections/Addition to be done
1	Earth's Atmosphere	1. - Explain the Yellow Curve on first page
2	What is air made up of ?	No Change
3	The Seasons	3. Find out Typical ball size and use same ball size in all kits. "Scale images accordingly"
4	Climates of the World	4. Reorder starting with polar equator
5	Weather of different cities	5. - Beside put pictures of observatory and instrument - Explain when in the day we typically get maximum and minimum temperature - Include Nagpur, Jodhpur, may drop one of the costal cities - Show daily variations graphs of temperature, pressure, humidity

6	Uneven Heating	No Change
7	Air circulation	No Change
8	Convection Currents in Oceans and atmosphere	No Change
9	Heat Capacity: Sand versus water	No Change
10	Whirling paper snake	No Change
11	Infrared radiation	No Change
12	Make your own Barometer	No Change
13	Picnic Experiment	No Change
14	Liquid Barometer	No Change
15	Relative Humidity	No Change
16	Hair Hygrometer	Make a mention that this technique is also used in real life
17	Moisture in the Air	No Change
18	Making Fog	No Change
19	Can you become the rain God	No Change
20	Making Clouds	No Change
21	Make your own rain gauge	Write it as hd^2/D^2 (i.e. drop X)
22	Types of clouds	Write English names in Roman Script - Add an instruction, "draw similar tables in your notebook and keep records every 15 days" - Cumulonimbus clouds replace picture To be simplified thoroughly (English as well as Hindi)
23	What is Orographic Rain	No Change
24	Today's Weather record	No Change
25	How clouds form	No Change
26	What causes Lightening ?	No Change
27	Make a windsock	No Change
28	Make your own anemometer	No Change
29	Measuring wind speed	No Change
30	Finding wind direction	No Change
31	How wind speeds affect us	Categories should be renamed as per Indian norms (see IMD)
32	Coriolis effect	This is an analogy to Coriolis force not an example, modify accordingly.
33	My Weather symbol	Drop the book completely. Too many errors overlap with

	book	activity
34	Weather symbols	No Change
35	My weather instrument book	Maintain font uniformity.
36	Satellite pictures	No Change

Poster:- No Change

Kit should also include Thermometer, Metallic Disc, Graduated Cylinder(1"x6") Straws(3), Laser Light, White powder

Design corrections:

1. Re work on the sizes of each activity sheet needs to be standardized in 3 to 4 sizes .
2. Work on the packaging need to be done

Technical specification of Activity kit on Weather Kit as per the prototype to be developed

Weather Kit Specific modification

1. Activity sheet of size 5.5" X 5.5" on 100 gsm card paper with 4 colours printing 13 in number (as per sample given activity number are, 5,6,7,9,11,17,18,19,20,23,27,30,34)
2. Activity sheet of size 9" X 5.5" on 100 gsm card paper with 4 colours printing, 8 in number . (as per sample given activity number are, 2,8,12,16,21,26,28,29)
3. Activity sheet of size 11.5" X 5.5" on 100 gsm card paper with 4 colours printing 8 in number(as per sample given activity number are, 1,13,14,22,24,25,31,32)
4. Two Booklet of ten pages size 4" X 3"
5. One Poster of size 24" X 16" on 100 gsm card paer with 4 colour printing.

CHECK LIST
Documents to be attached

1. EMD 5% of the total value of the bid .in form of DD in favour of “Vigyan Prasar” payable at New Delhi.
2. Documents in support of all necessary registration TIN,PAN,VATetc.
3. Certificate accepting all the terms and condition of the tender.
4. Tender fee Rs: 100.00 in form of DD in favor of “Vigyan Prasar” payable at New Delhi.

Yours sincerely,

(Dr TV Venkateshwaran)
Scientist-E & Registrar