CDM Training Program Final Examination

20 August 2010

Prepared by: JICA Expert Team

Name: _____

Organization: _____

Please answer the following questions by ticking (✓) or choosing the right answer(s) from the options in accordance with the instructions.

[1] Functional Background of CDM

Marks: ／9

[Q1] Please check the CORRECT description (1 answer) about greenhouse gasses (GHGs).

[ ]	There is no definition about GHGs under UNFCCC.
[ ]	There are six (6) gasses defined as GHGs under UNFCCC.
[ ]	SOx and NOx are GHGs defined under UNFCCC.
[ ]	1 ton of every GHG has the same impact on global warming.

[Q2] Please select the proper combination of words for [a] and [b].

Sri Lanka is categorized as [a] under Kyoto Protocol and can participate in CDM projects as [b] country.

[ ]	[a] Annex I party	[b] Investing
[ ]	[a] Annex I party	[b] Host
[ ]	[a] Non-annex I party	[b] Investing
[ ]	[a] Non-annex I party	[b] Host

[Q3] Please check the INCORRECT description (1 answer) about Certified Emission Reduction (CER).

[ ]	CER is emission reduction amount achieved by a CDM project activity certified by the UNFCCC.
[ ]	The unit of CER is 1 ton of CO2
[ ]	Tradable units of the CDM
[ ]	CER can be issued by Designated National Authority (DNA) of each country.

[Q4] Please select the INCORRECT description (1 answer) about Clean Development Mechanism (CDM).

[ ]	CDM is one of the flexible mechanisms under the Kyoto Protocol.
[ ]	The only mechanism under Kyoto Protocol, applicable to both Annex I & non-Annex I parties
[ ]	The reduced amount of GHGs resulting from a CDM project can be used as part of quantified emission reduction targets for Annex I parties
[ ]	Project participants can create and use a new baseline methodology without approval by CDM EB.
[ ]	CER can be dealt at market

[Q5] <A> is key organizations relevant to CDM. Please draw lines to connect "Organization" <A> and the correct description about each organization from <B>.

<A>: Organization			<B>: Description
Project Participants (PPs)	•	•	The government organization responsible for issuance of host/investment countrie's approval for proposed CDM projects.
Designated National Authority (DNA)	•	•	(a) a Party involved, and/or (b) a private and/or public entity authorized by a Party involved to participate in a CDM project activity.
Designated Operational Entity (DOE)	•	•	Independent auditors that assess whether a potential project meets all the eligibility requirements of the CDM (validation) and whether the project has achieved greenhouse gas emission reductions (verification and certification).
UNFCCC	•	•	The organization supervising the CDM, under the authority and guidance of the CMP.
CDM Executive Board (CDM EB)	•	•	A multilateral convention aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system

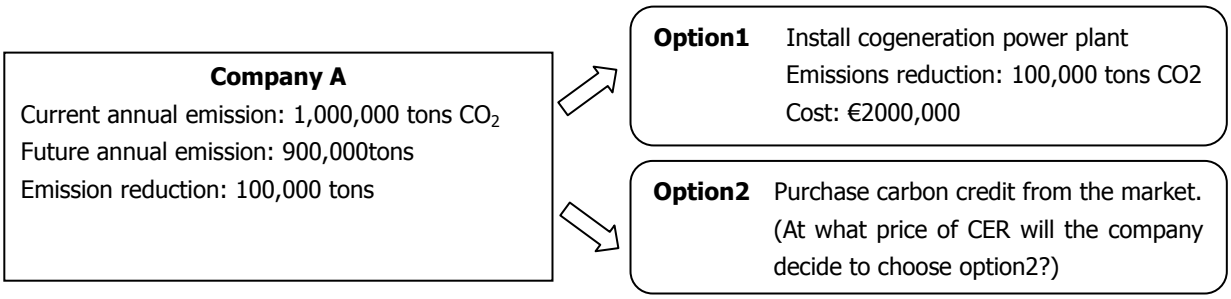
[2] Carbon Credit Market

Marks: ／3

[Q1] Please identify market based approaches (3 answers) among the GHG emissions management initiatives.

[ ]	Carbon Taxation
[ ]	Mandatory flaring of a landfill gas
[ ]	Domestic Cap and Emission Trading Scheme
[ ]	Ban manufacture of products that contain HFC
[ ]	Clean Development Mechanism Scheme

[Q2] Company A is currently emitting 1,000,000 tons of CO_2 per year from its factory. The company is legally required to reduce 100,000 tons of CO_2 emissions this year. They need to install €2,000,000 gas cogeneration power plant to meet this target, or alternatively purchase 100,000 tons CO_2 emission reduction worth of CER from the European Climate Exchange. At what price will the company decide to purchase CER from the market? Please tick the most appropriate box below:



[ ]	CER price of more than €20 per ton of CO_2e
[ ]	CER price of less than €20 per ton of CO_2e
[ ]	CER price of less than €100 per ton of CO_2e
[ ]	CER price of more than €100 per ton of CO_2e

[Q3] Please select a factor (1 answer) among the following action/events that likely increase the market price of the CER.

[ ]	Demand for CER is greater than its supply
[ ]	Global Economic Crisis
[ ]	Over allocation of EUA by the European Commission
[ ]	Global reduction in demand for manufactured goods

EUA: Carbon credits used in the European Union Emissions Trading Scheme (EU ETS).

[3] CDM Typology

Marks: ／11

[Q1] Please select the INCORRECT description (1 answer) about the Small Scale CDM.

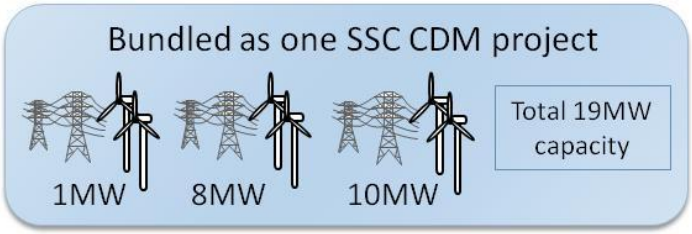
[ ]	There is a limit in size to be qualified as Small Scale CDM project
[ ]	Baseline Methodologies and monitoring plans are same as full scale projects
[ ]	Simplified PDD format is applied
[ ]	Simplified additionality establishment method is applied
[ ]	The same DOE can undertake validation, verification and certification

[Q2] Please select the project NOT ELIGIBLE for bundling.

[ ]	A
[ ]	B
[ ]	C

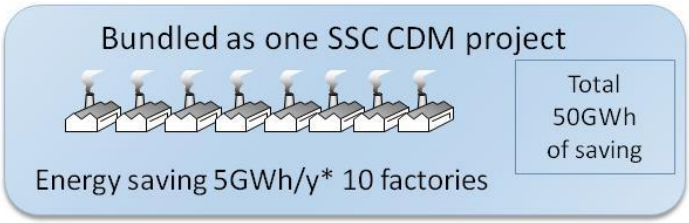
A

3 wind farm projects with total capacity 19 MW.



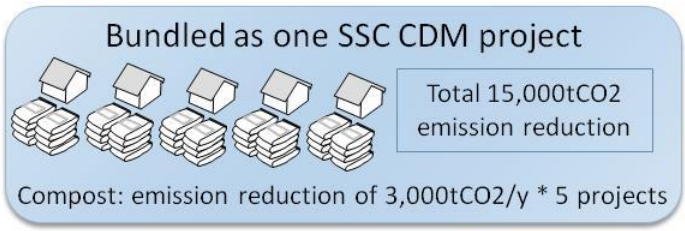
B

10 energy saving projects with total saving amount is 50 GWh /year



C

5 composting project that reduce emission 15,000 tCO2/ year in total.



[Q3] <A> are the key organizations relevant to CDM. Please draw lines to connect "Organization" <A> and correct description about the organization <B>.

<A>: Terms		<B>: Description
Program of Activity (PoA)	• •	A framework to implement programmatic CDM
CDM Project Activity (CPA)	• •	A private or public entity in charge of the followings: - communication with CDM Executive Board - coordinating of the PoA framework - management of the monitored data - Ensuring no double counting
Coordinating and Managing Entity (CME)	• •	Individual CDM projects implemented under the programmatic CDM

[Q4] Please select the INCORRECT description (1 answer) about programmatic CDM.

[ ]	Program of Activity (PoA) is applicable for the efforts to meet "mandated policy/measure"
[ ]	PoA must determine a coordinating and managing entity
[ ]	PoA can start with only one CPA
[ ]	Boundary can be beyond one country
[ ]	CPAs can be added: - at any time during PoA period (28 years for emission reduction projects) - by anybody within the PoA boundary - with no limit in number - without project registration procedures (no need individual project registration)

[Q5] Please identify 3 projects from the list below that is clearly NOT ELIGIBLE as CDM.

[ ]	a) Nuclear power plant project
[ ]	b) Carbon Capture and Storage (CCS) project
[ ]	c) Reforestation Project
[ ]	d) Small scale hydro dam project
[ ]	e) Landfill gas combustion project
[ ]	f) Waste plastic to energy project
[ ]	g) Fossil fuel to biomass fuel switch project at a waste plastic recycling centre
[ ]	h) Coal to natural gas fuel switch project

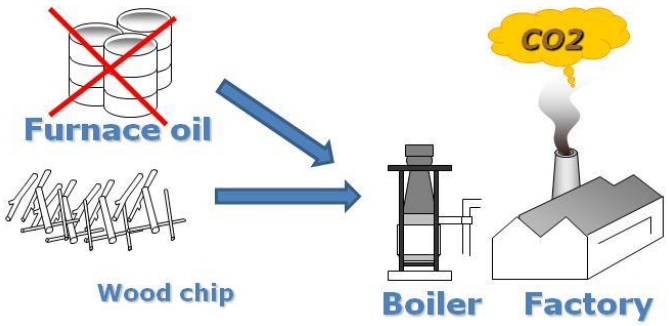
[Q6] Please match the Greenhouse gas described inside the box with the Global Warming Potential indicated in the table below:

(a)Methane (CH4)	(b) Nitrous Oxide (NO2)	(c) Carbon dioxide (CO2)

Green house gases	Global Warming Potential
[ ]	1
[ ]	21
[ ]	310
Hydro-fluorocarbons (HFCs)	150~11,700
Perfluorcarbons (PFCs)	6,500~9,200
Sulphur hexafluoride (SF6)	23,900

[Q7] The project below was rejected by CDM EB due to the fact that the source of biomass was not eligible for CDM. Please select the most suitable reason (1 answer) why the source of biomass for this project is not eligible for CDM from the list below.

Description of the project:
The project aims at fuel switch from boiler system using furnace oil into a woodchip fired steam generation system.



[ ]	Woodchips are procured from saw mills.
[ ]	Woodchips are regarded as neither carbon neutral nor sustainable biomass as they are procured from the natural forest.
[ ]	The woodchip are the residues that would have been disposed at landfill without the CDM project.
[ ]	The woodchip was procured from the mill 150km away from the project factory.

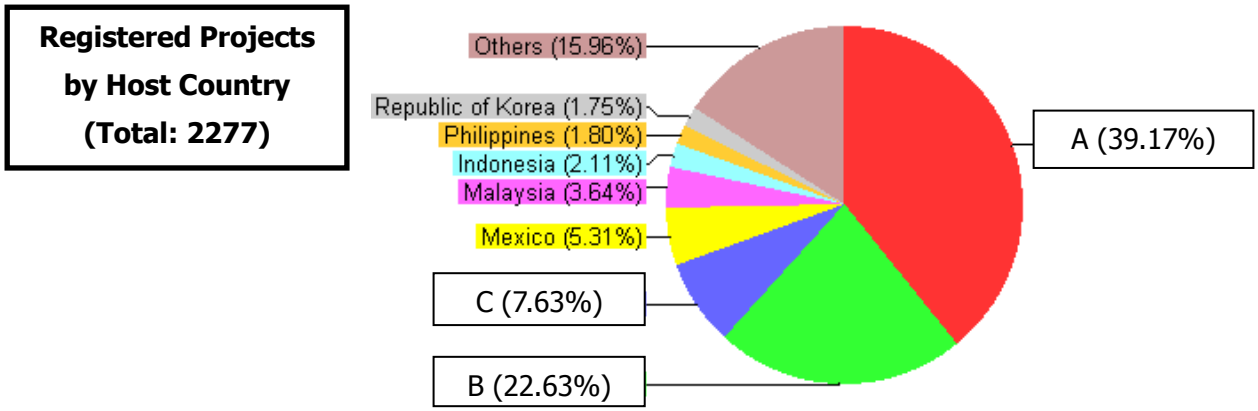
[4] Institutional Background of CDM

Marks: ／3

[Q1] Which is correct sentence in regard to ultimate objective of the United Nations Framework Convention on Climate Change (UNFCCC)? Please select the option from below sentences (1 answer).

[ ]	Reduce Greenhouse Gas (GHG) emission 5% against 1990 levels
[ ]	Achieve Sustainable Development and Greenhouse Gas (GHG) emission reduction
[ ]	Stabilization of Greenhouse Gas (GHG) concentrations in the atmosphere

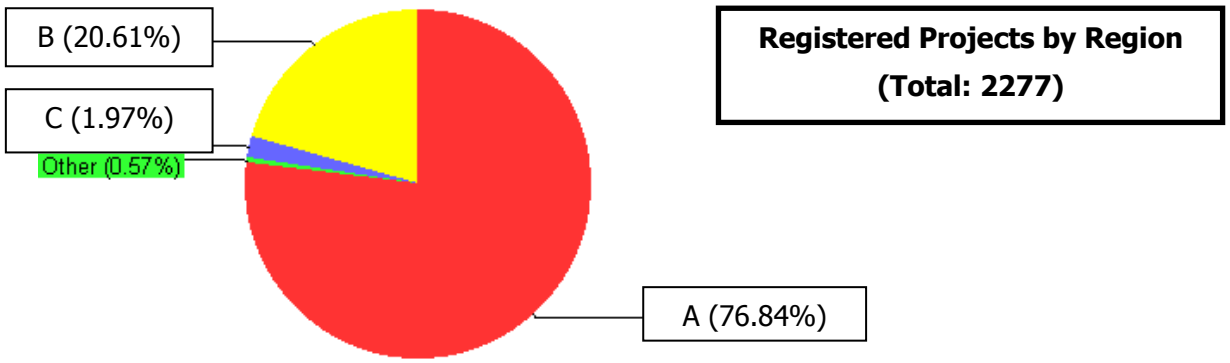
[Q2] Please fill in the appropriate country name at the following blank box.



(Above data from UNFCCC-CDM website as of 7 July 2010)

[ ]	A: India	B: Brazil	C: China
[ ]	A: Brazil	B: China	C: India
[ ]	A: China	B: India	C: Brazil

[Q3] Please select the region name at the following blank box.



(Above data from UNFCCC-CDM website as of 7 July 2010)

[ ]	A: Latin America	B: Africa	C: Asia & Pacific
[ ]	A: Asia & Pacific	B: Latin America	C: Africa
[ ]	A: Asia & Pacific	B: Africa	C: Latin America

[5] Post Kyoto

Marks: ／3

[Q1] Please select the legal status of the Copenhagen Accord from below options (1 answer).

[ ]	International treaty/protocol
[ ]	COP decision
[ ]	No legal binding document

[Q2] Which COP/CMP meeting decides the negotiation schedule of post first commitment period of Kyoto Protocol? Please select the option from below (1 answer).

[ ]	COP12/CMP2 (2006, at Nairobi, Kenya)
[ ]	COP13/CMP3 (2007, at Bali, Indonesia)
[ ]	COP14/CMP4 (2008, at Poznan, Poland)

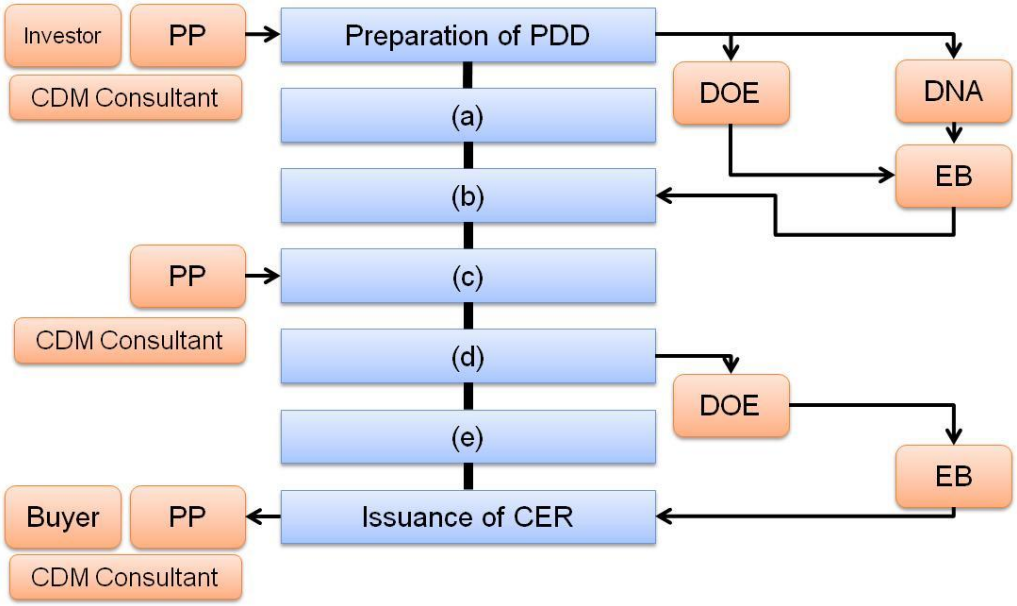
[Q3] Did Government of Sri Lanka submit their voluntary mitigation actions based on the Copenhagen Accord yet?

[ ]	Yes
[ ]	No

[6] Stepwise Consideration of CDM

Marks: ／12

[Q1] Fill out the diagram of CDM project flow by choosing appropriate activities listed in a box. *(3 points)*



(a)	(b)	(c)	(d)	(e)

① Verification	② Monitoring
③ Validation	④ Certification
⑤ Rejection	⑥ Registration

[Q2] Match Greenhouse Gas accounting principles and explanations.

Principles	Answer
Relevance	[ ]
Completeness	[ ]
Consistency	[ ]
Transparency	[ ]
Accuracy	[ ]

Explanations of Principles
1) Use data, methods, criteria, and assumptions that allow meaningful and valid comparisons
2) Use data, methods, criteria, and assumptions that are appropriate for the intended use of reported information
3) Provide clear and sufficient information for reviewers to assess the credibility and reliability of GHG reduction claims
4) Reduce uncertainties as much as is practical
5) Consider all relevant information that may affect the accounting and quantification of GHG reductions, and complete all requirements.

[Q3] Choose validity of date as a project starting date for CDM.

Valid	Invalid	Description of Date
		Date of contract with consultant to execute a feasibility study of pilot project
		Date of contract to purchase heavy equipments to build a plant for proposed CDM project
		Date of CFL lump installed in a household in programmatic CDM activity
		Date of contract to conduct a preliminary survey to build hydro power station

[7] PDD(Project Design Documents)

Marks: ／9

[Q1]There have been approximately 150 projects failed to be registered under CDM so far. The table shows the numbers of rejected CDM projects specified by the reasons for that rejection. Fill the blanks of the table with the reasons for rejection shown in the box.

Number of rejected CDM projects by the reasons for rejection

Reasons	Number of Rejected Projects
1. _____	64
2. Additionality	186
(1) _____	102
(2) _____	49
(3) Other Additonality Issues _____	35
(4) Other Reasons	11

(a) Investment Analysis
(b) Baseline and Monitoring Methodology
(c) Barrier Analysis

[Q2] Which of the following cases will be deemed additional ? Please mark √ for the case that will be deemed additional.

[ ]	**Case 1:** Company B in Sri Lanka has already determined that it will upgrade its turbines, and has sufficient financing and access to suitable technology. Company A offers to partner with Company B and present this project as a CDM project, creating CDM credits corresponding to the activity they have planned.
[ ]	**Case 2:** Company A, a power producer in Japan, decides that instead of replacing its turbines, it would like to explore buying CER credits at lower cost. Company B in Sri Lanka, also a power producer, would like to replace its old turbines, provided the company can obtain financing and access to high efficiency turbine technology. Company A approaches Company B, offering to purchase CDM credits and transfer technology and expertise.

[Q3]Choose what barrier is discussed in the following sentences from the boxes shown below.

(1) Legal and Regulatory/Policy Barriers
(2) Financial/Investment Barriers
(3) Technological Barriers
(4) Social/Cultural Barriers
(5) Common Practice Barriers

[ ]	Company A had been trying to develop a mini-hydropower project in a certain rural area. However, there was strong resistance from the surrounding residents. However, Company A and the surrounding residents have agreed on the development under the term that a certain portion of income from CERs is allocated for socio-economic welfare of the rural communities. In this regard, CDM development is indispensable to realize this project.
[ ]	Company B, a manufacturing factory in Sri Lanka developed a CDM project to install a new biomass gasifier from Japan. That technology is the first of its kind in Sri Lanka and Company C, a gasifier producer in Japan is going to provide that technology in exchange of CERs arising from the CDM project.
[ ]	Company D in Sri Lanka was trying to develop a landfill methane capture project under CDM. Company D had to prove that landfill methane capture is not the conventional practice at the existing landfills in Sri Lanka to demonstrate additionality of its project.
[ ]	Company E could not have converted the existing turbine to the new advanced one unless the income from CERs improved the Project Internal Rate of Return (PIRR) to make the commercial bank of Sri Lanka confident to finance the project.
[ ]	Pig farm A in Sri Lanka plans to collect methane from pig manure treatment pond within its farm. It also plans to use the collected methane for energy purposes. To conduct this plan as a CDM project, the farm has to identify whether there are any laws or regulations that provide collection and utilization of methane in the treatment process of pig manure in Sri Lanka.

TOTAL SCORE:	/50