

**FINAL EXAM**

**CERTIFICATE IN WASH**

**Submitted by:**

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**1) What is Sanitation and Hygiene?**

Sanitation simply denotes hygienic practices of discarding or reusing wastes. It’s equally regarded a practice that permits fortification of human health through hygienic measures (UNESCO, 2003). World Health Organization (WHO) describes sanitation as availing amenities or services that aid management of human, solid and animal waste (WHO, UNICEF, 2010). In the 19th century, the sanitation meant something “relating to health, or relating to or used in the disposal of domestic waterborne waste" (Merriam-Webster's Collegiate Dictionary, eleventh edition, 2003: 84)

Hygiene refers to practices, norms or behaviors that preserve health. According to WHO, hygiene are “conditions and practices that help to maintain health and prevent the spread of diseases.” The concept on hygiene is closely related to personal and professional cleanliness of self and environment (Eisenberg *et al.,* 2007).

**2) Why are water, sanitation, and hygiene important?**

* About 2.2 billion people globally lack access to safe clean drinking water (WHO/UNICEF, 2019)
* More than half of the world’s population representing 4.2 billion people have no access to safe sanitation ([WHO/UNICEF, 2019](https://washdata.org/))
* It takes half an hour for 207 million people in the world to access water from an improved source ([WHO/UNICEF, 2019](https://washdata.org/))
* 2 billion people globally, drink water that is contaminated with fecal matter ([WHO, 2019](https://www.who.int/news-room/fact-sheets/detail/drinking-water))
* Globally, over 800 children under the age of 5 die daily from diarrheal illnesses resulting from poor hygiene & sanitation or by drinking contaminated water ([WHO, 2019](https://www.who.int/news-room/fact-sheets/detail/drinking-water)).
* 3 billion people in the world have no basic facilities for washing their hands at home ([WHO/UNICEF, 2019](https://washdata.org/))
* Diseases related to poor sanitation conditions cost some countries up to 5% of their GDP, funds that could have been used for development activities (WHO, 2012).
* Promotion of hygiene and sanitation is a cost effective way of preserving health ( World Bank, 2016)
* Access to clean drinking water, adequate sanitation facilities and maintenance of high standards of hygiene can potentially reduce worldwide disease problem by about 10% ([WHO, 2012](http://www.who.int/gho/phe/water_sanitation/burden/en/)).

**3) What is open defecation?**

Latha, *et al.,* 2018) refers Open defecation as “the practice whereby people go out in fields, bushes, forests, open bodies of water, or other open spaces rather than using the toilet to defecate”.

**4) What is Sanitation Marketing?**

Devine & Sijbesma, (2011) defines sanitation marketing as the adoption of business ideologies and unsubsidized markets to enable providers fulfil the demand of both poor and non-poor local households. (Devine & Kullmann, 2011a) adds that it’s the strategic move towards a joint mobilization to promote ways that inspires households move up sanitation hierarchy. In this way, sanitation status is improved from unhygienic and low quality, to user-friendly hygienic sanitation facilities among other healthy behaviors.

The ultimate objective of sanitation marketing is to assist those lacking access to safe and hygienic sanitation meet their basic sanitation needs(Borja-Vega, 2014). This is achieved through stimulation of supply and demand for clean sanitation facilities through combination of social and profitable marketing strategies to the advantage of poor consumers (Devine & Kullmann, 2011b).

**5) What are some of the biggest challenges you face in teaching hygiene and sanitation?**

***Individual challenges:*** These are individual related barricades emanating from the lack of knowledge and awareness on hygiene and sanitation practices. Examples include: Ignorance on the health dangers related to poor hygiene and sanitation, lack of information on the critical times of hand washing, and restricted awareness on the appropriate procedures of water treatment, filtration and disinfection and poor personal hygiene habits.

***Socio-cultural challenges:*** These are the social, cultural and religious beliefs that hinder people from embracing good WASH practices. In some communities for instance, they consider baby’s excretes harmless hence don’t bother to dispose them appropriately. The beliefs of Samburus and Maasai communities in Kenya similarly don’t allow men, children and women share toilets, and as a consequent, people defecate in the nearby bushes. In many communities, cleanliness including of toilets is socially a woman’s job and in their absence, household hygiene deteriorates significantly.

***Infrastructural challenges:*** They may include:

* Inadequate hygiene and sanitation facilities in schools and highly populated urban and sub-urban areas.
* Poorly constructed and cleanliness maintenance of public toilets
* Unavailability of facilities that are disability or child friendly
* Limited or no space for the construction of hygiene and sanitation facilities, especially in densely populated urban and peri-urban shanty areas.
* Landlords perceive providing hygiene and sanitation services such as paying for garbage collection an extra and unnecessary cost.
* Absent, inadequate or expensive waste disposal and sludge removal services by the municipal

**7) What are the steps for planning and implementing a successful WASH behavior change campaign?**

***Assess:*** collect information on the hygiene behaviors intended for change, the target group, limits as well as the context of the intervention. The gathered information will inform the choice of approach technique to be used.

***Build:*** Undertake formative research based on the above collected information. This is intended at filling knowledge gaps, explain causes, clarifies and authenticates hypothesis on the drivers of change etc.

***Create:*** Work with a creative team in the designing, packaging and testing of ideas on a small scale so as to have optimal outcome on the targeted behavior. Formulate a clear a catchy behavior statement suitable to the target group.

***Deliver:*** Develop set of activities and assign responsibilities. These planned activities may involve the target group either directly or indirectly and may include methods such as; use of community workers, face to face communication, use of print and electronic media, organizing road shows etc. Monitoring should also be done at this stage because lessons learnt will be useful in future. Evaluate: Carry out an assessment to determine whether the intended outcomes were achieved. Lessons learnt in this stage should provide a new starting point and development of a new program.

**8) What are the challenges faced by WASH Projects in Africa**

***Poverty:*** Significant number of people live below poverty lines. Most of their income is spent on basic needs such as food, clothes, shelter, educating their children etc. Sanitation and hygiene facilities therefore is not in the priority list (Banerjee & Duflo, 2007).

***Absence of political commitments:*** Most hygiene and sanitation projects in Africa are implemented by Non-Governmental organizations. Relevant government departments in a number of African countries neither take an active role in enhancing WASH activities nor allocate resources to continue sustaining the programs initiated by NGOs (Brown, *et al.,* 2010).

***Disregarding community participation when planning:*** Hygiene technologies transferred to African countries may at times conflict with customs and cultural beliefs of the locals hence affecting acceptance and use. Involvement of communities in the designing and implementation stages is key in informing customization of the technologies. Where communities are involved, ownership and acceptance of interventions are greatly enhanced (CDC, 2015).

***Culture and behavior:*** attitudes, beliefs and ways of life differs from one community to another (Chakravarty, Bhattacharya, & Das, 2017). Therefore there’s no one-size-fits-all solutions. One example is that it’s a taboo for children, women and men to share a toilet facility among the Samburu and Maasai communities of Kenya. In Malawi and other African countries, members eating from the same plate wash their hands by dipping their hands in the same bowl of water.

***Fragmented policies, legal and institutional frameworks:*** In Kenya for instance, existence of numerous institutions such as water service providers, water services boards, County governments and a number of WASH related government ministries result in overlapping of roles thus undermining WASH access efforts (Mansour, Oyaya, & Owor, 2017).

***Lack of accurate data on WASH:*** Most developing countries have limited or outdated data on the coverage and deficiencies of WASH facilities especially in the slums, rural areas and marginalized zones. This hampers effective planning and budgeting of WASH facilities to meet the needs of the underserved populations (Mansour et al., 2017).

***Climate change and variability:*** Arid and Semi-Arid areas suffer most the effects of prolonged and frequent droughts, specifically acute water shortages. This situation is often worsened by an ever increasing demand from increased population growth and obliteration of water catchment zones in favor of farming and settlements (Government of Kenya, 2010).

***Poor urban planning:*** Informal settlement in most African nations is characterized by shanties mushrooming haphazardly. This hinders effective development of WASH structures because there are no public spaces. Additionally, unclear land ownerships and doubtful land tenure systems discourages entities from establishing WASH facilities in the area (APHRC, 2002)

**9) You have visited one of the schools in your locality. What part of its surroundings can you see that satisfy the criteria for disease prevention? List the parts of the building and its surroundings, and state why they are important.**

1. School location

* Away from noise and air pollution to allow convenient learning environment

1. Classrooms

* Spacious enough to prevent overcrowding
* Well ventilated to allow free circulation of air
* Waste bins/buckets for safe disposal of solid waste

1. Water sources/points

* Water sources that are at least 50M away from the toilets or sources of waste water to prevent contamination
* Clearly marked sources of safe drinking-water to avoidSchool children and teachers drinking from unclean sources
* Storage tanks to provide water reserves to satisfy the demand for cleaning, handwashing and personal hygiene

1. Latrines

* separate latrines for boys, girls, male staff and female staff for convenience and privacy
* Distant location of latrines to avoid foul smell and vector transmission of pathogens
* Presence of handwashing facilities nearby to maintain clean hands and avoid possible ingestion of germs.
* Hygiene bins in girls and female staff toilets for safe disposal of menstrual wastes.

**10) You have asked the local county government to provide a license for your new hotel in town. The inspector asks you to assist him to describe the basic hygiene for your business before licensing. Kindly describe.**

***Location:*** The location of the new hotel is distant from hazardous areas such as waste disposal sites and floods.

***The building:*** The acquired place is spacious with separate kitchen, dining and storage rooms. Windows are adequate to allow free air movements and lighting. The interiors are also constructed in a way that it prevents cross contamination of food between and during operations. Walls, roof and floors surfaces are constructed with materials that are durable, easy to maintain and clean easily. The choice of interior color is such that it maximizes interior lighting.

***Sanitary facilities:*** Handwashing, latrines and urinal facilities are present. Liquid soap is available for hand washing and separate latrines for men and women constructed. The number of these facilities corresponds to the number of customers during peak hours. There’s also separate and conveniently located sanitary facilities and changing rooms for food handlers.

***Water availability:*** There’s a reliable and sustainable source of safe water used for drinking, cooking, hygiene and cleaning. Water storage facilities are available in case a problem is encountered with the supply source.

***Waste management:*** organic, inorganic wastes generated are disposed appropriately without contaminating or polluting the environment.

***Storage facilities:*** refrigerators are available to store perishable and semi perishable foods. Kitchen shelves are at least 50cm above the ground and away from wall surfaces.

**11) You have to make a plan of action for the promotion of WASH in your town. Briefly describe the activities that need to be included in your plan.**

* ***Aim of program:*** This is the program’s general statement of intent, i.e. the problem the program seeks to address.
* ***Purpose:*** This refers to the wider behavioral objective of the planned program, i.e. practical changes required.
* ***Output:*** This are the expected results of the program which are key in the realization of the stated aim and purpose.
* ***Activities:*** It refers to the actual or practical actions such as promotional events, communication, trainings, etc. that must be undertaken to achieve the desired output, purpose and aim. Each activity is assigned a budget, timeline and person responsible.
* ***Indicators:*** They verify/measure achievements.
* ***Target audiences/groups:*** Includes the group targeted for the behavioral change.
* ***Budget:*** Financial and non-financial resources required by the program.
* ***Monitoring & evaluation:*** Monitoring are measures put in place to ensure the program remains on course during implementation. Evaluation on the other hand are ways in which the success of the program is measured against aims and objectives. Evaluation is done after implementation and lessons learnt drawn.

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