AV- 8628
Bachelor of Physical Education (First Semester)
Examination, 2015-16
Health Education and Environmental

Section – A

Question 1

Ans-i World Health Origination

Ans-ii (b)- Individual

Ans-iii- 1909

Ans-iv- increasing of fat in the body.

Ans-v- (c)- Career

Ans-vi- (b)- Immune disorder

Ans-vii- (c)- 22 April

Ans-viii- (d)- All of above

Ans-ix- (c)- CNG

Ans-x- (b)- CFC

Ans-xi- (b)- 80dB

Ans-xii- (c)- Mercury

Section- B

Unit – 1

Ans- 2
Health is free from any disease, soundness of a body and mind.
Dimension of health: Physical, Mental, Social.
Spectrum: Positive health, Better health, Free from sickness, unrecognized diseases, mild diseases, severe disease, death

Or

Health education like general education is concerned with the change in knowledge, feelings and behavior of people. In its most usual ‘form it concentrates on developing such health practices as are believed to bring about the best possible state of well being'—(WHO).

The aim :

(i) To cultivate the desirable health practices and health practices and health habits;

(ii) To develop the health attitudes;

(iii) To appreciate the health programmes undertaken by the school and community and to improve the school and community and to improve the necessary materials for the execution of that programme;

(iv) To develop health consciousness in the school and in the community;

(v) To teach pupils the rules for the preservation and development of their physical, mental and emotional health;

(vi) To eradicate the diseases through health drive programmes;

(vii) To combat the superstitions and prejudices in the community;

(viii) To provide a healthful environment for physical and mental growth;

(ix) To improve the general conditions of living in the community;

(x) To instruct the children and youth so as to conserve and improve their own health;

(xi) To influence the parents and other adults through the health-educative programme for better habits and attitudes in children.

Unit-2

Ans-3

Cancer: Cancer is the uncontrolled growth of abnormal cells in the body. It is named for the organ or type of cell in which it starts growing.

Types:

- Carcinoma: Cancers derived from epithelial cells. This group includes many of the most common cancers, particularly in older adults. Nearly all cancers developing in the breast, prostate, lung, pancreas, and colon are carcinomas.
- Sarcoma: Cancers arising from connective tissue (i.e. bone, cartilage, fat, nerve), each of which develop from cells originating inmesenchymal cells outside the bone marrow.
- Lymphoma and leukemia: These two classes of cancer arise from cells that make blood. Leukemia is the most common type of cancer in children accounting for about 30%. However, far more adults develop lymphoma and leukemia.
- Germ cell tumor: Cancers derived from pluripotent cells, most often presenting in the testicle or the ovary (seminoma and dysgerminoma, respectively).
- Blastoma: Cancers derived from immature "precursor" cells or embryonic tissue. Blastomas are more common in children than in older adults.

Prevention and cure:

Prevention of cancer, by avoiding its potential causes, is the simplest method. First on most clinicians and researchers list is to stop (or better, never start) smokingtobacco. Avoiding excess sunlight (by decreasing exposure or applyingsunscreen) and many of the chemicals and toxins is an excellent way to avoid cancers. Avoiding contact with certain viruses and other pathogens also is likely to prevent some cancers. People who have to work close to cancer-causing agents (chemical workers, X-ray technicians, ionizing radiation researchers) should follow all safety precautions and minimize any exposure to such compounds.

There are two vaccines currently approved by the U.S. Food and Drug Administration (FDA) to prevent specific types of cancer. Vaccines against the hepatitis B virus, which is considered a cause of some liver cancers, and vaccines against human papillomavirus (HPV) types 16 and 18 are available. According to the NCI, these viruses are responsible for about 70% of cervical cancers. These virus also plays a role in cancers arising in the head and neck, as well as cancers in the anal region, and probably in others. Today, vaccination against HPV is recommended in teenagers and young adults of both sexes. The HPV virus is so common that by the age of 50, half or more people have evidence of being exposed to it. Sipuleucel-T is a new vaccine approved by the FDA to help treat advanced prostate cancer. Although vaccine does not cure prostate cancer, it has been shown to help extend the lifespan of individuals with advanced prostate cancer.

People with a genetic predisposition to develop certain cancers and others with a history of cancers in their genetically linked relatives currently cannot change their genetic makeup. However, some individuals who have a high possibility of developing genetically linked cancer have taken actions to prevent cancer development. For example, some young women who have had many family members develop breast cancer have elected to have their breast tissue removed even if they have no symptoms or signs of cancer development to reduce or eliminate the possibility they will develop breast cancer. Some doctors consider this as an extreme measure to prevent cancer while others do not.

Screening tests and studies for cancer are meant to help detect a cancer at an early stage when the cancer is more likely to be potentially cured with treatment. Such screening studies are breast exams, testicular exams, colon-rectal exams (colonoscopy), mammography, certain blood tests, prostate exams, urine tests and others. People who have any suspicion that they may have cancer should discuss their concerns with their doctor as soon as possible. Screening recommendations have been the subject of numerous conflicting reports in recent years. Screening may not be cost effective for many groups of patients or lead to unnecessary further invasive tests, but individual patients' unique circumstances should always be considered by doctors in making recommendations about ordering or not ordering screening tests

Or

Ans-(a)- OBJECTIVES OF SCHOOL HEALTH SERVICES The main objectives of this service is the prevention of illness as well as the promotion of health and well being of the students through:

1. Early detection and care of students with health problems.
2. Development of healthy attitudes and healthy behaviors by students.
3. Ensure a healthy environment for children at school.
4. Prevention of communicable diseases at school

Ans-(b)- First aid emergency and care: The cure given before the perfect treatment is called first aid.
Care: care of skin, care of hair, care of eyes, care of ear, etc.

Ans-(c)- Skin is the largest organ in our body. It is essential to keep the skin clean and dry as it prevents entry of many pathogenic organisms in to our body.

1. Take bath twice a day
2. Take well balanced diet containing vitamin A, B,C and protein
3. Massage of the skin increases blood circulation
4. Take warm bath to increase blood circulation
5. Take plenty of water
6. Regular exercise
7. Use moisturizer or lotions to keep skin smooth and healthy

hair

1 Wash hair daily

2 Keep the scalp clean

3 Well balanced diet help in healthy hair growth

4 Scalp massage stimulates hair growth

5 Take more water

6 Shampooing helps to keep the hair and scalp clean and to relieve dandruff

7 Avoid scratching with finger on the scalp

8 Use soft brushed comb

9 Daily comb and tie the hair

eyes

1 Clean the secretions from eyes

2 Cleaning should be done from inner canthus to the outer canthus of the eye

3 Should not use same material to clean both eyes to prevent spread of infection

4 Use protective devices while exposing to radiation

5 Use protective glass during fire works

6 Wear sun glasses while going out

7 Wash eye with cool water in the morning

8 Treat any infection to eye and surrounding areas

ear

1. Clean the nose and ear daily
2. Should not apply pressure to remove dry materials from the nose and ear. It can be removed by wet cloth or cotton
3. Should not use sharp objects to remove wax from the ear. It may tear the tympanic membrane and cause hearing impairment
4. Protect the ear and nose from entry of any foreign particles.

Unit- 3

Ans-4

Ans-(a)- Efforts to define environmental education as a specific endeavour began in the 1960s. They were given international support at the United Nations conference on the Human Environment held in Stockholm in 1972, where participating governments recommended that it be recognised and promoted on an international scale through the United Nations. One of the initial tasks was to develop some consensus on what environmental education could and should become, and to assist governments in implementing relevant programs as soon as practicable. Two major conferences, supported by regional meetings of experts, were hosted by the newly formed UNESCO-UNEP International Environmental Education Programme. The purpose of the first (Belgrade, 1975) was to draft concepts and a vision for environmental education. The second, an Intergovernmental Conference on Environmental Education (Tbilisi, 1977), formally approved the scope and action plans put forward from the previous conference. The provisions of the 'Tbilisi Declaration on the role, objectives and characteristics of environmental education', appended to this document, remain in wide international use and have sustained their role as a guiding influence over the past two decades. Other major milestones include:

- The IUCN World Conservation Strategy (1980) suggested requirements for human survival and prosperity, putting forward the conservationist concept of sustainable development.

- Our Common Future (1988) was the name of the report published by the World Commission on Environment and Development, chaired by the Prime Minister of Norway, Mrs Brundtland. It emphasised the relationship between the under-developed nature of parts of the world, and existing social and environmental problems. The report is a survey of the planet's health, presenting the problems of atmospheric pollution, desertification, over-population, over-consumption, water shortages, poverty and under-development.

- Agenda 21 (1992) The United Nations Conference on Environment and Development in Rio de Janeiro established further strategies for a sustainable future. Chapter 36 of the action plan adopted by the Conference, Agenda 21, focused on public education, awareness and training, which confirms the role of education and the importance of positioning environmental education in the perspective of sustainable development.

- UNESCO Thessaloniki Declaration (1997), Educating for a Viable Future: a multidisciplinary vision for concerted action sought to further clarify the concept of education for sustainable development. It presented sustainability as an ethical and moral imperative and the objective to which education should devote itself as an instrument of choice. Education is described as an ongoing process aimed at developing the capability of adapting to rapid changes in the world, but first and foremost as a process of transmitting knowledge and information to make the public understand the problems and to stimulate awareness.

Ans –(b)- The importance's of environmental studies are as follows:

1. To clarify modern environmental concept like how to conserve biodiversity.

2. To know the more sustainable way of living.

3. To use natural resources more efficiently.

4. To know the behaviour of organism under natural conditions.

5. To know the interrelationship between organisms in populations and communities.

6. To aware and educate people regarding environmental issues and problems at local, national and international levels.

Ans-(c)-

2nd Feb	World Wetland Day	Students may be called for discussion on What is wetlands, Importance of wetland, Ramsar Convention, Managing wetlands and Biodiversity in wetland.

21 March	World Forestry Day	Celebrate World Forestry Day by doing activities such as the planting of trees and highlighting the urgency to increase the green cover.
22 April	Earth Day	Discover Earth Day activities for students including games, art projects, crafts and other Earth Day ideas. Let them find Earth Day information, activities and events to remind them of the importance of green living and sustainable lifestyles.
5th June	World Environment Day	You can make a difference – individual actions, when multiplied, can make an exponential difference to the planet!
17th June	World Day to Combat Desertification & Drought	Discuss on drought and desertification, its implications on society and ways to minimize the problem among the students.
1st week of July	Vanamohatsav	Students may be encouraged to share on importance of this vanamohatsav week, its history and let them do some exercise on biodiversity & plant as many as tree.
11 July	World Population Day	World Population Day aims to increase people's awareness on various population issues such as the importance of family planning, including gender equality, poverty, maternal health and human rights. Let the students share their information through competitions.
16th September	International Day for the preservation of the Ozone layer	Share information about atmosphere, ozone, CFC, acid rain among students. Let them invite for participation in competition. They can go for awareness campaign on ecofriendly products.
1st week of October	Wildlife week	Let us share information about types animals, habitat, extinct, endangered species, food web, food chain, natural cycles among students and importance of each species in ecological balance. Students can go to local nearby park and help visitors as guide.
4th October	Animal Welfare Day	We can discuss on importance of animals. Activities like giving unused foods, put a bin of water in the campus, make artificial nest in trees etc.
2nd December	National Pollution Prevention Day	Share information about types of pollution, about reduction, laws, local issues and finding solution from students. Promote ecofriendly practices like ban of polythene, use of cycle or by walk, plantation, water conservation practices

Or

Ans-(a)- Before recycling, most plastics are sorted according to their resin type. In the past, plastic reclaimers used the resin identification code (RIC), a method of categorization of polymer types, which was developed by the Society of the Plastics Industry in 1988. Polyethylene terephthalate, commonly referred to as PET, for instance, has a resin code of 1. Most plastic reclaimers do not rely on the RIC now; they use automatic sort systems to identify the resin. Ranging from manual sorting and picking of plastic materials; to mechanized automation processes that involve shredding, sieving, separation by rates of density i.e. air, liquid, or magnetic, and complex spectrophotometric distribution technologies e.g. UV/VIS, NIR, Laser, etc. Some plastic products are also separated by color before they are recycled. The plastic recyclables are then shredded. These shredded fragments then undergo processes to eliminate impurities like paper labels. This material is melted and often extruded into the form of pellets which are then used to manufacture other products.

Thermal depolymerization

Another process involves the conversion of assorted polymers into petroleum by a much less precise thermal depolymerization process. Such a process would be able to accept almost any polymer or mix of polymers, including thermoset materials such as vulcanized rubber tire superation of wastes and the biopolymers in feathers and other agricultural waste. Like natural petroleum, the chemicals produced can be made into fuels as well as polymers. A pilot plant of this type exists in Carthage, Missouri, United States, using turkey waste as input material. Gasification is a similar process, but is not technically recycling, since polymers are not likely to become the result.

Heat compression

Yet another process that is gaining ground with startup companies (especially in Australia, United States and Japan) is heat compression. The heat compression process takes all unsorted, cleaned plastic in all forms, from soft plastic bags to hard industrial waste, and mixes the load in tumblers (large rotating drums resembling giantclothes dryers). The most obvious benefit to this method is the fact that all plastic is recyclable, not just matching forms. However, criticism rises from the energy costs of rotating the drums, and heating the post-melt pipes.

Distributed Recycling

For some waste plastics, recent technical devices called recyclebots enable a form of distributed recycling. Preliminary life-cycle analysis(LCA) indicates that such distributed recycling of HDPE to make filament of 3-D printers in rural regions is energetically favorable to either using virgin resin or conventional recycling processes because of reductions in transportation energy

Other processes

A process has also been developed in which many kinds of plastic can be used as a carbon source in the recycling of scrap steel. There is also a possibility of mixed recycling of different plastics, which does not require their separation. It is called Compatibilization and requires use of special chemical bridging agent's compatibilizers. It can help to keep the quality of recycled material

and to skip often expensive and inefficient preliminary scanning of waste plastics streams and their separation/purification.

Ans-(b)- children may be taught how to conserve energy, paper recycling, waste segregation or gardening. It is also ideal to develop environmental policies and slogans for the school or integrating environmental themes to the school curriculum to promote knowledge and consciousness. Children could also be encouraged to become more actively involved in environmental issues in a practical manner, such as recycling trashed materials. Through this, they will not only participate in saving mother earth, they would also develop their skills and creativity. In addition, it is also a good concept to consider the collection and selling of recyclable materials, particularly empty bottles or tins. As a result, the school will not only help the environment, but benefit as well because of the income generated through the activity. Given the solutions, though simple and easy, could open a new window for a fresh and new start as "every bit counts"

Ans-(c)- Environmental education (EE) refers to organized efforts to teach how natural environments function, and particularly, how human beings can manage behavior and ecosystems to live sustainably. It is a multi-disciplinary field integrating disciplines such as biology, chemistry, physics, ecology, earth science, atmospheric science, mathematics, and geography. The term often implies education within the school system, from primary to post-secondary. However, it sometimes includes all efforts to educate the public and other audiences, including print materials, websites, media campaigns, etc.
importance:

- Studying EE Creates Enthusiastic Students
- EE Helps Build Critical Thinking, and Relationship
- EE Instructional Strategies Help Foster Leadership Qualities
- Self Control/Self Discipline Benefits for Children with ADD
- Increased Focus/Improved Cognition
- Health Benefits .

Unit- 4

Ans-5- Water pollution is an appalling problem, powerful enough to lead the world on a path of destruction. Water is an easy solvent, enabling most pollutants to dissolve in it easily and contaminate it. The most basic effect of water pollution is directly suffered by the organisms and vegetation that survive in water, including amphibians. On a human level, several people die each day due to consumption of polluted and infected water.
causes of water pollution.

1. Industrial waste
2. The sewage and waste water

3. Accidental Oil leakage
4. Burning of fossil fuels
5. Chemical fertilizers and pesticides
6. Global warming
7. Radioactive waste
8. Animal waste
9. Underground storage leakage

Or

Ans-(a)- Thermal pollution is the degradation of water quality by any process that changes ambient water temperature. A common cause ofthermal pollution is the use of water as a coolant by power plants and industrial manufacturers.

Ans-(b)-

Functions of the Central Board at the National Level

1. Advise the Central Government on any matter concerning prevention and control of water and air pollution and improvement of the quality of air.
2. Plan and cause to be executed a nation-wide programm for the prevention, control or abatement of water and air pollution;
3. Co-ordinate the activities of the State Board and resolve disputes among them;
4. Provide technical assistance and guidance to the State Boards, carry out and sponsor investigation and research relating to problems of water and air pollution, and for their prevention, control or abatement;
5. Plan and organise training of persons engaged in programme on the prevention, control or abatement of water and air pollution;
6. Organise through mass media, a comprehensive mass awareness programme on the prevention, control or abatement of water and air pollution;
7. Collect, compile and publish technical and statistical data relating to water and air pollution and the measures devised for their effective prevention, control or abatement;
8. Prepare manuals, codes and guidelines relating to treatment and disposal of sewage and trade effluents as well as for stack gas cleaning devices, stacks and ducts;
9. Disseminate information in respect of matters relating to water and air pollution and their prevention and control;
10. Lay down, modify or annul, in consultation with the State Governments concerned, the standards for stream or well, and lay down standards for the quality of air; and
11. Perform such other function as may be prescribed by the Government of india.

Ans-(c)- Ozone depletion describes two distinct but related phenomena observed since the late 1970s: a steady decline of about 4% in the total volume of ozone in Earth's stratosphere (the ozone layer), and a much larger springtime decrease in stratospheric ozonearound Earth's polar regions.