October 12, 2016

Q.1) Consider the following statements about Ready-to-use therapeutic food (RUTF)

- 1. Primary ingredients include peanuts, oil, sugar, milk powder and vitamin and mineral supplements
- 2. It is safe to use without refrigeration at household level
- 3. It can be used in combination with breastfeeding and other best practices for infant and young child feeding

Which of the following statements is/are correct?

- a) 1 and 2
- b) 1 and 3
- c) 2 and 3
- d) All of the above

Q.1) Solution (d)

Ready-to-use therapeutic food (RUTF) are energy dense, micronutrient enhanced pastes used in therapeutic feeding. These soft foods are a homogenous mix of lipid rich foods, with a nutritional profile similar to the World Health Organization-recommended therapeutic milk formula used for inpatient therapeutic feeding programmes. Typical primary ingredients for RUTF include peanuts, oil, sugar, milk powder and vitamin and mineral supplements. For several reasons, RUTF is essential for the community-based management of children who are suffering from uncomplicated severe acute malnutrition and who retain an appetite. First, it provides all the nutrients required for recovery. Second, it has a good shelf life, and does not spoil easily even after opening. Third, since RUTF is not water based, the risk of bacterial growth is very limited, and consequently it is safe to use without refrigeration at household level. Fourth, it is liked by children, safe and easy to use without close medical supervision. Finally, it can be used in combination with breastfeeding and other best practices for infant and young child feeding.

In News - http://www.thehindu.com/todays-paper/unicef-initiative-to-tackle-malnutrition-in-children/article9209008.ece

Q.2) Consider the following statements about National Commission for Backward Classes (NCBC)

- 1. It is a statutory body
- 2. It was the outcome of the direction of the Supreme Court in the Mandal case judgement

October 12, 2016

Select the incorrect statements

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Q.2) Solution (d)

National Commission for Backward Classes is an Indian statutory body established on 14 August 1993, under the provisions of National Commission for Backward Classes Act, 1993 (Act No. 27 of 1993). The commission was the outcome of the direction of the Supreme Court in the Mandal case judgement.

In News - http://www.business-standard.com/article/politics/maharashtra-govt-faces-legal-challenge-in-hc-over-quota-for-marathas-116100900475 1.html

Q.3) NASA Invents 'Electric Gauze' That Can Speed Up Wound Healing. Consider the following statements

- 1. The fibres of the guaze are made of Polyvinylidene Flouride (PVDF)
- 2. Only one time external power source is required
- 3. Wounds tend to heal much more quickly if small amounts of electricity are applied to the surrounding tissue

Which of the following statements is/are correct?

- a) Only 1
- b) 1 and 3
- c) 2 and 3
- d) All of the above

Q.3) Solution (b)

US space agency NASA has developed a high-tech electroactive bandage that creates an electric charge to help promote the healing process of wounds. The bandage is made of an electroactive material that is stimulated by pressure of cell growth and body heat.

October 12, 2016

An electroactive device is applied to an external wound site, which utilises low level electrical stimulation to promote wound healing. Electroactive material is so sensitive that a push or even blow on it can create an electric charge.

The fibres of the guaze are made of electroactive material Polyvinylidene Flouride (PVDF) which are stimulated by the heat of the body and the pressure of cell growth, thus no external power source is required.

The bandage also minimises infection and related complications such as illness or amputation. It speeds the wound's healing process. The electroactive material is made using a polyvinylidene fluoride (PVDF).

In News - http://timesofindia.indiatimes.com/home/science/Nasas-electric-bandage-to-speed-up-wound-healing/articleshow/54781697.cms

Q.4) 15.2% of Indians are undernourished according to Global Hunger Index (GHI). GHI is published by

- a) World Health Organisation
- b) Médecins Sans Frontières (MSF)
- c) International Food Policy Research Institute (IFPRI)
- d) None of the above

Q.4) Solution (c)

In News - http://www.livemint.com/Politics/ZIPsHik4xPnCQMJlrWYTuM/Indias-hunger-crisis-is-worse-than-other-South-Asian-nation.html

Q.5) Consider the following about 'Himansh', which was in news recently:

- 1. It is a glaciological research facility of India located in Antarctica
- 2. It is established by the National Centre for Antarctic and Ocean Research (NCAOR)
- 3. The station houses many instruments to quantify the glacier melting and its relation to changing climate.

Which of the above given statements are correct?

- a) 1 and 2 only
- b) 1 and 3 only
- c) 2 and 3 only

October 12, 2016

d) 1, 2 and 3

Q.5) Solution (c)

Himansh is a glaciological research facility of India located at an altitude of nearly 13,500 feet in Spiti Valley, Himachal Pradesh.

Himansh is considered to be the highest point from where an Indian glacier research facility is functioning. The research lab, established by the National Centre for Antarctic and Ocean Research (NCAOR), has automatic weather stations, ground penetrating radars, geodetic GPS systems and other sophisticated facilities to study glaciers and their discharge.

The facility will serve as the base for Terrestrial Laser Scanners and Unmanned Aerial Vehicles to digitise glacier movements and snow cover variations.

The NACOR ventured to set up the station as part of initiatives to understand and quantify glaciers in the upper Indus basin in Himachal Pradesh and their contribution to river discharge. The glacier studies in the high altitudes of Himalayas can succeed only with highend research infrastructure that would help in unhindered collection of scientific data and protection of scientists from harsh weather. Himansh is expected to provide research support to scientists to quantify the changes happening in Himalayan glaciers and its hydrological contribution.

M. Rajeevan, Secretary to the Ministry of Earth Sciences, inaugurated the facility. M. Ravichandran, director NCAOR, was also present.

In News: High-altitude glacial lab opens in the Himalayas - The Hindu

