## October 3, 2017

# Q.1) Horn of Africa is home to which of the following countries?

- 1. Djibouti
- 2. Eritrea
- 3. Kenya
- 4. Ethiopia
- 5. Rwanda
- 6. Somalia

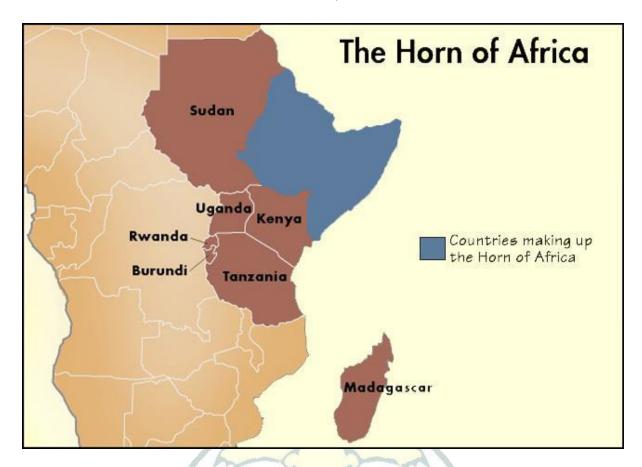
## **Select the correct code:**

- a) 2, 4, 5 and 6
- b) 1, 2, 4 and 6
- c) 1, 3, 4 and 5
- d) 1, 2, 3 and 5

## Q.1) Solution (b)

Horn of Africa is a peninsula in Northeast Africa. It juts hundreds of kilometers into the Arabian Sea and Indian Ocean, lying along the southern side of the Gulf of Aden. The area is the easternmost projection of the African continent. The Horn of Africa denotes the region containing the countries of Djibouti, Eritrea, Ethiopia, and Somalia.

## October 3, 2017



Source: http://indianexpress.com/article/opinion/columns/raja-mandala-india-and-djiboutis-geopolitical-scrum-ram-nath-kovind-abroad-visit-4871697/

## Q.2) Which of the following statement(s) is/are correct?

- a) MAVEN is a space probe developed by NASA designed to study the Martian atmosphere while orbiting Mars
- b) Curiosity Rover's primary mission is to find out if Mars is, or was, suitable for life
- c) Both (a) and (b)
- d) Neither (a) nor (b)

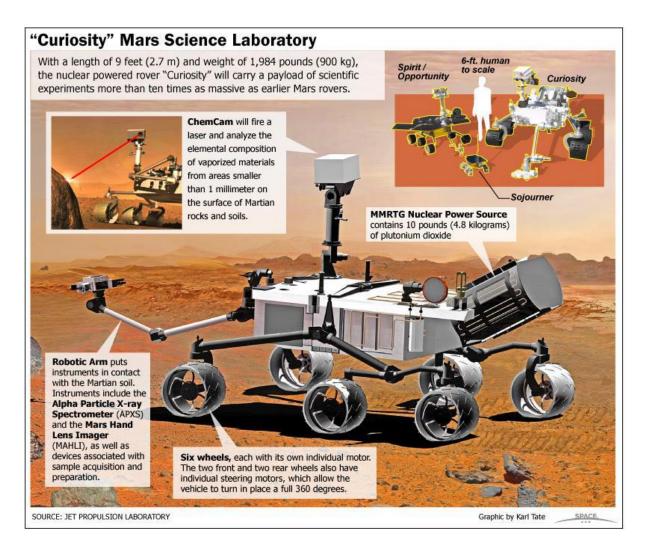
## Q.2) Solution (c)

Mars Atmosphere and Volatile Evolution Mission (MAVEN)[5] is a space probe developed by NASA designed to study the Martian atmosphere while orbiting Mars. Mission goals include determining how the planet's atmosphere and water, presumed to have once been substantial, were lost over time.

## October 3, 2017

Curiosity is a car-sized rover designed to explore Gale Crater on Mars as part of NASA's Mars Science Laboratory mission (MSL).

The rover's goals include an investigation of the Martian climate and geology; assessment of whether the selected field site inside Gale Crater has ever offered environmental conditions favorable for microbial life, including investigation of the role of water; and planetary habitability studies in preparation for human exploration.



Source: <a href="http://www.thehindu.com/sci-tech/science/large-solar-storm-sparks-global-aurora-on-mars/article19780721.ece">http://www.thehindu.com/sci-tech/science/large-solar-storm-sparks-global-aurora-on-mars/article19780721.ece</a>

## Q.3) Consider the following statements about Northern Lights

- 1. It is also called as Aurora Australis
- 2. It is always pale green in colour

## October 3, 2017

#### Select the correct statements

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

## Q.3) Solution (d)

The bright dancing lights of the aurora are actually collisions between electrically charged particles from the sun that enter the earth's atmosphere. The lights are seen above the magnetic poles of the northern and southern hemispheres. They are known as 'Aurora borealis' in the north and 'Aurora australis' in the south.

The Northern Lights are actually the result of collisions between gaseous particles in the Earth's atmosphere with charged particles released from the sun's atmosphere. Variations in colour are due to the type of gas particles that are colliding.

The colors most often associated with the aurora borealis are pink, green, yellow, blue, violet, and occasionally orange and white. Typically, when the particles collide with oxygen, yellow and green are produced. Interactions with nitrogen produce red, violet, and occasionally blue colors.

Northern Lights can be seen in the northern or southern hemisphere, in an irregularly shaped oval centred over each magnetic pole. The lights are known as 'Aurora borealis' in the north and 'Aurora australis' in the south. Scientists have learned that in most instances northern and southern auroras are mirror-like images that occur at the same time, with similar shapes and colors.

'Aurora borealis', the lights of the northern hemisphere, means 'dawn of the north'. 'Aurora australis' means 'dawn of the south'. In Roman myths, Aurora was the goddess of the dawn. \par Many cultural groups have legends about the lights. In medieval times, the occurrences of auroral displays were seen as harbingers of war or famine. The Maori of New Zealand shared a belief with many northern people of Europe and North America that the lights were reflections from torches or campfires.

Source: <a href="http://www.thehindu.com/sci-tech/science/large-solar-storm-sparks-global-aurora-on-mars/article19780721.ece">http://www.thehindu.com/sci-tech/science/large-solar-storm-sparks-global-aurora-on-mars/article19780721.ece</a>

## Q.4) World Development Report is released by

## October 3, 2017

- a) World Bank
- b) United Nations Development Programme (UNDP)
- c) World Economic Forum (WEF)
- d) World Trade Organisation (WTO)

## Q.4) Solution (a)

World Development Report 2018: LEARNING to Realize Education's Promise

Source: <a href="http://www.huffingtonpost.com/entry/south-asias-human-capital-crisis-us-59d2c870e4b043b4fb095bd4">http://www.huffingtonpost.com/entry/south-asias-human-capital-crisis-us-59d2c870e4b043b4fb095bd4</a>

# Q.5) Christmas Island is located in

- a) Pacific Ocean
- b) Indian Ocean
- c) Atlantic Ocean
- d) None of the above

## Q.5) Solution (b)

The Territory of Christmas Island is an Australian external territory comprising the island of the same name. Christmas Island is located in the Indian Ocean, around 350 kilometres (220 mi) south of Java and Sumatra and around 1,550 kilometres (960 mi) north-west of the closest point on the Australian mainland.

Source: http://www.hindustantimes.com/environment/over-15-of-species-found-in-india-are-threatened/story-Q8d5kenWiQB4K6DhmimRbK.html