

January 29, 2019

**Q.1) Consider the following statements with respect to 'Medium-Range Surface-to-Air Missile (MRSAM)'**

1. It is being developed by India's Defence Research and Development Organisation (DRDO)
2. It is being developed in collaboration with Israel Aerospace Industries (IAI)

**Select the correct statements**

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

**Q.1) Solution (c)**

Both the statements are correct.

Read More - <https://www.airforce-technology.com/projects/medium-range-surface-to-air-missile-mrsam/>

**Q.2) Consider the following statements with respect to 'Yuva Swabhiman Yojana'**

1. It is a Central Sector Scheme
2. It guarantees 100 days of employment every year to the EWS youths

**Select the correct statements**

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

**Q.2) Solution (b)**

Madhya Pradesh government has announced the launch of a scheme to ensure temporary employment to the youths from the economically weaker sections (EWS) in the urban areas. It would guarantee 100 days of employment every year to the EWS youths. Youths would be given skills training of their choice, so that they can take benefits of the available job opportunities.

**Q.3) 'Sadyojata-Nandin' is associated with**

- a) Buddhism
- b) Jainism
- c) Sikhism
- d) None of the above

**Q.3) Solution (d)**

It is one of the faces of Shiva.

Read More - [http://www.naturalmeditation.net/Design/five\\_faces.html#](http://www.naturalmeditation.net/Design/five_faces.html#)

**Q.4) There is a concern over the increase in harmful algal blooms in the seawater of India. What could be the causative factors for this phenomenon?**

- 1. Mixing of warm and cold water currents in oceans
- 2. Run-off from the land during the monsoon
- 3. Upwelling in the seas
- 4. Discharge of phosphorus-containing sewage in oceans
- 5. Increase of salt in sea

**Select the correct answer from the codes given below**

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

**Q.4) Solution (c)**

Eutrophication would increase nutrient supply resulting in growth of algal bloom

Phytoplankton (algae and blue-green bacteria) thrive on the excess nutrients and their population explosion covers almost entire surface layer. This condition is known as algal bloom.

Algal Blooms restrict the penetration of sunlight resulting in death of aquatic plants, and hence restricts the replenishment of oxygen.

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Algae are referred to large seaweeds which grow in water with large nutrients added through different sources. When algal blooms block vital sunlight from reaching beneficial underwater plants that provide food and a place to live and grow for fish and other animals, the ecosystem can be negatively impacted. Further, algae when dead; their decay requires large oxygen; thus increasing the Biological Oxygen Demand of water and killing many marine animals.

Algae become stressed and die when they deplete the nutrient supply or move from freshwater into saltier waters.

Eutrophication is the response to the addition of nutrients such as nitrates and phosphates naturally or artificially, fertilizing the aquatic ecosystem.

Algal blooms are the consequence of Eutrophication.

**Q.5) 'Laffer curve' is related to**

- a) Inflation
- b) Balance of Payment
- c) Taxation
- d) Employment

**Q.5) Solution (c)**

A supposed relationship between economic activity and the rate of taxation which suggests that there is an optimum tax rate which maximizes tax revenue

It illustrates the concept of taxable income elasticity—i.e., taxable income will change in response to changes in the rate of taxation. The Laffer curve is typically represented as a graph which starts at 0% tax with zero revenue, rises to a maximum rate of revenue at an intermediate rate of taxation, and then falls again to zero revenue at a 100% tax rate.