

July 24, 2019

Q.1) Consider the following statements

1. India has been allotted a site of 75,000 sq. km. in the Central Indian Ocean Basin (CIOB) by the UN International Sea Bed Authority for exploitation of polymetallic nodules (PMN).
2. India has an Exclusive Economic zone spread over 2.2 Million sq.kms

Select the correct statements

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

Q.1) Solution (c)

Deep Ocean mission is the Government of India mission to study the various aspects of ocean in an integrated frame work as the Indian space research organisation(ISRO) has been studying the space.

India has been allotted a site of 75,000 sq. km. in the Central Indian Ocean Basin (CIOB) by the UN International Sea Bed Authority for exploitation of polymetallic nodules (PMN). These are rocks scattered on the seabed containing iron, manganese, nickel and cobalt. Being able to lay hands on even 10% of that reserve can meet the energy requirement for the next 100 years. It has been estimated that 380 million metric tonnes of polymetallic nodules are available at the bottom of the seas in the Central Indian Ocean. India's Exclusive Economic Zone spreads over 2.2 million sq. km. and in the deep sea, lies "unexplored and unutilised".

Source: <https://www.thehindu.com/news/national/centre-to-launch-deep-ocean-mission-in-october/article28733519.ece>

Q.2) Consider the following about O-SMART scheme:

1. It is a mission to promote millet cultivation 'as we move towards climate-smart agriculture in the wake of frequent droughts'.
2. The scheme is being piloted by the Union earth sciences ministry.

Select the correct statements

- a) 1 Only

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

Q.2) Solution (b)

“Ocean Services, Technology, Observations, Resources Modelling and Science (O-SMART)”

- Implementation period - 2017-18 to 2019-20 at an overall cost of Rs.1623 crore. (by Ministry of Earth Sciences)
- Implementation of O-SMART will help in addressing issues relating to Sustainable Development Goal-14, which aims to conserve use of oceans, marine resources for sustainable development.
- This scheme (O-SMART) also provide necessary scientific and technological background required for implementation of various aspects of Blue Economy.
- The State of Art Early Warning Systems established under the O-SMART Scheme will help in effectively dealing with ocean disasters like Tsunami, storm surges.

Source: <https://timesofindia.indiatimes.com/india/india-to-launch-its-deep-ocean-mission-by-october/articleshow/70414191.cms>

Q.3) Which of the following best describes the term ‘Gig Economy’ which is sometimes seen in the news?

- a) It is an economy with high prevalence of failing start ups
- b) It is characterized by prevalence of short term contracts and freelance work
- c) It is characterized by export oriented manufacturing
- d) It is characterized by high prevalence of permanent jobs in organized sector

Q.3) Solution (b)

In a gig economy, temporary, flexible jobs are commonplace and companies tend toward hiring independent contractors and freelancers instead of full-time employees. A gig economy undermines the traditional economy of full-time workers who rarely change positions and instead focus on a lifetime career.

Source: <https://www.thehindu.com/sci-tech/technology/bangalore-startup-engendered-tries-to-establish-gender-equity-in-workplaces/article28649731.ece>

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Q.4) Consider the following statements with respect to 'International Seabed Authority (ISA)'

1. It is an organization established by the United Nations Convention on the Law of the Sea.
2. It has its headquarters in Kingston, Jamaica.

Select the correct statements

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

Q.4) Solution (c)

The International Seabed Authority is an autonomous international organization established under the 1982 United Nations Convention on the Law of the Sea and the 1994 Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea. The Authority is the organization through which States Parties to the Convention shall, in accordance with the regime for the seabed and ocean floor and subsoil thereof beyond the limits of national jurisdiction (the Area) established in Part XI and the Agreement, organize and control activities in the Area, particularly with a view to administering the resources of the Area.

The Authority, which has its headquarters in Kingston, Jamaica, came into existence on 16 November 1994, upon the entry into force of the 1982 Convention.

Q.5) Consider the following statements with respect to 'Polymetallic nodules'

1. They are rock concretions on the sea bottom formed of concentric layers of iron and manganese hydroxides around a core
2. They are only found in the central Pacific Ocean

Select the corrects statements

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

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Q.5) Solution (c)

Polymetallic nodules, also called manganese nodules, are rock concretions on the sea bottom formed of concentric layers of iron and manganese hydroxides around a core. As nodules can be found in vast quantities, and contain valuable metals, deposits have been identified as having economic interest.

They contain varying amounts of manganese, cobalt, copper and nickel. They occur as potato-sized lumps scattered about on the surface of the ocean floor, mainly in the central Pacific Ocean but with some deposits in the Indian Ocean.

