

Q. 1) Consider the following statements about Multiple Independent Reentry Vehicle (MIRV)

1. It is an exoatmospheric ballistic missile payload containing several warheads.
2. Each warhead is capable of being aimed to hit a different target
3. The Soviet Union was the first country to develop MIRV technology

Which of the statements given above are correct?

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

Q.1) Solution: (a)

Explanation:

- A multiple independently targetable reentry vehicle (MIRV) is an exoatmospheric ballistic missile payload containing several warheads, each capable of being aimed to hit a different target. **Hence statement 1 and 2 are correct .**
- The United States was the first country to develop MIRV technology, deploying a MIRVed Intercontinental Ballistic Missile (ICBM) in 1970 and a MIRVed Submarine-Launched Ballistic Missile (SLBM) in 1971. The Soviet Union quickly followed suit and by the end of the 1970s had developed their own MIRV-enabled ICBM and SLBM technology. **Hence statement 3 is incorrect.**

Q. 2) Consider the following statements

1. Israel has become a major supplier of defence equipment to India
2. Barak 8 a long range surface to air missile was jointly developed by India's Defence Research & Development Organisation (DRDO) and Israel Aerospace Industries (IAI).

Choose the correct code:

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

Q.2) Solution: (c)

Explanation:

- Israel has become a major supplier of defence equipment to India, standing second to Russia on a few occasions. As per the data furnished by the Indian Ministry of Defence (MoD) Israel was ahead of Russia in the year 2013–2014 and 2015–2016, in terms of signing defence contracts with India. **Hence statement 1 is correct .**
- Barak 8 was jointly developed by India's Defence Research & Development Organisation (DRDO) and Israel Aerospace Industries (IAI). The Barak 8 missile defence system is produced by Israel's Directorate of Research and Development (DDR&D), Elta Systems, Rafael Advanced Defense Systems and India's Bharat Dynamics limited (BDL). **Hence statement 2 is correct.**

Q. 3) Consider the following statements regarding Light Combat Aircraft Tejas Mk2

1. It's mission endurance for fighting a war is 300 minutes
2. It is specifically designed to carry only air-to-air weapons.

Choose the correct code:

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

Q.3) Solution: (d)

Explanation:

- The Tejas Mk2 is a fighter aircraft developed in India that can carry **eight Beyond-Visual-Range (BVR) missiles simultaneously**. It is an upgraded version of the LCA Tejas Mk1, which has improved range and mission endurance. The mission endurance for fighting a war was 57 minutes for LCA Tejas Mk1, but it is 120 minutes for LCA Tejas Mk2. **Hence statement 1 is incorrect.**
- The Light Combat Aircraft is designed to carry only air-to-air **air-to-surface, precision-guided**, weapons. It has the air-to-air refuelling capability. **Hence statement 2 is incorrect.**
- The **LCA** programme was started by the Government of India in 1984 and the **Aeronautical Development Agency (ADA)** manages it.

Q. 4) Consider the following statements about the Kalashnikov AK 203 Rifle

1. It is the **most advanced version** of the AK-47 rifle.
2. It cannot be used in high altitudes.
3. It is jointly produced by India and Ukraine.

Choose the correct code:

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

Q.4) Solution: (a)

Explanation:

- AK 203 Rifle is the **most advanced version** of the AK-47 rifle. **Hence statement 1 is correct.**
- It is expected to replace the Indian Small Arms System (INSAS) 5.56×45 mm assault rifle, which is presently being used by Army, Navy and Air Force besides other security forces. INSAS rifles are not suitable for use at high altitudes. Several other issues with these rifles include gun jamming, oil leakage etc. Thus AK 203 will replace them as they can be used in high altitudes. **Hence statement 2 is incorrect.**
- It is jointly produced by India and Russia. They had inked an agreement in **2021 for the procurement of AK 203 assault rifles** through Korwa Ordnance Factory in Uttar Pradesh's Amethi district. The deal has a clause for complete technology transfer and the rifles will also be exported to friendly foreign nations. **Hence statement 3 is incorrect.**

Q. 5) Consider the following statements

1. The S-400 Triumpf is a mobile, air-to-air missile system (SAM) designed by Russia.
2. The Terminal High Altitude Area Defense (THAAD) is a transportable, ground-based anti-ballistic missile defence system designed by the USA.
3. Iron dome air defence system was developed by USA and is deployed in Israel

Choose the correct code:

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

Q.5) Solution: (b)

Explanation:

- The S-400 Triumf is a mobile, surface-to-air missile system (SAM) designed by Russia. **Hence statement 1 is incorrect.**
- The S-400 Triumf is the most dangerous operationally deployed modern long-range SAM (MLR SAM) in the world. **can engage all types of aerial targets** including aircraft, unmanned aerial vehicles (UAV), and ballistic and cruise missiles within a range of 400km, at an altitude of up to 30km.
- **The Terminal High Altitude Area Defense (THAAD) is a transportable, ground-based anti-ballistic missile** defence system designed by the USA. **Hence statement 2 is correct.**
- It was developed by the state-run Rafael Advanced Defense Systems and Israel Aerospace Industries and was deployed in 2011. Rafael claims a success rate of over 90%, with more than 2,000 interceptions, however experts agree the success rate is over 80%. **Hence statement 3 is incorrect**

Q. 6) Consider the following statements about iDEX

1. It aims to support projects requiring support beyond Rs. 10 crores up to Rs. 100 crores.
2. It is an ecosystem to foster innovation & technology development in defence and aerospace by engaging innovators & entrepreneurs.
3. It provides funding/grants to Micro Small and Medium Enterprises (MSMEs), start-ups, individual innovators, R&D institutes, and academia.

Choose the correct code:

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

d) 1, 2 and 3

Q.6) Solution: (b)

Explanation:

- iDEX aims to support projects requiring support beyond Rs. 1.5 crores up to Rs. 10 crores. Hence statement 1 is incorrect.
- iDEX was launched to provide wider publicity and better visibility of iDEX activities and enable more efficient running of future challenges through better information management.
- It is an ecosystem to foster innovation & technology development in defence and aerospace by engaging innovators & entrepreneurs. Hence statement 2 is correct.
- It provides funding/grants to Micro Small and Medium Enterprises (MSMEs), start-ups, individual innovators, R&D institutes, and academia. Hence statement 3 is correct.

Q. 7) Consider the following statements regarding the Integrated Guided Missile Development Programme (IGMDP)

1. Prithvi is a short-range surface-to-surface ballistic missile.
2. Trishul is a long-range surface-to-air missile.
3. Akash is air to surface ballistic missile
4. Agni is an intermediate-range surface-to-surface ballistic missile.

Choose the correct code:

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

Q.7) Solution: (d)

Explanation:

The Integrated Guided Missile Development Programme (IGMDP) brought together the country's scientific community, academic institutions, R&D laboratories, industries and the three defence services in giving shape to the strategic, indigenous missile systems. It formally got the approval of the Indian government on July 26, 1983. It was the brainchild of renowned scientist Dr APJ Abdul Kalam and was intended to attain self-sufficiency in the field of missile technology.

The missiles developed under IGMDP are -

- Prithvi is a short-range surface-to-surface ballistic missile. **Hence statement 1 is correct.**
- Trishul is a short-range low-level surface-to-air missile. **Hence statement 2 is incorrect.**
- Akash is a medium-range surface-to-air missile. **Hence statement 3 is incorrect.**
- Agni is an intermediate-range surface-to-surface ballistic missile. **Hence statement 4 is correct.**

Q. 8) Consider the following statements

1. The Defence Research and Development Organisation (DRDO) was established in 1958.
2. The Indian Space Research Organisation (ISRO) was established in 1947.
3. The Department of Space (DoS) was established in 1972.

Choose the correct code:

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

Q.8) Solution: (c)

Explanation:

- DRDO is the **Research and Development wing of the Ministry of Defence** with a vision to **empower India with cutting-edge defence technologies**. DRDO was formed in 1958 from the amalgamation of the then-already functioning Technical Development Establishment (TDEs) of the Indian Army and the Directorate of Technical Development & Production (DTDP) with the Defence Science Organisation (DSO). **Hence statement 1 is correct.**
- The Indian Space Research Organisation (ISRO) was established in 1969. ISRO is the space agency under the Department of Space of the Government of India, headquartered in the city of

Bengaluru, Karnataka. ISRO's vision is to harness space technology for national development while pursuing space science research and planetary exploration. **Hence statement 2 is incorrect.**

- The Department of Space was established in 1972. Its primary objective of promoting the development and application of space science and technology to assist in the all-around development of the nation. **Hence statement 3 is correct.**

Q. 9) Consider the following statements

1. Ballistic missile travel in projectile motion whereas Cruise missile travel in a straight line.
2. Ballistic missiles are short-range missiles whereas Cruise missiles are long-range missiles.
3. Cruise missiles are easy to detect as compared to Ballistic missiles due to their trajectory

Choose the correct code:

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

Q.9) Solution: (a)

Explanation:

- Ballistic missile travel in projectile motion whereas Cruise missile travel in a straight line. **Hence statement 1 is correct.**
- Ballistic missiles are long-range missiles (300km to 12,000km) whereas Cruise missiles are short-range missiles (up to 1000km). **Hence statement 2 is incorrect.**
- Cruise missiles remain within the atmosphere for the duration of their flight and can fly as low as a few meters off the ground. Flying low to the surface of the earth expends more fuel but makes a cruise missile very difficult to detect. On other hand ballistic missiles as they fly at very high altitude are easy to detect. **Hence statement 3 is incorrect.**

Q. 10) Consider the following statements about the Biological Weapons Convention 1975

1. It prohibits the development, production, acquisition, transfer, stockpiling, and use of biological and toxin weapons.
2. India is not a signatory to this convention as it seen as discriminatory in nature
3. It was the first multilateral disarmament treaty banning an entire category of Weapons of Mass Destruction (WMD).

Choose the correct code:

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

Q.10) Solution: (c)

Explanation:

- The Biological Weapons Convention prohibits the development, production, acquisition, transfer, stockpiling, and use of biological and toxin weapons. **Hence statement 1 is correct.**
- India is a signatory to the Convention. Rather India is not a signatory to Non Proliferation Treaty as it is seen as discriminatory to developing nations. **Hence statement 2 is incorrect.**
- It was the first multilateral treaty banning weapons of mass destruction. It is in force since 1975. **Hence statement 3 is correct.**

Q. 11) Which of the following is/are applications of drones?

1. Mapping of landslide areas
2. Aerial photography of journalism
3. Disaster management
4. Border control surveillance
5. Forecasting storms and hurricanes
6. Crop damage assessment

7. Inspection of active volcanoes

Choose the correct code:

- a) 1, 3, 4 and 7
- b) 1, 2, 4, 5 and 6
- c) 3, 4, 6 and 7
- d) 1, 2, 3, 4, 5, 6 and 7

Q.11) Solution: (d)

Explanation:

Applications of drones -

- Mapping of landslide areas
- Aerial photography of journalism
- Disaster management
- Border control surveillance
- Forecasting storms and hurricanes
- Crop damage assessment
- Inspection of active volcanoes

Hence option d is correct.

Q. 12) Consider the following statements about the Agni IV Missile

Q. 12) Consider the following statements about the Agni IV Missile

1. It is a nuclear-capable intercontinental ballistic missile.
2. It is a surface-to-air missile with a strike range of 10000 km

Choose the correct code:

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

d) Neither 1 nor 2

Q.12) Solution: (d)

Explanation:

- The Agni IV Missile is a nuclear-capable but not an intercontinental ballistic missile. It is developed by DRDO. **Hence statement 1 is incorrect.**
- It is a surface-to-surface missile with a strike range of 4,000km. It is a two-stage missile and its re-entry heat shield can withstand the temperature of over 4,000°. **Hence statement 2 is incorrect.**

Q. 13) Consider the following statements Mission Shakti Anti Satellite Weapons Test

1. It was a joint collaboration of the DRDO and ISRO.
2. It struck a predetermined target orbiting at a distance of 30000 km from the Earth's surface.
3. India became only the fourth country to carry out an anti-satellite missile test.

Choose the correct code:

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

Q.13) Solution: (c)

Explanation:

- Mission Shakti is a joint programme of the Defence Research and Development Organisation (DRDO) and the Indian Space Research Organisation (ISRO). **Hence statement 1 is correct.**
- It struck a predetermined target which was a redundant Indian satellite that was orbiting at a distance of 300 km from the Earth's surface. As per official sources, the satellite that had been knocked out was Microsat R, a micro-satellite launched by ISRO in January, 2019. **Hence statement 2 is incorrect.**
- The first anti-satellite test (ASAT) was carried out by the US military way back in 1959. The then Soviet Union followed a year later. Thereafter, the two countries carried out a series of such tests up till early 1980s. After that there was a lull, broken only by the Chinese test in 2007. India

became only the fourth country to carry out an anti-satellite missile test. **Hence statement 3 is correct.**

Q. 14) Consider the following statements about the 'DUSTLIK'

1. It is a naval exercise between India and Sri Lanka.
2. It focuses on joint counter-terrorist operations in mountainous areas.
3. The first edition of this exercise was held in 2019.

Choose the correct code:

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

Q.14) Solution: (b)

Explanation:

- The DUSTLIK is a military exercise between India and Uzbekistan. **Hence statement 1 is incorrect.**
- It's a 14-day long joint exercise that focuses on joint counter-terrorist operations in the mountainous and semi-urban scenario under the UN mandate and will include field training exercises, combat discussions, lectures, and demonstrations and culminate with a validation exercise. **Hence statement 2 is correct.**
- Both sides will jointly train, plan and execute a series of tactical drills for the neutralisation of likely threats while learning to exploit new-generation equipment and technology for conducting joint operations.
- The first edition of this exercise was held in 2019. It was held in Uzbekistan. **Hence statement 3 is correct.**
- It recently took place in Foreign Training Node, Pithoragarh (Uttarakhand).

Q. 15) Consider the following statements

1. India has conducted one nuclear test since independence.
2. India adopted a **doctrine of 'No First Use' (NFU)** in 1975 after its first test.
3. India is yet to achieve its nuclear triad

Choose the correct code:

- a) 1 only
- b) 2 only
- c) 3 only
- d) None of the above

Q.15) Solution: (d)

Explanation:

- India has conducted two nuclear tests since its independence. Its **first nuclear test was in 1974** and the **second nuclear test was in 1998**. Hence **statement 1 is incorrect**.
- India adopted a **doctrine of 'No First Use' (NFU)** of nuclear weapons in January 2003. Hence **statement 2 is incorrect**.
- It states that **India will use the weapon only in retaliation to a nuclear attack on Indian territory or against Indian forces anywhere**.
- The nuclear triad is a three-sided military-force structure consisting of land-launched nuclear missiles, nuclear-missile-armed submarines, and strategic aircraft with nuclear bombs and missiles. India has achieved its nuclear triad in 2018. Hence **statement 3 is incorrect**.

Q. 16) Consider the following statements

1. The project BOLD-QIT under the CIBMS (Comprehensive Integrated Border Management System) aims to install technical systems on Indo-Bangla border.
2. The CIBMS is a robust system which seamlessly integrates human resources, weapons, and high-tech surveillance equipment.

Choose the correct code:

- a) 1 only

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

Q.16) Solution: (c)

Explanation:

- The project **BOLD-QIT** under the **CIBMS (Comprehensive Integrated Border Management System)** aims to **install technical systems** in Indo-Bangla borders. **Hence statement 1 is correct.**
- It equips with **different kinds of sensors in the unfenced riverine area of the Brahmaputra and its tributaries.**
- The CIBMS is a robust system which seamlessly integrates human resources, weapons, and high-tech surveillance equipment. **Hence statement 2 is correct.**
- CIBMS is being implemented since 2016 and has three components which are using several different devices for surveillance, efficient and dedicated communication network and data storage for a composite picture.

Q. 17) Consider the following statements about Multilateral Export Control Regimes (MECR)

1. These are independent of the United Nations and their regulations apply only to members.
2. The Nuclear Suppliers Group and the Australia Group are two such MECRs.
3. India is a member of Nuclear Supplier Group and Australia Group .

Choose the correct code:

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

Q.17) Solution: (b)

Explanation:

- Multilateral Export Control Regimes (MECR) are independent of the United Nations and their regulations apply only to members. **Hence statement 1 is correct.**
- The Nuclear Suppliers Group and the Australia Group are two of the four such MECRs. The other two are the Wassenaar Agreement and the Missile Technology Control Regime. **Hence statement 2 is correct .**
- India is a member of the three MECRs. India is not a member of the Nuclear Suppliers Group. **Hence statement 3 is incorrect.**
- The Nuclear Suppliers Group (NSG), for the control of nuclear-related technology.
- The Australia Group (AG) for control of chemical and biological technology that could be weaponized.
- The Missile Technology Control Regime (MTCR) for the control of rockets and other aerial vehicles capable of delivering weapons of mass destruction.
- The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies.

Q. 18) Consider the following statements about Operation Namkeen

1. It was launched to interdict narcotic drugs.
2. It was launched by the Directorate of Revenue Intelligence (DRI).

Choose the correct code:

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

Q.18) Solution: (c)

Explanation:

- **Operation Namkeen** was launched to interdict narcotic drugs. **Hence statement 1 is correct.**
- **It was launched by the Directorate of Revenue Intelligence (DRI).** Hence statement 2 is correct.

- DRI is an Indian intelligence agency, an anti-smuggling intelligence, investigations and operations agency. It Functions under Ministry of Finance. DRI is run by officers from the Central Board of Indirect Taxes and Customs (CBIC).
- DRI works to secure India's national and economic security by preventing the outright smuggling of contraband such as firearms, gold, narcotics, fake Indian Currency notes, antiques, wildlife and environmental products.

Q. 19) Consider the following statements about the 'Thermonuclear Bomb'

1. Its primary stage is a nuclear fusion reaction while secondary stage is of nuclear fission reaction
2. They are less powerful when compared to atomic bombs
3. The first full-scale thermonuclear test was carried out by the United States

Choose the correct code:

- a) 1 only
- b) 2 only
- c) 3 only
- d) None

Q.19) Solution: (c)

Explanation

- Modern fusion weapons consist essentially of two main components: a nuclear fission primary stage and a separate nuclear fusion secondary stage containing thermonuclear fuel: the heavy hydrogen isotopes deuterium and tritium, or in modern weapons lithium deuteride. For this reason, thermonuclear weapons are often colloquially called hydrogen bombs or H-bombs **Hence statement 1 is incorrect.**
- The uncontrolled chain reaction that is self-sustaining under high temperatures takes place through a **process known as nuclear fusion.**
- Thermonuclear bombs are also called hydrogen bombs as the fuel used is isotopes of hydrogen.
- The atomic bomb gets its destructive property from nuclear fission reactions or the combination of nuclear fission or fusion reactions.

- **Nuclear fission** is a process in which the nucleus of an atom splits into two or smaller nuclear fission products and usually some by-product particles.
- They are more powerful when compared to atomic bombs. **Hence statement 2 is incorrect.**
- The first full-scale thermonuclear test was carried out by the United States in 1952; the concept has since been employed by most of the world's nuclear powers in the design of their weapons. **Hence statement 3 is correct.**

Q. 20) Consider the following statements

1. INS Tarkash is a Talwar-class frigate.
2. INS Vikrant is India's second indigenously developed aircraft carrier.
3. INS Vishal is India's first indigenously developed aircraft carrier.

Choose the correct code:

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

Q.20) Solution: (a)

Explanation:

- INS Tarkash is a Talwar-class frigate. **Hence statement 1 is correct.**
- INS Vikrant is India's first indigenously developed aircraft carrier. **Hence statement 2 is incorrect.**
- INS Vishal is India's second indigenously developed aircraft carrier. **Hence statement 3 is incorrect.**

Q.21) Consider the following statements about Manthan platform recently seen in news

1. It is an initiative of The Office of the Principal Scientific Adviser (PSA) to the Government of India (GoI)
2. It is an India's exclusive platform for driving R&D collaboration at scale and achieving India's scientific missions and UN SDGs.

Choose the incorrect statement:

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

Q.21) Solution (d)

Explanation:

- The **Office of the Principal Scientific Adviser (PSA) to the Government of India (GoI)**; entrusted with the vision to enable and empower all spheres of science and technology within the country, announced the launch of the Manthan platform. **Hence statement 1 is correct.**
- Led by the Office of PSA, Manthan can potentially change the landscape of science and technology-based social impact innovation and solutions in India.
- Manthan is **India's exclusive platform for driving R&D collaboration at scale and achieving India's scientific missions and UN SDGs. Hence statement 2 is correct.**
- Manthan platform, aims to promote collaboration at scale between industry and the scientific research and development ecosystem to help meet India's sustainability goals in alignment with the UN defined Sustainable Development Goals (SDG) charter.

Source: [CLICK HERE](#)

Q.22) Consider the following statements about Central Consumer Protection Authority

1. CCPA is a regulatory body established in 2020 based on the provisions of the Consumer Protection Act, 2019.
2. CCPA has suo motu powers to inquire or investigate into matters relating to violations of consumer rights or unfair trade practices.
3. The composition of CCPA includes a Chief Commissioner as head, and only two other commissioners as members.

Choose the correct statements:

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

Q.22) Solution (a)

Explanation:

- CCPA is a **regulatory body established in 2020 based on the provisions of the Consumer Protection Act, 2019. Hence statement 1 is correct.**
- CCPA works under the administrative control of the **Ministry of Consumer Affairs.**
- The objective of the Central Consumer Protection Authority (CCPA) is to promote, protect and enforce the rights of consumers as a class.
- Powers: The CCPA will have the powers to inquire or investigate into matters relating to violations of consumer rights or unfair trade practices suo motu, or on a complaint received, or on a direction from the central government. **Hence statement 2 is correct.**

Central Consumer Protection Authority shall consist of following members appointed by Central Government.

- **Chief Commissioner**
- **Two Commissioners. One commissioner each will represent for goods and services. Hence statement 3 is correct.**

Source: [CLICK HERE](#)

Q.23) 'NIPAM', an initiative of the Government of India, aims at?

- a) Imparting Intellectual Property (IP) awareness and basic training to 1 million students
- b) Providing affordable and quality education to the citizens for free
- c) To conduct Biogeochemical and climate change research in polar and cryosphere regions.
- d) Providing financial and technical assistance to start-up entrepreneurs to find innovative solutions to plastic pollution problem

Q.23) Solution (a)

Explanation:

- National Intellectual Property Awareness Mission (NIPAM) has achieved **target of imparting Intellectual Property (IP) awareness and basic training to 1 million students** on 31st July 2022, ahead of the deadline which was 15 August 2022.
- NIPAM, a **flagship program to impart IP awareness and basic training**, was launched on 8 Dec 2021 as a part of "Azadi Ka Amrit Mahotsav" celebrations.
- The program is being **implemented by Intellectual Property Office, the Office of Controller General of Patents, Designs and Trade Marks (CGPDTM), Ministry of Commerce and Industry.**

Source: [CLICK HERE](#)

Q.24) Consider the following statements about Armed Forces Tribunal (AFT)

1. It is a military tribunal with the power of adjudication or trial of disputes and complaints related to commission, appointments, enrolments and conditions of service.
2. The Tribunal is empowered to adjudicate appeals against any sentence passed by a court-martial.
3. An appeal against the AFT orders does not lie before the High Courts.

Choose the incorrect statements:

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

Q.24) Solution (c)

Explanation:

- Armed Forces Tribunal was established in August 2009 by the **Armed Forces Tribunal Act 2007.**
- It is a military tribunal with the power of **adjudication or trial of disputes and complaints related to commission, appointments, enrolments and conditions of service.** Hence statement 1 is correct
- The Tribunal is empowered to **adjudicate appeals against any order, decision, finding or sentence passed by a court-martial or any related matter.** Hence statement 2 is correct
- It is also empowered to grant bail to an accused who is in military custody.
- In January 2020, the **Supreme Court made it clear that the verdicts of the Armed Forces Tribunals (AFT) can be challenged before the high courts.** Hence statement 3 is not correct
- In 2015, a Supreme Court bench had held that AFT verdicts could not be challenged before the high courts.

- It had also said that an appeal against the AFT orders would lie before the apex court but only if a point of law of general public importance is involved.

Source: [CLICK HERE](#)

Q.25) Consider the following statements about Malvinas Island

1. It is located to the west of the Strait of Magellan.
2. It is an internally self-governing overseas territory of the United Kingdom and is located in the Pacific Ocean.
3. It is a disputed territory between the UK and Argentina.

Choose the correct statements:

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

Q.25) Solution (c)

Explanation:

Malvinas Island

- **Falkland Islands, also called Malvinas Islands or Spanish Islas Malvinas, internally selfgoverning overseas territory of the United Kingdom in the South Atlantic Ocean. Hence statement 2 is correct**
- It lies **northeast of the southern tip of South America** and a similar distance east of the Strait of Magellan. **Hence statement 1 is not correct**
- The capital and major town is Stanley, on East Falkland.
- It is a disputed Island between the **UK and Argentina. Hence statement 3 is correct**



Source: [CLICK HERE](#)

Q.26) X, Y and Z ran a 50 m race. The time taken by X was recorded by watch W1 and the time taken by Y and Z was recorded by watch W2. The time taken by X, Y and Z to complete the race according to the respective watches used was 5, 6 and 3 seconds respectively. W2 is a faulty clock and loses time uniformly. If X beats Y by 10 m, what was the speed of Z during the race?

- a) 26
- b) 36
- c) 16
- d) 56

Q.26) Solution (c)

Explanation:

Speed of X = $50/5 = 10$ m/s Speed of Y = $40/5 = 8$ m/s Time taken by Y to finish the race = $50/8 = 6.25$ sec

It is now known that the faulty clock lost time and has shown 6s instead of 6.25s for Y. Similarly the time taken by Z = $3 \times 6.25/6 = 3.125$ sec

Speed of Z = $50/3.125 = 16$ m/sec

Q.27) There are 35 steps in a temple. By the time Chithra comes down two steps, Madhu goes up one step. If they start simultaneously and keep their speed uniform, then at which step from bottom will they meet.

- a) 9th
- b) 11th
- c) 13th
- d) None of the above

Q.27) Solution (d)

Explanation:

After 11 times, Chitra will be on the 13th step from the bottom.

After 11 times, Madhu will be on the 12th step from the bottom.

So, they will not meet on the same step.

Q.28) Arman was standing on a bridge and precisely 5m away from the centre of the bridge. He saw a train coming from the end that was nearest to him. Seeing it, he ran towards the train and managed to jump off the track when the train was 2m away from the bridge. However, if he would have run in the opposite direction, the train would have hit him 2m before the end of the bridge. If the speed of train is four times that of Arman, what is the length of the bridge in meters?

- a) 32 metres
- b) 28 metres
- c) 35 metres
- d) 25 metres

Q.28) Solution (a)

Explanation:

Let x be the distance of train from bridge, $2l$ be the length of the bridge and s be the speed of cow

Then according to the question

$$(x-2)/4s = (l-5)/s$$

$$4l-a = 18 \text{ ----- (1)}$$

Also

$$(a+2l-2)/4s = (l+5-2)/s$$

$$a-2l = 14 \text{ ----- (2)}$$

On adding (1) and (2), we get

$$2l = 32$$

Thus the length of the bridge is 32 meters.

Q.29) Two buses start from a bus terminal with a speed of 20km/h at interval of 10minutes. What is the speed of a man coming from the opposite direction towards the bus terminal if he meets the buses at interval of 8 minutes?

- a) 3 km/h
- b) 4 km/h
- c) 5 km/h
- d) 7 km/h

Q.29) Solution (c)

Explanation:

Let Speed of the man is x kmph.

Distance covered in 10 minutes at 20 kmph = distance covered in 8 minutes at $(20 + x)$ kmph.

$$\text{Or, } 20 \cdot (10/60) = (8/60) \cdot (20+x)$$

$$\text{Or, } 200 = 160 + 8x$$

Or, $8x = 40$

Hence, $x = 5\text{kmph}$.

Read the following passage and answer the item that follow. Your answer to these items should be based on the passages only

Passage 1

Cheapness and its cinematic markers, such as hand-held camera work and low or high-contrast light, aren't themselves guarantors of a tone of artistic authenticity. In fact, they're often misused by filmmakers short of inspiration as badges of sincerity that take the place of actual artistry. The theatrical realism of many older, ostensibly classic movies have dated terribly and reflect the very exclusions and compromises of the system that produced them. Only the ingenious exertions and inventions of a slender minority of great filmmakers could circumvent and override them. Yet, critics fetishize the styles of studio-era movies and take them for an enduring and immutable aesthetic standard – as if, with an appreciation of Shakespeare came a comparable fixation on lesser Elizabethans and a disdain for latter-day dramatists for not writing in iambic pentameter.

Q.30) Which of the following best summarises the passage?

- a) Nostalgia for movies as they were made in the past converges to nostalgic exaltation of their production methods.
- b) Rather than imitating the styles of studio-era movies in a bid to achieve artistic authenticity, filmmakers need to focus on inventive ideas and realistic themes.
- c) Only the brilliance and resourcefulness of small minority of great filmmakers could overcome the hurdles posed by budget constraints in studio-era movies.
- d) The veneration of the styles and production methods of low-budget movies of the studio-era as the ideal aesthetic standard is misguided.

Q.30) Solution (d)

Explanation:

Let us see the options one-by-one to see which one summarizes the paragraph best:

Option a: From what the paragraph says, we know that the above is true. However, this does not fully summarize the main idea of the paragraph, which argues emphatically that this nostalgia is misplaced. So, option a is not the right one to sum up the paragraph as it only partially covers the main idea of the paragraph.

Option b: The paragraph given does talk about filmmakers trying to copy the styles of studio-era movies, as if this alone is enough to declare their work as artistic. However, the focus of the paragraph is not what filmmakers need to do. Rather, the focus is on the mistaken notion that low budget filmmaking of the studio-era is an immutable standard for artistic authenticity. Further, the paragraph makes no mention of the need for filmmakers to centre their attention on “realistic themes” as mentioned in the line above. So option b is not the right one to sum up the paragraph.

Option c: Again, the paragraph does say this, but this is not the main idea of the paragraph and certainly does not summarize it.

Option d: The whole point of the paragraph is to say that the undue fetish for the styles and production of low-budget movies of the studio-era and the idea that this is the immutable artistic standard is misguided. So this is the right option to sum up the paragraph.