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IAS MENTOR SOLUTION WEEKLY TEST-5



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To bring Socio-Economic justice through most powerful weapon 'EDUCATION'

Description

IAS MENTOR is an education center founded by **Mr. SAHBAN ALI**, Advocate, Founding Member & Founding Member & Ex. Director of Education360.Pvt .Ltd, one of the best teacher & mentor for CIVIL SERVICES EXAMS- I.A.S./P.C.S.

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1.a NAVIC

- The navigation system will be known as NAVIC "Navigation with Indian Constellation."
- The system is a constellation of 7 satellites and will be useful for navigation.

2.d Neither 1 nor 2

- The Bill establishes the National Compensatory Afforestation Fund under the Public Account of India, and a State Compensatory Afforestation Fund under the Public Account of each state.
- These Funds will receive payments for: (i) compensatory afforestation, (ii) net present value of forest (NPV), and (iii) other project specific payments.
- The National Fund will receive 10% of these funds, and the State Funds will receive the remaining 90%.
- These Funds will be primarily spent on afforestation to compensate for loss of forest cover, regeneration of forest ecosystem, wildlife protection and infrastructure development
- The Bill also establishes the National and State Compensatory Afforestation Fund Management and Planning Authorities to manage the National and State Funds.
- At present, an ad hoc National CAMPA (National Compensatory Afforestation
- Fund Management and Planning Authority) and ad hoc State CAMPAs, established by government orders, receive money collected for compensatory afforestation.
- Once the National Fund is created, money collected by state governments which has been placed with the existing National

CAMPA will be transferred to the National Fund. Other sources of funds for the National Fund will be: (i) 10% of the funds collected for compensatory afforestation by states each year; and (ii) grants-in-aid/other sums received by, and loans/borrowings taken by the National CAMPA.

- The major sources of funds for the State Fund will be: (i) unspent balances lying with existing State CAMPAs; (ii) money transferred from the National Fund to the State Funds (90% of the money transferred from the existing National CAMPA to the National Fund); (iii) money received for compensatory afforestation; and (iv) grantsin-aid/other sums received by, and loans/borrowings taken by the State CAMPA.
- The balance with both funds will be non-lapsable and get interest as per a rate declared by the central government on a yearly basis.
 3.b Only 2
- Article 348 (1) of the Constitution of India provides that all proceedings in the Supreme Court and in every High court shall be in English Language until Parliament by law otherwise provides.
- Under Article 348 (2), the Governor of the State may, with the previous consent of the President, authorize the use of the Hindi language or any other language used for any official purpose of the State, in the proceedings of the High Court having its principal seat in that State provided that decrees, judgments or orders passed by such High Courts shall be in English.
- Section 7 of the Official Languages Act, 1963, provides that the use of Hindi or official language of a State in addition to the English language may be authorized, with the consent of the President of India, by the

Governor of the State for purpose of judgments, etc. made by the High Court for that State.

 Government had taken up with the Supreme Court of India the proposals of the Governments of Chhattisgarh, Gujarat, Tamil Nadu and Karnataka seeking consent of the President of India for allowing regional languages in the proceedings of their High Courts. However, the Full Court of the Supreme Court disapproved these proposals.

4.d.All of the above

- Ephedrine is a medication used to prevent low blood pressure during spinal anesthesia. It has also been used for asthma, narcolepsy, and obesity but is not the preferred treatment.
- Both ephedrine and pseudoephedrine increase blood pressure and act as bronchodilators, with pseudoephedrine having considerably less effect.
- Ephedrine was first isolated in 1885. It is on the WHO Model List of Essential Medicines, the most important medications needed in a basic health system. It is available as a generic medication.
- Ephedrine drug is an ingredient used in manufacturing Mephedrone powder, also known as party drug Meow Meow. Ephedrine powder is used for sniffing as recreational drug.
- Common side effects include, trouble sleeping, anxiety, headache, hallucinations, high blood pressure, fast heart rate, loss of appetite, and inability to urinate. Serious side effects include stroke, heart attack, and abuse.

5. Only 2

• Septicemia (or, sepsis) is the leading cause for deaths in hospitals worldwide.

- Sepsis is caused by the overwhelming response of the immune system to an infection.
- The main causative agents of sepsis are Gram-negative bacteria due to their predominance in the normal intestinal flora and the environment. Specifically, it is the endotoxin, a major constituent of the Gramnegative bacterial cell wall that causes sepsis.
- In lieu of expensive and time-consuming methods for diagnosis of sepsis, Prof. Shalini Gupta from the Department of Chemical Engineering, IIT Delhi and Dr. Venkataraman Sritharan from Hyderabad have developed a low-cost, disposable, point of care device for bedside use for sepsis diagnosis.
- The device is a colorimetric rapid card test to detect endotoxin levels in human serum sample.
- A commonly used antibiotic colistin is combined with (conjugated) gold nanoparticles to act as a detection probe. They used the drug to detect endotoxin as they did not want to use the antibody detection method and it also reduces the cost of testing.
- The device which took about three years to develop won the Gandhian Young Technology Innovation award in March 2016.
- 6. Solution: d.

7. a.

"... "A roadmap to tackle the challenge of antimicrobial resistance", was the first ever joint meeting of medical societies in India addressing antibiotic resistance, held in Chennai in August 2012. The high antimicrobial resistance rate in the country and the inspiration received from the on-going international efforts prompted Indian doctors to organise the Chennai meeting. Considering

the large number of medical societies in India, ensuring participation of all major societies, as well as representatives from of governmental bodies such as the office of Drugs Controller General of India, Medical Council of India, National Accreditation Board of Hospitals, Indian Council of Medical Research, was a major achievement."

"The efforts resulted in a strategy of Indian medical societies and policy makers to combat the serious menace of antimicrobial resistance in the country. Shortly after the meeting, representatives of major societies joined together to compile a consensus document on

- tackling antimicrobial resistance."
 - 8. Solution: b.
 - 9. Solution: d.

http://indianexpress.com/article/explained/ narendra-modi-cheraman-juma-masjidreplicasaudi-king-gift/

10. Solution: a.

Tadoba Tiger Reserve – Maharashtra "What is conspicuous, however, is the lack of political will to remove industrial pressures on forests. The proposal to widen National Highway 7 in Central India, for instance, has become controversial because of the dreadful impact it would have on tigers in the Kanha-Pench and Kanha-Nagzira corridors in Maharashtra."

http://www.thehindu.com/opinion/editorial/

keeping-tigers-in-the-greenzone/article8467554.ece

11. Solution: a.

http://www.thehindu.com/business/Econom y/world-output-faces-risk-of-39-drop-by-2021/article8472298.ece

12. Solution: a.

CS(P) "Kalamkari painting is a type of Indian folk textile art that involves free hand drawing and painting or printing on cloth, mostly cotton. Derived from the Persian language meaning 'drawing or crafting with pen', Kalamkari is an ancient form of painting that developed in India over a period of 3,000 years. Kalahasti and Machilipatnam in Andhra Pradesh, the nerve centres of this art continue to be beehives of Kalamkari activity."

13. Solution: c.

14. Solution: a.

http://pib.nic.in/newsite/PrintRelease.aspx?

relid=141137

15. Solution (c)

The following are the features borrowed by Indian Constitution from the Canadian Constitution

- 1) Federation with a strong Centre
- 2) Vesting of residuary powers in the Centre
- 3) Appointment of state governors by the Centre (not Office of Governor)
- 4) Advisory jurisdiction of the Supreme Court

 Office of Governor was borrowed from Government of India Act of 1935

Source: Refer Chapter 3: Salient Features of the Constitution, Indian Polity by Laxmikanth

16. Solution (d)

• It was in the Minerva Mills case (1980), the Supreme Court held that 'the Indian Constitution is founded on the bedrock of the balance between the Fundamental Rights and the Directive Principles'.

Source: Refer Chapter 3: Salient Features of the Constitution, Indian Polity by Laxmikanth

17. Solution (b)

According to Article 12, the State includes the following:

- (a) Government and Parliament of India, that is, executive and legislative organs of the Union government.
- (b) Government and legislature of states, that is, executive and legislative organs of state government.
- (c) All local authorities that is, municipalities, panchayats, district boards, improvement trusts, etc.
- (d) All other authorities, that is, statutory or non-statutory authorities like LIC, ONGC, SAIL, etc.

Thus, State has been defined in a wider sense so as to include all its agencies. It is the actions of these agencies that can be challenged in the courts as violating the Fundamental Rights. According to the Supreme Court, even a private body or an agency working as an instrument of the State falls within the meaning of the 'State' under Article 12.

18. Solution (c)

Explanation:

- Article 368 in Part XX of the Constitution deals with the powers of Parliament to amend the Constitution and its procedure.
- It states that the Parliament may, in exercise of its constituent power, amend by way of addition, variation or repeal any provision of the Constitution in accordance with the procedure laid down for the purpose.
- For the removal of doubts, it is hereby declared that there shall be no limitation whatever on the constituent power of Parliament to amend by way of addition, variation or repeal the provisions of this Constitution under this article.
- However, the Supreme Court in *Minerva Mills Ltd. and Others Vs. Union of India and Others* (1980), declared the above section as invalid and unconstitutional.
- (Refer the note given under clarifications below)

Source: Chapter 10 - Amendment of the Constitution, Laxmikanth 19. Solution (c)

Explanation:

• Self-explanatory (both statements are correct)

Source: Chapter 10 - Amendment of the Constitution, Laxmikanth

20. Solution (d)

Explanation: The constitutional amendment bill must be passed in each House by a special majority, that is, a majority (that is, more than 50 per cent) of the total membership of the House and a majority of two-thirds of the members of the House present and voting.

• In 1st statement, it is explaining about Absolute Majority (hence statement 1 is wrong)

• There is no provision of joint sitting, for the purpose of deliberation and passage of constitutional amendment bill (so statement 2 is also wrong)

Source: Chapter 10 - Amendment of the Constitution, Laxmikanth 21. Solution (b)

22. Solution (b)

According to the constitution of Kashmir, Kashmir is an integral part of India.

23. Solution (c)

Explanation:

- The Indian federal system is based on the 'Canadian model' and not on the 'American model'. The 'Canadian model' differs fundamentally from the 'American model' in so far as it establishes a very strong centre.
- The Indian federation resembles the Candian federation
- a) in its formation (i.e., by way of disintegration);
- b) in its preference to the term 'Union' (the Canadian federation is also called a 'Union'); and
- c) in its centralising tendency (i.e., vesting more powers in the centre vis-a-vis the states)

24. Solution (d)

Explanation:

All the given statements are correct – self explanatory

25. Solution (c)

Explanation:

- The Constitution of India provides for a federal system of government in the country.
- The framers adopted the federal system due to two main reasons—the large size of the country and its socio-cultural diversity. They realised that the federal system not only ensures the efficient

governance of the country but also reconciles national unity with regional autonomy.

- However, the term 'federation' has no where been used in the Constitution.
- The Constitution established a dual polity consisting the Union at the Centre and the states at the periphery. Each is endowed with sovereign powers to be exercised in the field assigned to them respectively by the Constitution.

26. Solution (a)

Some of the features required for special status are:

- i. hilly and difficult terrain;
- ii. low population density or sizeable share of tribal population;
- iii. strategic location along borders with neighbouring countries;
- iv. economic and infrastructural backwardness; and
- v. non-viable nature of state finances.

Telangana has not been given any special status. However, Andhra Pradesh has requested for the same. The decision has not been taken yet. GoI has said that there is no further need of giving 'Special Category Status' but, the previous status has not been officially abolished. So the question is valid as far as polity is concerned.

27. Solution (c)

On the recommendation of Governor, the President can declare the State Emergency and can take the responsibility of governance of state.

28. Solution (b)

As per the procedure laid out by article 368 for amendment of the Constitution, an amendment can be initiated only by the introduction of a Bill in either House of Parliament. The Bill must then be passed in each House by a majority of the total membership of thatHouse and by a majority of not less than two-thirds of the members of that House

present and voting. There is no provision for a joint sitting in case of disagreement between the two Houses. Total membership in this context has been defined to mean the total number of members comprising the House irrespective of any vacancies or absentees on any account vide Explanation to Rule

159 of the Rules of Procedure and Conduct of Business in Lok Sabha. The Bill, passed by the required majority, is then presented to the President who shall give his assent to the Bill.

29. **Solution (b)**

- Prime Minister was the Ex officio Chairman of the Planning commission.
- Chief Secretaries are not a part of NITI Aayog.
- **30. Solution: 4**
- 31. Answer: 3.
- 32. Answer: 2

There is no obligation on the part of the President to nominate two members to the Lok

Sabha if the Anglo Indian community is adequately represented in the Lok Sabha.

33. Solution (a)

A Cordillera is a system of mountain ranges often consisting of a number of more or less parallel chains. Eg. Rockies of North America, Himalayas of India etc.

34. Solution (c)

The Earth's **inner core** is the Earth's innermost part and according to seismological studies, it has been believed to be primarily a solid ball with a radius of about 1220 kilometers, or 768 miles (about 70% of the Moon's radius). It is composed of an iron–nickel alloy and some light elements. The temperature at the inner core boundary is approximately 5700 K.

The outer core was determined to be liquid from observations showing that compressional waves pass through it, but elastic shear waves do not – or do so only very weakly.

35. Solution (a)

Continental crust is much thicker than Oceanic crust. Continental crust is around 40 km thick on average and can reach up to 70-80 km thickness under high mountain chains. Oceanic crust is around 8-10km thick. Oceanic crust made of basalt is denser than continental crust. It plunges under continental crust during continental-oceanic convergence. This process is called subduction.

36. Solution (d)

There are three types of landforms- Primary, secondary and tertiary.

- Primary landforms are- continents and oceans
- Secondary- folded mountains, volcanoes, mid-oceanic ridges etc.
- Tertiary- v-shaped valleys, meanders, inselbergs, mushroom rocks etc.

Primary and secondary landforms are formed by endogenetic forces. Statement 2 and 3 are self explanatory.

37. Solution (d)

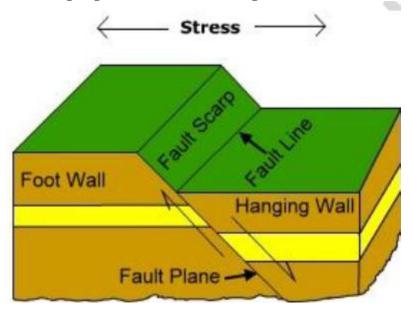
Both the statements are correct.

Orogeny and epeirogeny are both endogenetic forces. Epeirogeny acts in vertical direction pushing the whole continental landmass up or down. It is an extremely slow process.

Orogenetic force acts in horizontal direction, pushing the lithosphere plates. When these plates interact with each other, landforms like folds and faults are formed.

38. Solution (a)

This is the diagram of a normal fault. Due to tangential stress, the fault is created with hanging wall block sliding downwards forming a scarp on



footwall.

39. Solution (a)

Aeolian land forms are found in regions of the Earth where erosion and deposition by wind are the dominant geomorphic forces shaping the face of the earth. They are found usually in dry places.

Mushroom rocks are found in rocky deserts where winds keep cutting the base of a rock and the shape of the rock looks like a mushroom. Barchans are large sand dunes found in Sandy deserts like Sahara, Dasht e Kavir etc.

Rest are the example of fluvial landforms. i.e. landforms created by running water.

40. **Solution** (**b**)

Crystal formation depends on the rate of cooling of the rock. Since intrusive rock cools slowly, their crystals are well developed and have larger grains. Extrusive rocks are suddenly cooled hence they have smaller crystal grains.

Igneous rocks can be both crystalline and amorphous.

Fossils are not found in igneous rocks, hot lava burns all the organic content that comes in its way. Fossils are most commonly found in

sedimentary rocks. If these sedimentary rocks are metamorphosised then sometimes they are found in metamorphic rocks too.

41. **Solution (b)**

Explanation: Djibouti islands is located between Gulf of Aden and Red Sea (not Gulf of Suez)



42.Solution (c) National Park Location

- 1. Balphakram Meghalaya
- 2. Bison Tripura
- 3. Gorumara West Bengal
- 4. Mollem Goa
- 5. Nagarhole Karnataka
- 6. MG Marine NP A&N islands

7. Murlen Mizoram

43. Answer: 1

Because of the strong convection in the Equatorial region, the tropopause is pushed upward

there by increasing the height of troposphere in the Equators while it is not the case in the

Poles.

During summer season, the air gets heated up and creates low pressure on the ground thus

increasing the pressure gradient which propels the air movements upwards and in turn

pushing the tropopause upwards.

44. ANSWER:b. 2, 3

Explanation:

- This year government has introduced a new classification system for the Centre's spending.
- The new system divides Centrally Sponsored Schemes (CSS) into three categories: Core of the Core, Core, and Optional Schemes. This system is based on the recommendations of a sub-committee of chief ministers formed by Niti Aayog for the rationalisation of the CSS.
- Only Schemes/Programmes in CSS in key identified sectors will comprise the National Development Agenda.
- Amongst the Core Schemes, those for social protection and social inclusion should form the Core of the Core and be the first charge on available funds for the National Development Agenda.
- Under the new classification, eight schemes will be classified as Core
 of the Core. including MGNREGA and all the umbrella schemes for the
 upliftment of minorities, Scheduled Castes, and Scheduled Tribes.
- The Core schemes, 33 in number, include schemes as far-ranging as the Krishi Unnati Yojana, the Smart Cities programme, and the modernisation of the police force.

45.ANSWER:a NASA and Microsoft

Explanation:

- The U.S. space agency and tech giant Microsoft have teamed up to create 'Destination: Mars', a guided tour of Mars using the same Hololens headset technology that helps scientists plan the Curiosity rover's activities on Red Planet.
- It will offer people a guided tour of an area of Mars with astronaut Buzz Aldrin this summer in an interactive exhibit using the Microsoft HoloLens mixed reality headset.
- "Mixed reality" means virtual elements are merged with the user's actual environment, creating a world in which real and virtual objects can interact.
- The 'Destination: Mars' exhibit will open at NASA's Kennedy Space Center's visitor complex in Florida.
- Guests will "visit" several sites on Mars, reconstructed using real imagery from NASA's Curiosity Mars Rover, which has been exploring the Red Planet since August 2012.
- Aldrin, an Apollo 11 astronaut who walked on the moon in 1969, will serve as "holographic tour guide" on the journey.
- 'Destination: Mars' is an adaptation of OnSight, a Mars rover mission operations tool co-developed by Microsoft and JPL.
- A pilot group of scientists uses OnSight in their work supporting the Curiosity Mars rover's operations.

46. ANSWER: a. Proposal to share terrorist information between India and US

Explanation:

- The Homeland Security Presidential Directive (HSPD-6) is an agreement for exchange of terrorist screening information between the Terrorist Screening Centre (TCS) of the U.S. and a selected Indian security agency. The TCS has the database of 11,000 terror suspects.
- The database has names of terror suspects, their nationality, date of birth, photos, finger prints and passport number.

- Both RAW and IB objected to this proposal citing security and privacy concerns.
 - 47. ANSWER:.b. Tax Havens

Explanation:

• 'Panama papers' — a set of over 11 million leaked documents that reveal how the rich and the connected around the world used tax havens for salting away their wealth.

48. ANSWER: c.2, 3 and 4

Explanation:

For a startup to be recognized as one,

- It must be an entity registered/incorporated as
 - a) Private Limited Company under the Companies Act, 2013; or
 - b) Registered Partnership firm under the Indian Partnership Act, 1932; or
 - c) Limited Liability Partnership under the Limited Liability Partnership Act, 2008.
- Five years must not have elapsed from the date of incorporation/registration.
- Annual turnover (as defined in the Companies Act, 2013) in any preceding financial year must not exceed Rs. 25 crore.
- Startup must be working towards innovation, development, deployment or commercialisation of new products, processes or services driven by technology or intellectual property.
- The Startup must aim to develop and commercialise:
 - a) a new product or service or process; or
 - b) a significantly improved existing product or service or process that will create or add value for customers or workflow.
- The Startup must not merely be engaged in:
 - a) Developing products or services or processes which do not have potential for commercialisation; or
 - b) undifferentiated products or services or processes; or

- c) products or services or processes with no or limited incremental value for customers or workflow
- The Startup must not be formed by splitting up, or reconstruction, of a business already in existence.
- The Startup has obtained certification from the Inter-Ministerial Board, setup by DIPP to validate the innovative nature of the business, and (any one of the following conditions are met)
 - a) be supported by a recommendation (with regard to innovative nature of business), in a format specified by DIPP, from an incubator established in a post-graduate college in India; or b) be supported by an incubator which is funded (in relation to the project) from GoI as part of any specified scheme to promote innovation; or
 - c) be supported by a recommendation (with regard to innovative nature of business), in a format specified by DIPP, from an incubator recognized by GoI; or
 - d) be funded by an Incubation Fund/Angel Fund/Private Equity Fund/Accelerator/Angel Network duly registered with SEBI* that endorses innovative nature of the business; or
 - e) be funded by the Government of India as part of any specified scheme to promote innovation; or
 - f) have a patent granted by the Indian Patent and Trademark Office in areas affiliated with the nature of business being promoted.

DIPP may publish a 'negative' list of funds which are not eligible for this initiative.

49. ANSWER:d. 4312

Explanation:

• Make in India was launched in September 2014. However it caught attention and momentum in 2015-2016.

- Swachh Bharat was launched in October 2014 and is going strong since then.
- Digital India was launched on 1 July 2015
- Skill India was launched on 15 July 2015

50. ANSWER:c. 2, 3

Explanation:

The salient features of the Paris Agreement are as follows:

- The Paris Agreement acknowledges the development imperatives of developing countries. The Agreement recognizes the developing countries' right to development and their efforts to harmonize development with environment, while protecting the interests of the most vulnerable.
- The Paris Agreement recognizes the importance of sustainable lifestyles and sustainable patterns of consumption with developed countries taking the lead, and notes the importance of 'climate justice' in its preamble.
- The Agreement seeks to enhance the 'implementation of the Convention' whilst reflecting the principles of equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.
- The objective of the Agreement further ensures that it is not mitigationcentric and includes other important elements such as adaptation, loss and damage, finance, technology, capacity building and transparency of action and support
- Pre-2020 actions are also part of the decisions. The developed country
 parties are urged to scale up their level of financial support with a
 complete road map to achieve the goal of jointly providing US \$ 100
 billion by 2020 for mitigation and adaptation by significantly
 increasing adaptation finance from current levels and to further provide
 appropriate technology and capacity building support.