

1. Water can dissolve more substances than any other liquid because

- it is dipolar in nature
- it is a good conductor of heat
- it has high value of specific heat
- it is an oxide of hydrogen

Correct Option (a)

2. With reference to street-lighting, how do sodium lamps differ from LED lamps?

- Sodium lamps produce light in 360 degrees but it is not so in the case of LED lamps.
- As street-lights, sodium lamps have longer life span than LED lamps.
- The spectrum of visible light from sodium lamps is almost monochromatic while LED lamps offer significant colour advantages in street-lighting.

Select the correct answer using the code given below.

- 3 only
- 2 only
- 1 and 3 only
- 1, 2 and 3

Correct Option: (c)

Explanation

- Sodium lamps are omnidirectional that they emit light in 360 degrees, while led lamps emit light in 180

Hence this statement is correct.

<https://www.stouchlighting.com/blog/led-vs-hps-lps-high-and-low-pressure-sodium>

- Lifespan of LED is more than Sodium

Hence, this statement is incorrect.

<https://www.stouchlighting.com/blog/led-vs-hps-lps-high-and-low-pressure-sodium>

- Sodium lamps are monochromatic. And LEDs can be designed to generate the entire spectrum of visible light colors without having to use the traditional color filters required by traditional lighting

<https://www.mtholyoke.edu/~mpeterso/classes/phys301/laboratories/NaDoublet.html#:~:text=A%20sodium%20lamp%20contains%20vapor,surprisingly%20simple%20spectrum%2C%20almost%20monochromatic.>

This is correct statement.

3. The term 'ACE2' is talked about in the context of

1.
 - a. genes introduced in the genetically modified plants
 - b. development of India's own satellite navigation system
 - c. radio collars for wildlife tracking
 - d. spread of viral diseases

Correct Option: (d)

Explanation

- ACE 2 Angiotensin-converting enzyme 2 is an enzyme attached to the membrane of cells in the intestines, kidney, testis, gallbladder, and
- The angiotensin converting enzyme-2 (ACE-2) has been identified as the receptor for the SARS-CoV-2 viral

<https://www.frontiersin.org/articles/10.3389/fcimb.2020.00317/full>

4. Bisphenol A (BPA), a cause of concern, is a structural/key component in the manufacture of which of the following kinds of plastics?

1.
 - a. Low-density polyethylene
 - b. Polycarbonate
 - c. Polyethylene terephthalate
 - d. Polyvinyl chloride

Correct Option: (b)

Explanation

- Bisphenol A (BPA) is a chemical produced in large quantities for use primarily in the production of polycarbonate plastics and epoxy resins.

Source

<https://www.niehs.nih.gov/health/topics/agents/sya-bpa/index.cfm>

5. 'Triclosan', considered harmful when exposed to high levels for a long time, is most likely present in which of the following?

1.
 - a. Food preservatives
 - b. Fruit-ripening substances
 - c. Reused plastic containers
 - d. Toiletries

Correct Option: (d)

Explanation:

- Triclosan is an ingredient added to many consumer products intended to reduce or prevent bacterial contamination. It is added to some antibacterial soaps and body washes, toothpastes, and some cosmetics.

Source:

[https://www.fda.gov/consumers/consumer-updates/5-things-know-about-triclosan#:~:text=Triclosan%20is%20an%20ingredient%20added,and%20Drug%20Administration%20\(FDA\).](https://www.fda.gov/consumers/consumer-updates/5-things-know-about-triclosan#:~:text=Triclosan%20is%20an%20ingredient%20added,and%20Drug%20Administration%20(FDA).)

6. Which one of the following is a reason why astronomical distances are measured in light-years?

1.
 - a. Distances among stellar bodies do not change.
 - b. Gravity of stellar bodies does not change.
 - c. Light always travels in straight line.
 - d. Speed of light is always same.

Correct Option: (d)

Explanation

- Astronomical distances are measured in light-years as the speed of light is constant.
- A *light-year* is how astronomers measure distance in space. It's defined by how far a beam of light travels in one year – a distance of six trillion miles.

Source

<https://www.space.com/light-year.html#:~:text=Measuring%20in%20light%20years%20also,appeared%20exactly%20one%20year%20ago.>

7. We adopted parliamentary democracy based on the British model, but how does our model differ from that model?

1. As regards legislation, the British Parliament is supreme or sovereign but in India, the power of the Parliament to legislate is limited.
2. In India, matters related to the constitutionality of the Amendment of an Act of the Parliament are referred to the Constitution Bench by the Supreme Court.

Select the correct answer using the code given below.

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

Correct Option: (a)

Explanation

- Statement 1 is correct: Parliamentary sovereignty is a principle of the UK constitution. It makes Parliament the supreme legal authority in the UK, which can create or end any law. Parliament of India is a creation of the Constitution and hence for that reason itself, it has its limitations too.
- Statement 2 is incorrect: The Constitution (Forty-second Amendment) Act, 1976, inserted various articles in the Constitution to curtail, both directly and indirectly, the jurisdiction of the Supreme Court and the High Courts to review the constitutionality of laws.

Source

Statement 1:

<https://www.parliament.uk/about/how/role/sovereignty/>

Statement 2:

<https://www.legalserviceindia.com/legal/article-371-powers-functions-and-limitations-of-legislative-organs.html>

8. With reference to the Union Government, consider the following statements:

1. Gopalaswamy Iyengar Committee suggested that a minister and a secretary be designated solely for pursuing the subject of administrative reform and promoting it.
2. In 1970, the Department of Personnel was constituted on the recommendation of the Administrative Reforms Commission, 1966, and this was placed under the Prime Minister's charge.

Which of the statements given above is/are correct?

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

Correct Option (b)

Explanation

- **Statement 1 is incorrect:** Ayyangar was part of the 7-member drafting committee of the Indian constitution appointed on August 29, 1947. Sh. N. Gopalaswamy Ayyangar, in his Report namely 'Reorganization of the Machinery of Central Government' in 1950 recommended for the grouping of ministries, improvement in the capabilities of the personnel, and also in the working of the O&M Division.
- **Statement 2 is correct**

<https://darp.gov.in/about-department-0>

9. 'Right to Privacy' is protected under which Article of the Constitution of India?

- a. Article 15
- b. Article 19
- c. Article 21
- d. Article 29

Correct Option: (c)
Explanation

- Right to privacy is protected as an intrinsic part of the right to life and personal liberty under Article 21 and as a part of the freedoms guaranteed by Part III of the Constitution

Source: Lakshmikanth

10. Consider the following statements:

1. In India, there is no law restricting the candidates from contesting in one Lok Sabha election from three constituencies.
2. In 1991 Lok Sabha Election, Shri Devi Lal contested from three Lok Sabha constituencies.
3. As per the existing rules, if a candidate contests in one Lok Sabha election from many constituencies, his/her party should bear the cost of bye-elections to the constituencies vacated by him/her in the event of him/her winning in all the constituencies.

Which of the statements given above is/are correct?

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

Correct Option (B)
Explanation

- Statement 1 is incorrect: As per Section 33(7) of the RPA, one candidate can contest from a maximum of two constituencies (more constituencies were allowed until 1996 when the RPA was amended to set the cap at two constituencies).
- Statement 3 is incorrect: If a candidate is contesting from more than one constituency, he has to lodge a separate return of election expenses for every election which he has contested. The election for each constituency is a separate election. (Refer : Section 77 of the Representation of People Act, 1951)

Source

<https://eci.gov.in/important-instructions/>

https://mea.gov.in/Uploads/PublicationDocs/19169_Frequently_Asked_Questions_16-03-2009.pdf

11. The vegetation of savannah consists of grassland with scattered small trees, but extensive areas have no trees. The forest development in such areas is generally kept in check by one or more or a combination of some conditions. Which of the following are such conditions?

1. Burrowing animals and termites
2. Fire

3. Grazing herbivores
4. Seasonal rainfall
5. Soil properties

Select the correct answer using the code given below.

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

Correct Option: (C)
Explanation

- Savannas are defined based on vegetation structure, the central concept being a discontinuous tree cover in a continuous grass understorey. Fire, grazing herbivore and seasonal rainfall are behind the scarce forest development in the region.

Source

https://www.researchgate.net/publication/228872410_Effects_of_fire_and_herbivory_on_the_stability_of_savanna_ecosystems

12. With reference to the water on the planet Earth, consider the following statements:

1. The amount of water in the rivers and lakes is more than the amount of groundwater.
2. The amount of water in polar ice caps and glaciers is more than the amount of groundwater.

Which of the statements given above is/are correct?

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

Correct option (B)
Explanation

- Ocean water: 97.2 percent
- Glaciers and other ice: 2.15 percent
- Groundwater, : 0.61 percent
- Fresh water lakes: 0.009 percent
- Inland seas: 0.008 percent
- Soil Moisture: 0.005 percent
- Atmosphere: 0.001 percent

- Rivers: 0.0001 percent.

Source

<https://www.ngwa.org/what-is-groundwater/About-groundwater/information-on-earths-water>

13. Consider the following statements:

1. Moringa (drumstick tree) is a leguminous evergreen tree.
2. Tamarind tree is endemic to South Asia.
3. In India, most of the tamarind is collected as minor forest produce.
4. India exports tamarind and seeds of moringa.
5. Seeds of moringa and tamarind can be used in the production of biofuels.

Which of the statements given above are correct?

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

Correct Option: (b)

Explanation

- **Statement 1 is incorrect:** Moringa Oleifera is a medium-sized evergreen tree that is native to Africa and Asia. Also known as The Moringa Tree, the Drumstick Tree or The Miracle Tree. This is non-leguminous tree.
- **Statement 2 is incorrect:** Tamarind, (Tamarindus indica), evergreen tree of the pea family (Fabaceae), native to **tropical Africa**.

Source

Statement 1: <https://aduna.com/blogs/learn/moringa-oleifera-the-moringa-tree>

Statement 2: <https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/tamarindus-indica>

14. The black cotton soil of India has been formed due to the weathering of

- a. brown forest soil
- b. fissure volcanic rock
- c. granite and schist
- d. shale and limestone

Correct Option: (b)

Explanation:

Black cotton Soils

- Black soils are derivatives of Deccan trap lava and are spread mostly across interior Gujarat, Maharashtra, Karnataka, and Madhya Pradesh on the Deccan lava plateau and the Malwa Plateau, where there is both moderate rainfall and underlying basaltic rock.
- The Deccan trap, which is the source of the black soils, is a basaltic province formed during the hot spot volcanism when the Indian plate was above the Reunion island about 66 million years ago.
- At that time, the less viscous Basaltic lava erupted through the fissures covering a vast area of about ten lakh sq km. **Hence option (b) is correct.**
- These soils are also known as the 'Regur Soil' or the 'Black Cotton Soil'.

Sources: <https://www.britannica.com/place/India/Black-soils>

15. with reference to recent developments regarding 'Recombinant Vector Vaccines', consider the following statements:

1. Genetic engineering is applied in the development of these vaccines.
2. Bacteria and viruses are used as vectors.

Which of the statements given above is/are correct?

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

Correct Option: (c)

Genetic engineering is broad term that refers to the process that is used to manipulate the genetic structure of an organism.

Recombinant technology is one of the methods of Genetic Engineering.

<https://www.genome.gov/genetics-glossary/Genetic-Engineering#:~:text=Genetic%20engineering%20is%20the%20process,genetic%20makeup%20of%20an%20organism.&text=Genetic%20engineering%20involves%20the%20direct,give%20it%20a%20desired%20phenotype.>

Though Recombinant Vector Vaccines are primarily developed using virus, they can also be developed using bacteria.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6668849/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6024733/#:~:text=As%20a%20DNA%20vaccine%20carrier,features%20%5B25%2C26%5D.>

<https://www.nature.com/articles/nrmicro2240>

16. In the context of hereditary diseases, consider the following statements:

1. Passing on mitochondrial diseases from parent to child can be prevented by mitochondrial replacement therapy either before or after *in vitro* fertilization of egg.
2. A child inherits mitochondrial diseases entirely from mother and not from father.

Which of the statements given above is/are correct?

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

Correct Option: (a)

Explanation

Source:

<https://www.the-scientist.com/news-opinion/fathers-can-pass-mitochondrial-dna-to-children-65165>

17. Bollgard I and Bollgard II technologies are mentioned in the context of

- a. clonal propagation of crop plants
- b. developing genetically modified crop plants
- c. production of plant growth substances
- d. production of biofertilizers

Correct Option: (b)

Explanation:

- Bollgard I, the predominantly cultivated pest tolerant cotton, contains only one gene, the Cry 1Ac, from Bacillus Bollgard II **contains the Cry 2 Ab gene**, in addition to Cry 1 Ac.

<https://pubmed.ncbi.nlm.nih.gov/11576434/>

<https://www.cropscience.bayer.in/en/Products-H/Brands/Seeds-and-Traits/Traits-Bollgard.aspx>

18. In a pressure cooker, the temperature at which the food is cooked depends mainly upon which of the following?

1. Area of the hole in the lid
2. Temperature of the flame
3. Weight of the lid

Select the correct answer using the code given below.

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

Correct Option: (*)

19. Consider the following:

1. Bacteria
2. Fungi

3. Virus

Which of the above can be cultured in artificial/synthetic medium?

- 1 and 2 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Correct Option: (a)

20. Consider the following statements:

1. Adenoviruses have single-stranded DNA genomes whereas retroviruses have double-stranded DNA genomes.
2. Common cold is sometime caused by an adenovirus whereas AIDS is caused by a retrovirus.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Correct Option: (b)

Explanation

- Adenoviruses are medium-sized, nonenveloped viruses with an icosahedral nucleocapsid containing a double stranded DNA
- Retroviruses are **single-stranded RNA** animal viruses that employ a double-stranded DNA intermediate for

This is incorrect

statement. <https://www.sciencedirect.com/topics/neuroscience/adenovirus-genome>
<https://www.ncbi.nlm.nih.gov/books/NBK21335/#:~:text=Retroviruses%20are%20single%2Dstranded%20RNA,by%20the%20enzyme%20reverse%20transcriptase.>

- Adenoviruses are a group of viruses that typically cause **respiratory illnesses**, such as a common cold, conjunctivitis (an infection in the eye that is sometimes called pink eye), croup, bronchitis, or
- The human immunodeficiency virus (HIV) is grouped to the genus Lentivirus within the family of

This is correct statement.

<https://www.cdc.gov/adenovirus/index.html>

<https://www.health.state.mn.us/diseases/retrovirus/index.html>

21. Consider the following statements:

1. 'Right to the City' is an agreed human right and the UN-Habitat monitors the commitments made by each country in this regard.
2. 'Right to the City' gives every occupant of the city the right to reclaim public spaces and public participation in the city.
3. 'Right to the City' means that the State cannot deny any public service or facility to the unauthorized colonies in the city.

Which of the statements given above is/are correct?

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

Correct Option: (*)

22. With reference to India, consider the following statements:

1. Judicial custody means an accused is in the custody of the concerned magistrate and such accused is locked up in police station, not in jail.
2. During judicial custody, the police officer in charge of the case is not allowed to interrogate the suspect without the approval of the court.

Which of the statements given above is/are correct?

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

Correct Option: (b)

Explanation:

- Police Custody means that police have the physical custody of the accused while Judicial Custody means an accused is in the custody of the concerned Magistrate. In the former, the accused is lodged in a police station lockup while in latter, it is the jail. **So, statement 1 is incorrect.**
- When Police take a person into custody, the Cr.P.C kicks-in and they were produced before a Magistrate within 24 hours of the arrest.
- **Police Custody with permission to interrogate**
- During Judicial Custody, the police officer in charge of the case is not allowed to interrogate the suspect. However, the court may allow the interrogations to be conducted if it opines the interrogation being necessary under the facts produced before the court. **So, statement 2 is correct. And, Option (b) is correct.**

Sources: <https://districts.ecourts.gov.in/sites/default/files/fct.pdf>

23. With reference to India, consider the following statements:

1. When a prisoner makes out a sufficient case, parole cannot be denied to such prisoner because it becomes a matter of his/her right.
2. State Governments have their own Prisoners Release on Parole Rules.

Which of the statements given above is/are correct?

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

Correct Option: (b)

Explanation:

- The provision of Parole is a privilege/concession but not a right of any convicted prisoner. **Hence, statement 1 is incorrect.**
- States do have separate prison/parole rules because “prison and persons detained” is a state subject of the 7th schedule. So, **statement 2 is correct.**
- And, **Option (b) is correct.**

Sources: [https://bprd.nic.in/WriteReadData/userfiles/file/0452865483-](https://bprd.nic.in/WriteReadData/userfiles/file/0452865483-Table%202.pdf)

[Table%202.pdf](https://bprd.nic.in/WriteReadData/userfiles/file/0452865483-Table%202.pdf)

https://www.mha.gov.in/sites/default/files/ParoleFurloughadvisory_04092020.pdf

https://blog.ipleaders.in/parole-india-laws-related/#Eligibility_for_the_grant_of_parole

24. At the national level, which ministry is nodal agency to ensure effective implementation of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006?

1.
 - a. Ministry of Environment, Forest and Climate Change
 - b. Ministry of Panchayati Raj
 - c. Ministry of Rural Development
 - d. Ministry of Tribal Affairs

Correct Option: (d)

Explanation:

Forest Rights Act, 2006

- The Forest Rights Act (FRA), 2006 recognizes the rights of the forest dwelling tribal communities and other traditional forest dwellers to forest resources, on which these communities were dependent for a variety of needs, including livelihood, habitation and other socio-cultural needs. The forest management policies, including the Acts, Rules and

Forest Policies of Participatory Forest Management policies in both colonial and post-colonial India, did not, till the enactment of this Act, recognize the symbiotic relationship of the STs with the forests, reflected in their dependence on the forest as well as in their traditional wisdom regarding conservation of the forests.

- The Ministry of the Central Government dealing with Tribal Affairs or any officer or authority authorised by the Central Government on this behalf shall be the nodal agency for the implementation of the provisions of this Act. **Hence, option (d) is correct.**

Sources:

<https://tribal.nic.in/FRA/data/FRARulesBook.pdf>

<https://pib.gov.in/newsite/PrintRelease.aspx?relid=108222>

25. A legislation which confers on the executive or administrative authority an unguided and uncontrolled discretionary power in the matter of application of law violates which one of the following articles of the Constitution of India?

- Article 14
- Article 28
- Article 32
- Article 44

Correct Option: (a)

Explanation:

- The court exercises control over delegation of discretionary powers to the administration by adjudicating upon the constitutionality of the law under which such powers are delegated with reference to the fundamental rights enunciated in Part III of the Indian Constitution. Therefore, if the law confers vague and wide discretionary power on any administrative authority, it may be declared ultra vires Article 14, Article 19 and other provisions of the Constitution.
- Article 14 of the Constitution guarantees equality before law but the courts have permitted reasonable classification to be made. Where the law is valid under the article, a discriminatory action would still be violative of the equality clause.
- Hence, **option (a) is correct.**
- Also, by elimination, Art. 28, and Art.44 are unrelated to the question and Art. 44 is to protect the FR of the citizens.

Sources:<http://www.legalservicesindia.com/article/756/Abuse-of-Administrative-Discretion.html>

26. Which one of the following in Indian polity is an essential feature that indicates that it is federal in character?

- The independence of judiciary is safeguarded.
- The Union Legislature has elected representatives from constituent units.
- The Union Cabinet can have elected representatives from regional parties.
- The Fundamental Rights are enforceable by Courts of Law.

Correct Option: (a)

Explanation:

Key features of federalism:

- There are two or more levels (or tiers) of government.
- Different tiers of government govern the same citizens, but each tier has its own jurisdiction in specific matters of legislation, taxation and administration.
- The jurisdictions of the respective levels or tiers of government are specified in the constitution. So the existence and authority of each tier of government is constitutionally guaranteed.
- The fundamental provisions of the constitution cannot be unilaterally changed by one level of government. Such changes require the consent of both the levels of government.
- Courts have the power to interpret the constitution and the powers of different levels of government. The highest court acts as an umpire if disputes arise between different levels of government in the exercise of their respective powers. **The most important feature of the federal system adopted by the Indian Constitution is the principle that relations between the States and the centre would be based on cooperation.** And for this, Independent Judiciary is the prerequisite. **Hence, Option (a) is correct.**
- Sources of revenue for each level of government are clearly specified to ensure its financial autonomy.

Sources:

<https://ncert.nic.in/textbook/pdf/jess402.pdf>

<https://ncert.nic.in/ncerts/l/keps207.pdf>

27. Which one of the following best defines the term 'State'?

- a. A community of persons permanently occupying a definite territory independent of external control and possessing an organized government
- b. A politically organized people of a definite territory and possessing an authority to govern them, maintain law and order, protect their natural rights and safeguard their means of sustenance
- c. A number of persons who have been living in a definite territory for a very long time with their own culture, tradition and government
- d. A society permanently living in a definite territory with a central authority, an executive responsible to the central authority and an independent judiciary

Correct Option: (a)

Explanation:

- In political science, the term "State" has a more specific and definite meaning- "word State means a community or society politically organized under one independent government within a definite territory. It alone has the prerogative of making laws. The lawmaking power derives from sovereignty, which is the most distinctive characteristic of the State.

Sources: https://kkhsou.ac.in/eslm/ESLM_Main/5th%20Sem/Bachelor%20Degree/Sociology/Sociology%20Major/Sociology%20Major%20%20Block-1%20English/Unit%20-6.pdf

28. With reference to Indian judiciary, consider the following statements:

1. Any retired judge of the Supreme Court of India can be called back to sit and act as a Supreme Court judge by the Chief Justice of India with prior permission of the President of India.
2. A High Court in India has the power to review its own judgement as the Supreme Court does.

Which of the statements given above is/are correct?

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

Correct Option: (c)

Explanation:

- **Statement 1 is correct:** Under Article 128 of the Constitution, the Chief Justice of India may, at any time, with the previous consent of the President, request any person who has held the office of a Judge of the Supreme Court to sit and act as a Judge of the Supreme Court.
- **Statement 2 is correct:** Being A Court Of Record, High Court can review its own judgments under Article 226 Of the Constitution. The Kerala High Court has iterated the legal proposition that High Courts as Courts of Record could review their own orders. A Division Bench of Chief Justice S Manikumar and Shaji P Chaly were confronted with an appeal against a review petition.

Sources:

https://doj.gov.in/sites/default/files/memosc_1.pdf , <https://www.livelaw.in/news-updates/settled-proposition-court-of-record-high-court-review-own-judgments-article-226-kerala-high-court-174922#:~:text=Court%20Of...- ,Being%20A%20Court%20Of%20Record%2C%20High%20Court%20Can%20Review%20Its,the%20Constitution%3A%20Kerala%20High%20Court&text=a%20review%20petition.- ,The%20appellant%20who%20was%20the%20original%20writ%20petitioner%20had%20received,dispute%20concerning%20land%20tax%20payment.>

29. With reference to India, consider the following statements:

1. There is only 'one citizenship and one domicile'.
2. A citizen by birth only can become the Head of State.
3. A foreigner once granted the citizenship cannot be deprived of it under any circumstances.

Which of the statements given above is/are correct?

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

Correct Option: (a)

Explanation:

The Citizenship Act offers other categories of citizenship like Citizenship by Registration (Section 5) and Citizenship by Naturalisation (Section 6). These are basically for foreigners who wish to settle in India and seek Indian citizenship or persons of Indian origin living abroad who want to return to India and live as citizens in this country. It says that if the registration or certificate of naturalization was obtained by “means of fraud, false representation or the concealment of a material fact; or that citizen has shown himself by act or speech to be disloyal or disaffected towards the Constitution of India as by law established; or that citizen has, during any war in which India may be engaged, unlawfully traded or communicated with an enemy; or that citizen has been ordinarily resident out of India for a continuous period of seven years”, that person’s citizenship can be cancelled.

Sources:

<https://indiankanoon.org/docfragment/301611/?formInput=domicile>

http://164.100.47.4/billtexts/rsbilltexts/AsIntroduced/I_2000.pdf

<https://www.newindianexpress.com/opinions/2020/mar/03/your-indian-citizenship-is-not-so-fragile-2111292.html>

30. Which one of the following factors constitutes the *best* safeguard of liberty in a liberal democracy?

- a. A committed judiciary
- b. Centralization of powers
- c. Elected government
- d. Separation of powers

Correct Option: (d)

Explanation:

In the liberal approach which is inherent in democracy, all forms of power are rooted in the will of the people. This approach enhances the rule of law as one of the basic foundations of democracy; it affirms the separation of powers as a vehicle for their restraint, and it promotes individuals’ rights and freedoms as a prerequisite for their dignity.

Sources: http://archive.ipu.org/pdf/publications/democracy_pr_e.pdf

31. How is permaculture farming different from conventional chemical farming?

- a. Permaculture farming discourages monocultural practices but in conventional chemical farming, monoculture practices are pre-dominant.
- b. Conventional chemical farming can cause increase in soil salinity but the occurrence of such phenomenon is not observed in permaculture farming.

- c. Conventional chemical farming is easily possible in semi-arid regions but permaculture farming is not so easily possible in such regions.
- d. Practice of mulching is very important in permaculture farming but not necessarily so in conventional chemical farming.

Select the correct answer using the code given below.

- a. 1 and 3
- b. 1, 2 and 4
- c. 4 only
- d. 2 and 3

Correct Option: (b)

Explanation:

Sources: <https://www.downtoearth.org.in/coverage/environment/amp/new-civilisation-primitive-wisdom-59125>

32. With reference to 'palm oil', consider the following statements:

1. The palm oil tree is native to Southeast Asia.
2. The palm oil is a raw material for some industries producing lipstick and perfumes.
3. The palm oil can be used to produce biodiesel.

Which of the statements given above are correct?

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

Correct Option: (b)

Explanation:

- **Statement 1 is incorrect:** More than 80 percent of palm oil is grown in Southeast Asia, with Indonesia and Malaysia leading the world in production of the commodity. Oil palms were introduced to Malaysia and Indonesia in the mid-20th century from Africa, and large scale production followed. The growth has been rapid and widespread, and the natural forest and all that live in it face a dire future.
- **Statement 2 is correct:** Palm oil and its derivatives are present in at least 70% of cosmetic products, according to Croda, a global specialty ingredients supplier to the beauty and personal care industry. This goes to show that palm-derived ingredients are preferred by the manufacturers for their functional benefits.
- **Statement 3 is correct:** Generally, RBD palm oil is used to produce biodiesel due to the low FFA content (0.1-0.5%) and thus minimize the impact of saponification reaction. Darnoko and Cheryan (2000) studied the transesterification of RBD palm oil with methanol catalyzed by KOH.

Sources:

<https://www.efe.com/efe/english/life/southeast-asia-s-forests-threatened-by-growing-palm-oil-demand/50000263-3110426>

<https://www.malaysiakini.com/knowmypalmoil/488855>

<https://www.sciencedirect.com/science/article/pii/B9780123850997000164#:~:text=Generally%2C%20RBD%20palm%20oil%20is,with%20methanol%20catalyzed%20by%20KOH.>

33. With reference to the Indus river system, of the following four rivers, three of them pour into one of them which joins the Indus direct. Among the following, which one is such river that joins the Indus direct?

- a. Chenab
- b. Jhelum
- c. Ravi
- d. Sutlej

Correct Option: (d)

Explanation:

- Starting at the pinnacle of the world with glaciers, the Indus River supplies the flora and fauna of temperate forests, plateaus, and dry rural areas. In conjunction with the rivers Chenab, Jhelum, Sutlej, Ravi, Beas, and two tributaries from Afghanistan and Khyber Pakhtunkhwa, the Indus creates the Sapta Sindhu (Seven Rivers) delta of Pakistan.
- Chenab river moves into the lands of Punjab in the vicinity of Akhnur and is subsequently connected with the Jhelum. It creates the border between the Rechna and the Jech Doabs. The Chenab also meets the Ravi and the Sutlej in Pakistan.
- The Ravi River runs as a portion of the boundary between India and Pakistan for a particular distance prior to moving into Pakistan and meeting the Chenab River.
- The river moves into Pakistan in the vicinity of Sulemanki and is subsequently met by the Chenab.

Sources: <https://www.mapsofindia.com/maps/rivers/indus.html>

34. With reference to India, Didwana, Kuchaman, Sargol and Khatu are the names of

- a. glaciers
- b. mangrove areas
- c. Ramsar sites
- d. saline lakes

Correct Option: (d)

Explanation:

- Didwana is a town in the Nagaur district of Rajasthan. It also has a famous Didwana salt-water lake of Rajasthan.

[Downloaded from www.studymarathon.com](http://www.studymarathon.com)

- Kuchaman lake is a continental saline lake located around Kuchaman city, Nagaur District, Rajasthan.

Sources:

<https://truerajasthan.com/didwana-lake/>

<http://www.palaeontologicalsociety.in/vol35/v14.pdf>

35. consider the following rivers:

1. brahmani
2. nagavali
3. Subarnarekha
4. Vamsadhara

Which of the above rise from the Eastern Ghats?

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

Correct Option: (b)

Explanation:

- Rivers originating on the Eastern Ghats include Baitarani River, Budhabalanga River, Rushikulya River, **Vamsadhara River**, Palar River, **Nagavali River**, and Champavathi River, etc.
- The Baitarani River originates from Guptaganga hills in Keonjhar District of Orissa, about 2 km from Gonasika village, at an elevation of 900 m at latitude 21° 31' N and longitude 85° 33' E.
- The Subarnarekha River rises near Nagri village in the Ranchi District of Jharkhand at an elevation of 600 m. It flows for a length of 395 km before outfalling into the Bay of Bengal.

Sources:https://en.wikipedia.org/wiki/Eastern_Ghats

http://117.252.14.242/rbis/basin%20maps/brahmani_baitarni_about.htm

<https://indiawris.gov.in/wiki/doku.php?id=subarnarekha>

36. Consider the following statements:

1. The Global Ocean Commission grants licences for seabed exploration and mining in international waters.
2. India has received licences for seabed mineral exploration in international waters.
3. 'Rare earth minerals' are present on seafloor in international waters.

Which of the statements given above are correct?

- a. 1 and 2 only

- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Correct Option: (b)

Explanation:

Statement 1 is incorrect: With the establishment of the United Nations Convention on the Law of the Sea in 1982 and the entry into force of the ISA in 1994, exploration activities for mineral resources in the area began to be regulated under exploration contracts. Originally, exploration activities were predominantly undertaken by national agencies, until 2010, when private companies became involved and a polymetallic-nodule-mining industry was born.

Statement 2 is correct: India's exclusive rights to explore polymetallic nodules from seabed in the Central Indian Ocean Basin (CIOB) have been extended by five years. These rights are over 75000 sq. km of area in international waters allocated by the International Seabed Authority for developmental activities for polymetallic nodules.

Statement 3 is correct: In 1972, a young ecologist named Hjalmar Thiel ventured to a remote part of the Pacific Ocean known as the Clarion–Clipperton Zone (CCZ). The seafloor there boasts one of the world's largest untapped collections of rare-earth elements. Some 4,000 meters below the ocean surface, the abyssal ooze of the CCZ holds trillions of polymetallic nodules — potato-sized deposits loaded with copper, nickel, manganese, and other precious ores.

Sources:

<https://www.isa.org.jm/index.php/exploration-contracts>

<https://pib.gov.in/newsite/PrintRelease.aspx?relid=170138>

<https://www.nature.com/articles/d41586-019-02242-y>

37. Among the following, which one is the *least* water-efficient crop?

- a. Sugarcane
- b. Sunflower
- c. Pearl millet
- d. Red gram

Correct Option: (a)

Explanation:

Sources: <https://www.econstor.eu/bitstream/10419/203692/1/1022275348.pdf>

38. Consider the following statements:

1. In the tropical zone, the western sections of the oceans are warmer than the eastern sections owing to the influence of trade winds.
2. In the temperate zone, westerlies make the eastern sections of oceans warmer than the western sections.

Which of the statements given above is/are correct?

- a. 1 only
- b. 2 only

- c. Both 1 and 2
- d. Neither 1 nor 2

Correct Option: (c)

39. In the context of India's preparation for Climate-Smart Agriculture, consider the following statements:

1. The 'Climate-Smart Village' approach in India is a part of a project led by the Climate Change, Agriculture and Food Security (CCAFS), an international research programme.
2. The project of CCAFS is carried out under Consultative Group on International Agricultural Research (CGIAR) headquartered in France.
3. The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India is one of the CGIAR's research centres.

Which of the statements given above are correct?

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

Correct Option: (d)

Explanation:

- **Statement 1 is correct:** Rajapakar is a Climate-Smart Village (CSV), a part of a project led by the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Built on the principles of CSA, this program provides technological, organizational and systemic support to farmers in association with institutions to help them cope with climate change, in 36 sites across 20 countries.
- **Statement 2 is correct:** The governance and management of the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) are based on lessons learned by CGIAR headquartered in France.
- **Statement 3 is correct:** ICRISAT is headquartered in Patancheru near Hyderabad, Telangana, India, with two regional hubs and six country offices in sub-Saharan Africa. It is a member of the CGIAR Consortium. CGIAR is a global research partnership for a food secure future.

Sources:<https://natgeotraveller.in/climate-smart-villages-the-future-of-farming/>
<https://ccafs.cgiar.org/about-us>

40. "Leaf litter decomposes faster than in any other biome and as a result the soil surface is often almost bare. Apart from trees, the vegetation is largely composed of plant forms that reach up into the canopy vicariously, by climbing the trees or growing as epiphytes, rooted on the upper branches of trees". This is the most likely description of

- a. coniferous forest

- b. dry deciduous forest
- c. mangrove forest
- d. tropical rain forest

Correct Option: (d)

Explanation:

The tropical rainforest is a hot, moist biome where it rains all year long. It is known for its dense canopies of vegetation that form three different layers. The top layer or canopy contains giant trees that grow to heights of 75 m (about 250 ft) or more. This layer of vegetation prevents much of the sunlight from reaching the ground. Thick, woody vines are also found in the canopy. They climb trees in the canopy to reach for sunlight. The middle layer, or understory, is made up of vines, smaller trees, ferns, and palms. A large number of plants from this level are used as common houseplants. Because of the small amount of sunlight and rainfall these plants receive, they adapt easily to home environments. The bottom layer or floor of the rainforest is covered with wet leaves and leaf litter. This material decomposes rapidly in the wet, warm conditions (like a compost pile) sending nutrients back into the soil. Few plants are found on the floor of the forest due to the lack of sunlight.

Sources: <https://earthobservatory.nasa.gov/biome/biorainforest.php>

41. Under the Indian Constitution, concentration of wealth violates

- a. the Right to Equality
- b. the Directive Principles of State Policy
- c. the Right to Freedom
- d. the Concept of Welfare

Correct Option: (b)

Explanation:

- PART IV (DIRECTIVE PRINCIPLES OF STATE POLICY)- Article 39- says that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment.

42. What is the position of the Right to Property in India?

- a. Legal right available to citizens only
- b. Legal right available to any person
- c. Fundamental Right available to citizens only
- d. Neither Fundamental Right nor legal right

Correct Option: (b)

Explanation:

- The Forty Fourth Constitutional Amendment, 1978, deleted Articles 19(1)(f) and 31 from Part III, the chapter on Fundamental Rights in the Constitution. Instead, it inserted Article 300A in a new chapter IV of Part XII of the Constitution, thereby depriving the 'right to property' of its 'fundamental right' status. Article 300A directs that - Persons not to be

deprived of property save by authority of law.—No person shall be deprived of his property save by authority of law.

Sources: <https://legislative.gov.in/sites/default/files/COI-updated-as-31072018.pdf>

43. What was the exact constitutional status of India on 26th January, 1950?

- A Democratic Republic
- A Sovereign Democratic Republic
- A Sovereign Secular Democratic Republic
- A Sovereign Socialist Secular Democratic Republic

Correct Option: (*)

44. Constitutional government means

- a representative government of nation with federal structure
- a government whose Head enjoys nominal powers
- a government whose Head enjoys real powers
- a government limited by the terms of the Constitution

Correct Option: (d)

Explanation:

- The core element of constitutional government is, the existence of a "Rule-of Law" or set of "basic laws" that binds both public office-holders and all members of a society (i.e. citizens) within a given territory. Presently most states avail of a constitution, which directs the organization of the state, the relations between the public offices within the state, as well the human and civil rights of the individual.

Sources: <https://www.eolss.net/sample-chapters/C04/E6-32-01-02.pdf> (Hans Keman Free University at Amsterdam, Amsterdam, The Netherlands)

45. With reference to India, the terms 'Halbi Ho and Kui' pertain to

- dance forms of Northwest India
- musical instruments
- pre-historic cave paintings
- tribal languages

Correct Option: (d)

Explanation:

According to the 2011 census the Odisha tribal population is 95,90,765. Odisha's tribal language is divided into 3 main language families. They are Austro-Asiatic (Munda), Dravida and Indo-Aryan. Every tribe has its own language and language family. Each clan has a different dialect although speaking the same language. 21 languages and 74 dialects are in use. The languages are Austro-Asiatic:- Bhumij, Birhor, Rem (Bonda), Gatah (Didyai), Gutab (Gadaba), Sora(Saora), Gorum (Parenga), Khadia, Juang, Santali, Ho, Mundari, etc Dravid:- Gondi, Kui-Kondh, Kuvi-Kondh, Kisan, Koya, Olari, (Gadaba) Parja, Peng, Kudukh (Oraon) etc. Indo Aryan:- Bathudi,

Bhuyan, Kurmali, Sounti, Sadri, Kandhan, Aghria, Desia, Jharia, Halbi, Bhatri, Matia, Bhunjia, etc.

Sources: <https://repository.tribal.gov.in/handle/123456789/74116?viewItem=browse>

46. Consider the following statements in respect of Bharat Ratna and Padma Awards:

1. Bharat Ratna and Padma Awards are titles under the Article 18(1) of the Constitution of India.
2. Padma Awards, which were instituted in the year 1954, were suspended only once.
3. The number of Bharat Ratna Awards is restricted to a maximum of five in a particular year.

Which of the above statements are *not* correct?

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

Correct Option: (d)

Explanation:

- Statement (1) is correct - In 1996, the Supreme Court upheld the constitutional validity of the National Awards—Bharat Ratna, Padma Vibhushan, Padma Bhushan and Padma Sri. It ruled that these awards do not amount to ‘titles’ within the meaning of Article 18 that prohibits only hereditary titles of nobility. Therefore, they are not violative of Article 18 as the theory of equality does not mandate that merit should not be recognised.
- Statement (2) is incorrect: Padma Awards, which were instituted in the year 1954, is announced every year on the occasion of Republic Day except for brief interruption(s) during the years 1978 and 1979 and 1993 to 1997.
- Statement (3) is incorrect: Padma Awards, which were instituted in the year 1954, is announced every year on the occasion of Republic Day except for brief interruption(s) during the years 1978 and 1979 and 1993 to 1997.

Sources: <https://padmaawards.gov.in/AboutAwards.aspx>, Indian Polity laxmikant

47. Consider the following statements:

Statement 1:

The United Nations Capital Development Fund (UNCDF) and the Arbor Day Foundation have recently recognized Hyderabad as 2020 Tree City of the World.

Statement 2:

Hyderabad was selected for the recognition for a year following its commitment to grow and maintain the urban forests.

Which one of the following is correct in respect of the above statements?

- a. Both Statement 1 and Statement 2 are correct and Statement 2 is the correct and Statement 2 is the correct explanation for Statement 1

- b. Both Statement 1 and Statement 2 are correct but Statement 2 is not the correct explanation for Statement 1
- c. Statement 1 is correct but Statement 2 is not correct
- d. Statement 1 is not correct but Statement 2 is correct

Correct Option: (d)

Explanation:

- Statement 1 is incorrect: Hyderabad has become the only city in India to be recognised as a 'Tree City of the World' by the Arbor Day Foundation and the Food and Agriculture Organization (FAO) of the United Nations.
- Statement 2 is correct: Hyderabad has become the only city in India to be recognised as a 'Tree City of the World' by the Arbor Day Foundation and the Food and Agriculture Organization (FAO) of the United Nations.

48. Consider the following statements in respect of the Laureus World Sports Award which was instituted in the year 2000:

1. American golfer Tiger Woods was the first winner of this award.
2. The award was received mostly by 'Formula One' players so far.
3. Roger Federer received this award maximum number of times compared to others.

Which of the above statements are correct?

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

Correct Option: (c)

Explanation:

- **Statement (1) is correct:** Laureus World Sportsman of the year 2000 was given to Tiger Woods.
- **Statement (2) is incorrect:** The award was received mostly by tennis players
- **Statement (3) is correct:** Most awards: Roger Federer (5)

Sources: <https://www.laureus.com/world-sports-awards>

49. Consider the following statements in respect of the 32nd Summer Olympics

1. The official motto for this Olympics is 'A New World'.
2. Sport Climbing, Surfing, Skateboarding, Karate and Baseball are included in this Olympics.

Which of the above statements is/are correct?

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

Correct Option: (b)

Explanation:

- **Statement (1) is incorrect:** The International Olympic Committee decided upon the change with the new motto being, "Faster, Higher, Stronger - Together." The specific motto for the Tokyo games remains unchanged, "United by Emotion."
- **Statement (2) is correct :** Surfing, Skateboarding, Sport Climbing, Karate, Baseball and Softball are included in this olympics.

Sources: <https://olympics.com/tokyo-2020/en/sports/>

50. Consider the following statements in respect of the ICC World Test Championship:

1. The finalists were decided by the number of matches they won.
2. New Zealand was ranked ahead of England because it won more matches than England.

Which of the above statements is/are correct?

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

Correct Option: (d)

Explanation:

- **Statement 1 is incorrect:** As per the current regulations, WTC league standings would be determined by the percentage of points (PCT) earned by teams. PCT is the percentage of points won out of the total number of points contested by each team.
- **Statement 2 is incorrect:** New Zealand was ranked ahead of England in WTC 2019-21 table because the percentage of points won by New Zealand was more than England.

Sources: <https://www.espncriinfo.com/series/icc-world-test-championship-2019-2021-1195334/points-table-standings>

<https://www.icc-cricket.com/media-releases/196675>

51. Consider the following statements:

1. The Governor of the Reserve Bank of India (RBI) is appointed by the Central Government.

2. Certain provisions in the Constitution of India give the Central Government the right to issue directions to the RBI in public interest.
3. The Governor of the RBI draws his power from the RBI Act.

Which of the above statements are correct?

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

Correct Option: (c)

Explanation:

- Statement (1) is correct: RBI Governor and Deputy Governors are appointed by the Central Government.
- Statement (2) is incorrect: RBI Act, 1934- The Central Government may from time to time give such directions to the Bank as it may, after consultation with the Governor of the Bank, consider necessary in the public interest.
- Statement (3) is correct: RBI Act- 1934 -SGovernor and in his absence the Deputy Governor nominated by him in this behalf, shall also have powers of general superintendence and direction of the affairs and the business of the Bank, and may exercise all powers and do all acts and things which may be exercised or done by the Bank.

Sources: https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/RBIAM_230609.pdf

52. With reference to casual workers employed in India, consider the following statements:

1. All casual workers are entitled for Employees Provident Fund coverage.
2. All casual workers are entitled for regular working hours and overtime payment.
3. The government can by a notification specify that an establishment or industry shall pay wages only through its bank account.

Which of the above statements are correct?

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

Correct Option: (d)

Explanation:

- Statement (1) is correct: Holding that an employer cannot differentiate between contractual and permanent employees, the Supreme Court has ruled that casual workers

are also entitled to social security benefits under the Employees' Provident Funds and Miscellaneous Provisions Act.

Sources: <https://timesofindia.indiatimes.com/india/contractual-workers-also-entitled-to-pf-benefits-sc/articleshow/73364925.cms#:~:text=NEW%20DELHI%3A%20Holding%20that%20an,Funds%20and%20Miscellaneous%20Provisions%20Act.>

53. Which among the following steps is most likely to be taken at the time of an economic recession?

- Cut in tax rates accompanied by increase in interest rate
- Increase in expenditure on public projects
- Increase in tax rates accompanied by reduction of interest rate
- Reduction of expenditure on public projects

Correct Option: (b)

Explanation:

In Economic Recession, the Government can:

- Decrease interest rate to make more room for borrowing
- Increase Government Spending
- Cut Tax rates to increase spending capacity of people

Sources: <https://economictimes.indiatimes.com/definition/recession>

54. Consider the following statements:

Other things remaining unchanged, market demand for a good might increase if

- Price of its substitute increases
- Price of its complement increases
- The good is an inferior good and income of the consumers increases
- Its price falls

Which of the above statements are correct?

- 1 and 4 only
- 2, 3 and 4
- 1, 3 and 4
- 1, 2 and 3

Correct Option: (a)

Explanation:

The main influences on buying plans that change demand are:

- Prices of related goods

- Income
- Expectations
- Number of buyers
- Preferences

The Demand increases when

- The demand for a good increases, if the price of one of its substitutes rises.
- The demand for a good increases, if the price of one of its substitutes rises.
- An inferior good is an economic term that describes a good whose demand drops when people's incomes rise.
- If the price of a good falls, the quantity demanded of that good increases.

Sources: <https://www.unf.edu/~traynham/ch04lecture.pdf>, <https://www.investopedia.com/terms/i/inferior-good.asp>

55. With reference to urban cooperative banks in India consider the following statements:

1. They are supervised and regulated by local boards set up by the state governments
2. They can issue equity shares and preference shares.
3. They were brought under the purview of the Banking Regulation Act, 1949 through an Amendment in 1966.

Which of the statements given above is/are correct?

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

Correct Option: (b)

Explanation:

- The recent Banking Regulation (Amendment) Act 2020 enables the RBI to get all the powers, including those hitherto exclusively with the registrar of cooperative societies. However, powers of registrar continue to be with him but the powers of RBI override those of registrar.
- UCBs are permitted to raise equity share capital, preference shares and debt instruments.
- The applicability of banking laws to cooperatives societies since March 1, 1966 ushered in 'duality of control' over UCBs between the Registrar of Cooperative Societies/Central Registrar of Cooperative Societies and the Reserve Bank of India.

Sources: <https://www.rbi.org.in/Upload/AboutUs/89735.pdf> , https://www.business-standard.com/article/pti-stories/rbi-issues-draft-circular-on-allowing-ucbs-to-augment-capital-121071400994_1.html , https://www.rbi.org.in/scripts/bs_viewcontent.aspx?Id=401

1, <https://www.thehindubusinessline.com/money-and-banking/its-defining-times-for-urban-cooperative-banks/article36168777.ece>

56. Indian Government Bond Yields are influenced by which of the following?

1. Actions of the United States Federal Reserve
2. Actions of the Reserve Bank of India
3. Inflation and short-term interest rates

Select the correct answer using the code given below.

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

Correct Option: (d)

Explanation:

Bonds yields in India are affected by

- There are a number of economic factors that impact Treasury yields, such as interest rates, inflation, and economic growth.
- The major factors affecting the yield are the monetary policy of the Reserve Bank of India, especially the course of interest rates, fiscal position of the government, global markets, economy and the inflation.
- US Bond yields

Sources: <https://indianexpress.com/article/explained/explainspeaking-the-link-between-us-bond-yields-indian-stock-markets-gdp-and-gva-growth-rates-7209035/>

57. Consider the following:

1. Foreign currency convertible bonds.
2. Foreign institutional investment with certain conditions
3. Global depository receipts
4. Non-resident external deposits

Which of the above can be included in Foreign Direct Investments?

- a. 1, 2 and 3
- b. 3 only
- c. 2 and 4
- d. 1 and 4

Correct Option: (C)

Explanation:

- FII - Foreign investment in Indian securities has also been made possible through the purchase of Global Depository Receipts, Foreign Currency Convertible Bonds and Foreign Currency Bonds issued by Indian issuers which are listed, traded and settled overseas.

Sources: https://www.sebi.gov.in/sebi_data/commndocs/pt1b5_h.html

58. Consider the following statements :

The effect of devaluation of a currency is that it necessarily

1. Improves the competitiveness of the domestic exports in the foreign markets
2. Increases the foreign value of domestic currency
3. Improves the trade balance

Which of the above statement is/are correct?

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

Correct Option: (a)

Explanation:

A key effect of devaluation is that it makes the domestic currency cheaper relative to other currencies. There are two implications of a devaluation. First, devaluation makes the country's exports relatively less expensive for foreigners. Second, the devaluation makes foreign products relatively more expensive for domestic consumers, thus discouraging imports. This may help to increase the country's exports and decrease imports, and may therefore help to reduce the current account deficit.

Sources: <https://www.newyorkfed.org/aboutthefed/fedpoint/fed38.html>

59. Which one of the following effects of creation of black money in India has been the main cause of worry to the Government of India?

- a. Diversion of resources to the purchase of real estate and investment in luxury housing
- b. Investment in unproductive activities and purchase of precious stones, jewelley, gold, etc.
- c. Large donations to political parties and growth of regionalism
- d. Loss of revenue to the state exchequer due to tax evasion

Correct Option: (d)

Explanation:

- Black money eats up a part of the tax and, thus, the government's deficit increases.

Sources: <https://timesofindia.indiatimes.com/readersblog/santhosh-pens-down/black-money-a-serious-menace-to-be-tackled-24487/>

60. Which one of the following is likely to be the most inflationary in its effects?

- a. Repayment of public debt
- b. Borrowing from the public to finance a budget deficit
- c. Borrowing from the banks to finance a budget deficit
- d. Creation of new money to finance a budget deficit

Correct Option: (D)

Explanation:

- Deficit financing is inherently inflationary. Since deficit financing raises aggregate expenditure and, hence, increases aggregate demand, the danger of inflation looms large.
- Printing new currency notes increases the flow of money in the economy. This leads to increase in inflationary pressures which leads to rise of prices of goods and services in the country.

Sources: https://economictimes.indiatimes.com/budget-faqs/what-is-deficit-financing/articleshow/73329358.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

61. Which one of the following is used in preparing a natural mosquito repellent?

- a. Congress grass
- b. Elephant grass
- c. Lemongrass
- d. Nut grass

Correct Option: (c)

Explanation:

- Lemongrass is a natural mosquito repellent.

Sources: <https://www.thespruce.com/plants-that-repel-mosquitoes-4583885>

62. Consider the following kinds of organisms :

1. Copepods
2. Cyanobacteria
3. Diatoms
4. Foraminifera

Which of the above are primary producers in the food chains of oceans?

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

Correct Option: (B)

Explanation:

- Copepods are major secondary producers in the World Ocean
- In aquatic environments, cyanobacteria are important primary producer
- Diatoms are one of the major primary producers in the ocean

Sources: <https://sciencing.com/major-primary-producer-marine-ecosystem-4683.html>

63. Consider the following animals :

1. Hedgehog
2. Marmot
3. Pangolin

To reduce the chance of being captured by predators which of the above organisms rolls up/roll up and protects/protect its/their vulnerable parts?

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

Correct Option: (d)

Explanation:

- To protect itself, a hedgehog curls his head and feet into his body and forms a ball to protect his soft, delicate underside.
- Upon seeing a predator, the yellow-bellied marmot whistles to warn the others in the area, after which it typically hides in a nearby rock pile until there is no more threat.
- If under threat, a pangolin will immediately curl into a tight ball and will use their sharp-scaled tails to defend themselves.

Sources: <https://www.worldwildlife.org/stories/what-is-a-pangolin> , <https://animals.mom.com/hedgehogs-protect-themselves-predators-4232.html>, <https://answerstoall.com/technology/how-do-marmots-defend-themselves/>

64. With reference to the New York declaration on Forests, which of the following statements are correct?

1. It was first endorsed at the United Nations Climate Summit in 2014.
2. It endorses a global timeline to end the loss of forests.
3. It is a legally binding international declaration.
4. It is endorsed by governments, big companies and indigenous communities.
5. India was one of the signatories at its inception.

Select the correct answer using the code given below.

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

Correct Option: (a)

Explanation:

- The New York Declaration on Forests was endorsed at the 2014 Climate Summit by more than 150 governments, companies, indigenous peoples and civil society organizations committed to doing their part to achieve the Declaration's ten goals and follow its accompanying action agenda.
- It is voluntary in nature.
- Its ten goals include halting natural forest loss by 2030, restoring 350 million hectares of degraded landscapes and forestlands, improving governance, increasing forest finance, and reducing emissions from deforestation and forest degradation as part of a post-2020 global climate agreement.
- India is not its signatory.

Sources: <https://forestdeclaration.org/about>

65. Magnetite particles suspected to cause neurodegenerative problems, are generated as environmental pollutants from which of the following?

- 1. Brakes of motor vehicles
- 2. Engines of motor vehicles
- 3. Microwave stoves within homes
- 4. Power plants
- 5. Telephone lines

Select the correct answer using the code given below.

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

Correct Option: (d)

Explanation:

66. Which one of the following is a filter feeder?

- a. Catfish
- b. Octopus
- c. Oyster
- d. Pelican

Correct Option: (c)

Explanation:

- Oysters are filter feeders, meaning they eat by pumping large volumes of water through their body. Water is pumped through the oyster's gills by the beating of cilia. Plankton, algae and other particles become trapped in the mucus of the gills. From there these particles are transported to the oyster's mouth and esophagus to be eaten, then to the stomach to be digested.

Sources:

<https://www.baybackpack.com/blog/how-does-an-oyster-filter-water>

67. In case of which one of the following biogeochemical cycles the weathering of rocks is the main source of release of nutrient to enter the cycle?

- a. Carbon cycle
- b. Nitrogen cycle
- c. Phosphorus cycle
- d. Sulphur cycle

Correct Option: (c)

Explanation:

- Much of the phosphorus on Earth is tied up in rock and sedimentary deposits, from which it is released by **weathering**, leaching, and mining.

Sources:

<https://www.britannica.com/science/phosphorus-cycle>

68. Which of the following are detritivores?

1. Earthworms
2. Jellyfish
3. Millipedes
4. Seahorses
5. Woodlice

Select the correct answer using the code given below.

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

Correct Option: (c)

Explanation:

- Jellyfish feed on phytoplankton and zooplanktons . Detritivores are often **invertebrate** insects such as mites, beetles, butterflies and flies; mollusks such as slugs and snails; or soil-dwelling earthworms, millipedes and woodlice.

Sources:

<https://biologydictionary.net/detritivore/>

69. The 'Common Carbon Metric', supported by UNEP, has been developed for

- a. Assessing the carbon footprint of building operations around the world
- b. Enabling commercial farming entities around the world to enter carbon emission trading
- c. Enabling governments to assess the overall carbon footprint caused by their countries
- d. Assessing the overall carbon footprint caused by the use of fossil fuels by the world in a unit time

Correct Option: (a)

Explanation:

- The Common Carbon Metric is the calculation used to define measurement, reporting, and verification for GHG emissions associated with the operation of buildings types of particular climate regions.

Sources:

<https://c2e2.unepdtu.org/wp-content/uploads/sites/3/2016/09/unep-sbci-common-carbon-metric.pdf>

70. Which of the following have species that can establish symbiotic relationship with other organisms?

1. Cnidarians
2. Fungi
3. Protozoa

Select the correct answer using the code given below.

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

Correct Option: (d)

Explanation:

- Symbiosis is a close ecological relationship between the individuals of two (or more) different species. The relationship between cnidarians and dinoflagellate algae is termed as "symbiotic". Two common mutualistic relationships involving fungi are mycorrhiza and lichen. Symbiosis in protozoa mostly represents a close mutualistic association between a protozoan and unicellular symbionts (bacteria, cyanobacteria or/and unicellular

algae) or protozoans and a multicellular organism (ruminants, lower termites, wood-eating cockroaches, plants)

Sources:

<https://encyclopedia.thefreedictionary.com/symbiosis>

71. The money multiplier in an economy increases with which one of the following?

- a. Increase in the cash Reserve Ratio in the banks
- b. Increase in the Statutory Liquidity Ratio in the banks
- c. Increase in the banking habit of the people
- d. Increase in the population of the country

Correct Option: (c)

Explanation:

The money created by the Federal Reserve is the monetary base, also known as high-powered money. Banks create money by making loans. A bank loans or invests its excess reserves to earn more interest. A one-dollar increase in the monetary base causes the money supply to increase by more than one dollar. The increase in the money supply is the money multiplier.

Sources:

https://www.albany.edu/~bd445/Economics_350_Money_and_Banking_Slides_Spring_2013/Money_Multiplier.pdf

72. With reference to Indian economy, demand-pull inflation can be caused/increased by which of the following?

1. Expansionary policies
2. Fiscal stimulus
3. Inflation-indexing wages
4. Higher purchasing power
5. Rising interest rates

Select the correct answer using the code given below.

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

Correct Option: (a)

Explanation:

- Rising interest rates will deter people to borrow money and hence it will not aid in demand pull inflation

Sources:

<https://www.investopedia.com/ask/answers/12/inflation-interest-rate-relationship.asp>

73. With reference to India, consider the following statements :

1. Retail investors through demat account can invest in 'Treasury Bills' and 'Government of India Debt Bonds' in primary market.
2. The 'Negotiated Dealing System-Order Matching' is a government securities trading platform of the Reserve Bank of India.
3. The 'Central Depository Services Ltd'. is jointly promoted by the Reserved Bank of India and the Bombay Stock Exchange.

Which of the statements given above is/are correct?

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

Correct Option: (b)

Explanation:

- CDSL is promoted by BSE which later divested its stakes among nationalized banks

Sources:

[How to Invest in G-Sec \(nseindia.com\)](#)

[NDSOM290410.pdf \(rbi.org.in\)](#)

[CDSL vs NSDL - The Differences Between CDSL and NSDL | Scripbox](#)

74. With reference to 'Water Credit', consider the following statements :

1. It puts microfinance tools to work in the water and sanitation sector.
2. It is a global initiative launched under the aegis of the World Health Organization and the World Bank.
3. It aims to enable the poor people to meet their water needs without depending on subsidies.

Which of the statements given above are correct?

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

Correct Option: (c)

Explanation:

[Downloaded from www.studymarathon.com](http://www.studymarathon.com)

- WaterCredit is an initiative of water.org

Sources:

<https://water.org/solutions/watercredit/>

75. In India, the central bank's function as the 'lender of last resort' usually refers to which of the following?

1. Lending to trade and industry bodies when they fail to borrow from other sources
2. Providing liquidity to the banks having a temporary crisis
3. Lending to governments to finance budgetary deficits

Select the correct answer using the code given below.

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

Correct Option: (b)

Explanation:

- A lender of last resort (LoR) is an institution, usually a country's central bank, that offers loans to banks or other eligible institutions that are experiencing financial difficulty or are considered highly risky or near collapse.

Sources:

<https://www.investopedia.com/terms/l/lenderoflastresort.asp>

76. 'R2 Code of Practices' constitutes a tool available for promoting the adoption of

- a. Environmentally responsible practices in electronics recycling industry
- b. Ecological management of 'Wetlands of International Importance' under the Ramsar
- c. Sustainable practices in the cultivation of agricultural crops in degrade lands
- d. 'Environmental Impact Assessment' in the exploitation of natural resources

Correct Option: (a)

Explanation:

- R2 stands for Responsible Recycling and is a standard specifically created for the electronics recycling industry by Sustainable Electronics Recycling International (SERI)

Sources:

<https://sustainableelectronics.org/wp-content/uploads/2020/12/R2-2013-Code-of-Practices-ENGLISH.pdf>

77. Why is there a concern about copper smelting plants?

1. They may release lethal quantities of carbon monoxide into environment.
2. The copper slag can cause the leaching of some heavy metals into environment.
3. They may release sulphur dioxide as a pollutant.

Select the correct answer using the code given below.

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

Correct Option: (b)

Explanation:

- Carbon monoxide is used in copper smelters to reduce copper oxide. $CuO + CO \rightarrow Cu + CO_2$. hence its unlikely that a smelter will release lethal quantities of carbon monoxide in to the environment

Sources:

https://www.tf.uni-kiel.de/matwis/amat/iss/kap_a/backbone/ra_1_3.html

78. With reference to furnace oil, consider the following statements :

1. It is a product of oil refineries.
2. Some industries use it to generate power
3. Its use causes sulphur emissions into environment.

Which of the statements given above are correct?

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

Correct Option: (d)

Explanation

- Statement 1 is correct: Furnace oil or fuel oil is a dark viscous residual fuel obtained by blending mainly heavier components from crude distillation unit, short residue and clarified oil from fluidized catalytic cracker unit.
- Statement 2 is correct: It is used primarily for **steam** boilers in power plants, aboard ships, and in industrial plants.
- Statement 3 is correct: Sulphur contained in fuel causes emissions of sulphur dioxide (SO₂) and also contributes to the formation of secondary particulate matter (PM)

Source

https://archive.essar.com/article.aspx?cont_id=DKZVj8QKxD4=

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79. What is blue carbon?

- Carbon captured by oceans and coastal ecosystems
- Carbon sequestered in forest biomass and agricultural soils
- Carbon contained in petroleum and natural gas
- Carbon present in atmosphere

Correct Option: (a)

Explanation:

- Blue carbon is the term for **carbon** captured by the world's **ocean and coastal ecosystems**. **Our ocean and coasts provide a natural way of reducing the impact of greenhouse gases on our atmosphere, through sequestration. Sea grasses, mangroves, and salt marshes along our coast "capture and hold" carbon, acting as something called a carbon sink**

Sources: <https://oceanservice.noaa.gov/facts/bluecarbon.html>

80. In the nature, which of the following is/are most likely to be found surviving on a surface without soil?

- Fern
- Lichen
- Moss
- Mushroom

Select the correct answer using the code given below.

- 1 and 4 only
- 2 only
- 2 and 3
- 1, 3 and 4

Correct Option: (c)

Explanation:

- Ferns require indirect sunlight, moist soil, and a humid atmosphere. Lichens occur from sea level to high alpine elevations, in many environmental conditions, and can grow on almost any surface. Mosses are non-flowering plants which produce spores and have stems and leaves, but don't have true roots. The individual plants are usually composed of simple leaves that are generally only one cell thick, attached to a stem that may be branched or unbranched and has only a limited role in conducting water and nutrients. A mushroom or toadstool is the fleshy, spore-bearing fruiting body of a fungus, typically produced above ground, on soil, or on its food source.

Sources: <https://en.wikipedia.org/wiki/Mushroom>, <https://www.sciencefriday.com/educational-resources/how-to-cultivate-moss/>, <https://indiagardening.com/a-little-more-than-gardening/types-of-mushrooms-in-india-varieties/>, http://www.ladybug.uconn.edu/FactSheets/ferns_3_2511155032.pdf

81. With reference to the history of ancient India Bhavabhuti Hastimalla and Kshemeshvara were famous

- a. Jain monks
- b. Playwrights
- c. Temple architects
- d. Philosophers

Correct Option: (B)

Explanation:

- Bhavabhuti was an 8th-century scholar of India noted for his plays and poetry, written in Sanskrit. His plays are considered the equal of the works of Kalidasa. Bhavabhuti seems to have been the court poet of King Yashovarman of Kanauj and known to have been in the entourage of the king who had fought with Lalitaditya Muktapada, the king of Kashmir and had got defeated by him
- Hastimalla was 13th century Kannada poets and writers in Hoysala Empire. He wrote Purvapurana
- Kshemendra (990 – c. 1070 CE) was an 11th-century Sanskrit poet from Kashmir in India.

82. Consider the following statements :

1. The Montagu-Chelmsford Reforms of 1919 recommended granting voting rights to all the women above the age of 21.
2. The Government of India Act of 1935 gave women reserved seats in legislature.

Which of the statements given above is/are correct?

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

Correct Option: (b)

Explanation:

- In 1918, when Britain granted limited suffrage to women property holders, the law did not apply to British citizens in other parts of the Empire. Despite petitions presented by women, women's demands were ignored in the Montagu–Chelmsford Reforms. Though they were not granted voting rights, nor the right to stand in elections, the Government of

India Act 1919 allowed Provincial Councils to determine if women could vote, provided they met stringent property, income, or educational levels.

- Between 1919 and 1929, all of the British Provinces, as well as most of the Princely states granted women the right to vote and, in some cases, allowed them to stand in local elections.
- With limited input from women, the report from the three Round Tables was sent to the Joint Committee of the British Parliament recommending lowering the voting age to 21, but retaining property and literacy restrictions, as well as basing women's eligibility on their marital status. It also provided special quotas for women and ethnic groups in provincial legislatures. These provisions were incorporated into the Government of India Act 1935. Though it extended electoral eligibility, the Act still allowed only 2.5% of the women in India to vote

83. With reference to 8th August, 1942 in Indian history, which one of the following statements is correct?

- a. The Quit India Resolution was adopted by the AICC.
- b. The Viceroy's Executive Council was expanded to include more Indians.
- c. The Congress ministries resigned in seven provinces.
- d. Cripps proposed an Indian Union with full Dominion Status once the Second World War was over.

Correct Option: (A)

84. Who among the following is associated with 'Songs from Prison', a translation of ancient Indian Religious lyrics in English?

- a. Bal Gangadhar Tilak
- b. Jawaharlal Nehru
- c. Mohandas Karamchand Gandhi
- d. Sarojini Naidu

Correct Option: (C)

Explanation:

Songs From Prison: Translations Of Indian Lyrics Made In Jail was written by Mahatma Gandhi
Sources: <https://www.amazon.in/Songs-Prison-Translations-Indian-Lyrics/dp/1258112981>

85. With reference to medieval India, which one of the following is the correct sequence in ascending order in terms of size?

- a. Paragana – Sarkar – Suba
- b. Sarkar – Paragana – Suba
- c. Suba – Sarkar – Paragana
- d. Paragana – Suba – Sarkar

Correct Option: (A)

Explanation:

- The entire Suba was divided into Sarkars (districts), each being looked after by a military officer called the chief Shiqdar. Each Sarkar was divided into smaller units called Parganas. There was a Shiqdar (military officer), Amin or Munsif (Civilian Judge), one Fotahdar (treasurer) and two Karkuns (clerks or writers) in each Pargana

Sources: NCERT

86. Who among the following was associated as Secretary with Hindu Female Schools which later came to be known as Bethune Female School?

- a. Annie Besant
- b. Debendranath Tagore
- c. Ishwar Chandra Vidyasagar
- d. Sarojini Naidu

Correct Option: (C)

Explanation:

- The college owes its origin to John Elliot Drinkwater Bethune (1801-1851). What began as Hindu Female School in 1849 was renamed as Bethune School in 1856. The Managing Committee of the school was then formed and Pandit Ishwarchandra Vidyasagar, ... a relentless supporter of women's emancipation was made the Secretary

Sources: <https://www.telegraphindia.com/my-kolkata/news/tribute-to-vidyasagar-and-nivedita-at-bethune-college/cid/1829310>

87. In the context of Colonial India, Shah Nawaz Khan, Prem Kumar Sehgal and Gurbaksh Singh Dhillon are remembered as

- a. Leaders of Swadeshi and Boycott Movement
- b. Members of the Interim Government in 1946
- c. Members of the Drafting Committee in the Constituent Assembly
- d. Officers of the Indian National Army

Correct Option: (D)

Explanation:

- Red Fort trials: Between November 1945 and May 1946, approximately ten courts-martial were held in public at the Red Fort in Delhi. Claude Auchinleck, the Commander-in-Chief of the British-Indian army, hoped that by holding public trials in the Red Fort, public opinion would turn against the INA. Those who stood trials were accused variously of murder, torture and "waging war against the King-Emperor". However, the first and most celebrated joint courts-martial – those of Prem Sahgal, Gurubaksh Singh Dhillon and

Shah Nawaz Khan – were not the story of torture and murder Auchinleck had hoped to tell the Indian press and people.

Sources: https://en.wikipedia.org/wiki/Indian_National_Army

88. With reference to Indian history, which of the following statements is/are correct?

1. The Nizam of Arcot emerged out of Hyderabad State.
2. The Mysore Kingdom emerged out of Vijayanagara Empire.
3. Rohilkhand Kingdom was formed out of the territories occupied by Ahmad Shah Durrani.

Select the correct answer using the code given below.

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

Correct Option: (A)

Explanation:

- The Carnatic was a dependency of Hyderabad Deccan, and was under the legal purview of the Nizam of Hyderabad, until their demise.
- The kingdom, which was founded and ruled for most part by the Hindu Wodeyar family, initially served as a vassal state of the Vijayanagara Empire
- The Kingdom of Rohilkhand arose under the declining Mughal Empire in 1721 and continued to exist until 1774 when annexation by the British transformed its significantly reduced borders into the Princely State of Rampur. Nawab Ali Mohammed Khan, a scion of the ancient Barha Dynasty became the first Nawab of Rohilkhand, having been previously elected as overlord by various Afghan Chiefs at the age of fourteen. He would carve out the future kingdom from the collapsing Mughal Empire and go on to the found the Rohilla Dynasty.

89. Which one of the following statements is correct?

- a. Ajanta Caves lie in the gorge of Waghora river.
- b. Sanchi Stupa lies in the gorge of Chambal river.
- c. Pandu-lena Cave Shrines lie in the gorge of Narmada river.
- d. Amaravati Stupa lies in the gorge of Godavari river.

Correct Option: (A)

Explanation:

- Ajanta Caves, Buddhist rock-cut cave temples and monasteries, located near Ajanta village, north-central Maharashtra state, western India, are celebrated for their wall paintings. The temples are hollowed out of granite cliffs on the inner side of a 70-foot (20-metre) ravine in the Wagurna River valley 65 miles (105 km) northeast of Aurangabad.

Sources: <https://www.britannica.com/place/Ajanta-Caves>
<https://www.britannica.com/place/Great-Stupa-Buddhist-monument-Sanchi-India>

90. Consider the following statements:

1. 21st February is declared to be the International Mother Language Day by UNICEF.
2. The demand that Bangla has to be one of the national languages was raised in the Constituent Assembly of Pakistan.

Which of the above statements is/are correct?

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

Correct Option: (c)

Explanation:

- The idea to celebrate International Mother Language Day was the initiative of Bangladesh. It was approved at the 1999 UNESCO General Conference and has been observed throughout the world since 2000. It is celebrated on 21 Feb each year. So, **statement 1 is correct.**
- In Bangladesh, 21 February is the anniversary of the day when the people of Bangladesh (then East Pakistan) fought for recognition for the Bangla language.
- In 1948, the then Government of Pakistan declared Urdu to be the sole national language of Pakistan, even though Bengali or Bangla was spoken by the majority of people combining East Pakistan and West Pakistan. The East Pakistan people protested, and demanded that Bangla to be at least one of the national languages, in addition to Urdu.
- The demand was raised first by Dhirendranath Datta from East Pakistan on 23 February 1948, in the constituent Assembly of Pakistan. So, **Statement 2 is also correct.**
- To demolish the protest, the government of Pakistan outlawed public meeting and rallies. The students of the University of Dhaka, with the support of the general public, arranged massive rallies and meetings. On 21 February 1952, police opened fire on rallies. Abdu Salam, Abul Barkat, Rafiq Uddin Ahmed, Abdul Jabbar and Shafiur Rahman died, with hundreds of others injured. This was a rare incident in history, where people sacrificed their lives for their mother tongue.
- Since then, Bangladeshis have celebrated the International Mother Language Day as one of their tragic days.

91. With reference to Chausath Yogini Temple situated near Morena, consider the following statements:

1. It is a circular temple built during the reign of Kachchhapaghata Dynasty.
2. It is the only circular temple built in India.
3. It was meant to promote the Vaishnava cult in the region.
4. Its design has given rise to a popular belief that it was the inspiration behind the Indian Parliament building.

Which of the statements given above are correct?

- a. 1 and 2
- b. 2 and 3 only
- c. 1 and 4
- d. 2, 3 and 4

Correct Option: (c)

Explanation:

- The Chausath Yogini temple is in Mitaoli village (also spelled Mitawali or Mitavali), near Padaoli in Morena district 40 kilometres (25 mi) from Gwalior. According to an inscription dated to 1323 CE (Vikram Samvat 1383), the temple was built by the Kachchhapaghata king Devapala (r. c. 1055 – 1075). It is said that the temple was the venue of providing education in astrology and mathematics based on the transit of the Sun.
- It is externally circular in shape with a radius of 170 feet and within its interior part it has 64 small chambers. Within the main central shrine there are slab coverings which have perforations in them to drain rainwater to a large underground storage. The pipe lines from the roof lead the rain water to the storage are also visible. The Parliament house was inspired by the circular Chausath Yogini Temple.
- The cells and the main shrine are flat topped, but it is believed that initially each had a shikhara on top. While the 64 Yoginis originally placed in the 64 subsidiary shrines are now missing, a Shiva linga has taken their places in each cell. The central shrine also holds a Shivalinga.

Sources: <https://www.financialexpress.com/lifestyle/travel-tourism/temples-which-inspired-design-of-indian-parliament-madhya-pradeshs-chausath-yogini-mandir/1575446/>

92. Which one of the following ancient towns is well-known for its elaborate system of water harvesting and management by building a series of dams and channelizing water into connected reservoirs?

- a. Dholavira
- b. Kalibangan
- c. Rakhigarhi
- d. Ropar

Correct Option: (a)

Explanation:

- The configuration of the city of Dholavira, during its heyday, is an outstanding example of planned city with planned and segregated urban residential areas based on possibly differential occupational activities, and a stratified society. Technological advancements in water harnessing systems, water drainage systems as well architecturally and technologically developed features are reflected in the design, execution, and effective harnessing of local materials.
- Unlike other Harappan antecedent towns normally located near to rivers and perennial sources of water, the location of Dholavira in the island of Khadir was strategic to harness different mineral and raw material sources (copper, shell, agate-carnelian, steatite, lead, banded limestone, among others) and to facilitate internal as well as external trade to the Magan (modern Oman peninsula) and Mesopotamian regions.
- Sources: <https://www.downtoearth.org.in/indepth/secrets-of-the-water-fort-31932>

93. In the first quarter of seventeenth century, in which of the following was/were the factory/factories of the English east India Company located?

1. Broach
2. Chicacole
3. Trichinopoly

Select the correct answer using the code given below.

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

Correct Option: (A)

Explanation:

- By 1623, English East India Company had established factories at Surat, Broach, Ahmedabad, Agra, and Masulipatam.
- In 1625, the East India Company's authorities at Surat made an attempt to fortify their factory, but the chiefs of the English factory were immediately imprisoned and put in irons by the local authorities of the Mughal Empire.
- The English opened their first factory in the South at Masulipatam in 1611. But they soon shifted the center of their activity to Madras the lease of which was granted to them by the local king in 1639.

94. From the decline of Guptas until the rise of Harshavardhana in the early seventh century, which of the following kingdoms were holding power in Northern India?

1. The Guptas of Magadha
2. The Paramaras of Malwa
3. The Pushyabhutis of Thanesar
4. The Maukharis of Kanauj
5. The Yadavas of Devagiri
6. The Maitrakas of Valabhi

Select the correct answer using the code given below.

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

Correct Option: (B)

Explanation: Yadava of Deogiri belonged to the Medieval Era.

Sources: <https://egyankosh.ac.in/bitstream/123456789/67711/1/Block-2.pdf>

95. According to Portuguese writer Nuniz, the women in Vijayanagara Empire were expert in which of the following areas?

1. Wrestling
2. Astrology
3. Accounting
4. Soothsaying

Select the correct answer using the code given below.

- a. 1, 2 and 3 only
- b. 1, 3 and 4 only
- c. 2 and 4 only
- d. 1, 2, 3 and 4

Correct Option: (D)

Explanation:

- During Vijayanagar, Women worked in different occupations. According to Nuniz, “The king of Vijayanagara has also women who wrestle, and others who are astrologers and soothsayers; and has women who write all the accounts of expenses that are incurred insides the gates of the palace and others whose duty is to write all the affairs of the kingdom and compare their books with those of writers outside; he has women also for music, who play instruments and sing. Even the wives of the kings are well-versed in music... He has judges as well as a watchman who every night guards the palace, and these are women.”

96. With reference to Madanapalle of Andhra Pradesh, which one of the following statements is correct?

- Pingali Venkayya designed the tricolour Indian National Flag here.
- Pattabhi Sitaramaiah led the Quit India Movement of Andhra region from here.
- Rabindranath Tagore translated the National Anthem from Bengali to English here.
- Madame Blavatsky and Colonel Olcott set up headquarters of Theosophical Society first here.

Correct Option: (C)

Explanation:

- Rabindranath Tagore translated "Jana Gana Mana" from Bengali to English and also set it to music in Madanapalle. The National Anthem was written by Rabindranath Tagore as early as in 1911 and was sung at the annual session of the Indian National Congress at Calcutta on 27 December that year. But it was actually done in Besant Theosophical College, Madanapalle, where Tagore stayed for a few days in February 1919 that the now familiar tune was set. It was Margaret Cousins, wife of educationist Dr. James Henry Cousins, who composed the tune for "Jana Gana Mana". Dr. J H Cousins was then the Principal of the Madanapalle College that was established by Dr. Annie Besant.

Sources: <https://timesofindia.indiatimes.com/city/hyderabad/how-a-poem-recital-in-madanapalle-led-to-india-getting-its-national-anthem/articleshow/63045339.cms>

97. Consider the following pairs:

(Historical place) (Well-known for)

- Burzahom : Rock-cut shrines
- Chandraketugarh : Terracotta art
- Ganeshwar : Copper artefacts

Which of the pairs given above is/are correctly matched?

- 1 only
- 1 and 2
- 3 only
- 2 and 3

Correct Option: (D)

Explanation:

- The Ganeshwar-Jodhpura Chalcolithic culture was first discovered in the 1970's post the excavation at Jodhpura and Ganeshwar respectively. The site of Ganeshwar yielded a lot of copper objects such as arrowheads, spearheads, chisels, fish hooks, razor blades; ornaments like rings, hairpins, bangles, antimony rods, double spiral headed pin amongst others.

- Around 50 km north-east of Kolkata, near the tiny village of Berachampa in West Bengal, lies the 2,300-year-old site of Chandraketugarh, filled with the most amazing terracotta sculptures. Two years later, archaeologist Rakhaldas Banerji – the man who discovered the ruins of Mohenjodaro – visited Chandraketugarh and found a vast crop of terracotta artefacts.

Sources: <https://www.livehistoryindia.com/story/amazing-india/chandraketugarh-an-enigma-in-bengal/>

98. Consider the following statements:

1. It was during the reign of Iltutmish that Chengiz Khan reached the Indus in pursuit of the fugitive Khwarezm prince.
2. It was during the reign of Muhammad bin Tughluq that Taimur occupied Multan and crossed the Indus.
3. It was during the reign of Deva Raya II of Vijayanagara Empire that Vasco da Gama reached the coast of Kerala.

Which of the statements given above is/are correct?

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

Correct Option: (A)

Explanation:

- Battle of Delhi: In 1398 the Mongol-Turkish warrior Timur, ruler of Central Asia from his capital at Samarkand, found a pretext to strike south into India. A devout Muslim, Timur alleged that his co-religionist Sultan Nasiruddin Mahmud of Delhi was being too lenient toward his Hindu subjects
- In 1221, the great Mongol conqueror Genghis Khan stood victorious at western bank of the Indus River with 50,000 soldiers, having just defeated Jalal-ad-Din, the Shah of Khwarazm. Jalal-ad-Din's army was completely destroyed in this battle, which took place near the town of Kalabagh in Punjab. Northern India was ruled at the time by Shams ud-Din Iltutmish.

Sources: <https://www.britannica.com/event/Battle-of-Delhi-1398>

<https://indianinterest.com/history/revealed-why-genghis-khan-refused-to-invade-india/>

99. Consider the following statements:

1. Francis Xavier was one of the founding members of the Jesuit Order.
2. Francis Xavier died in Goa and a church is dedicated to him there.
3. The Feast of St. Francis Xavier is celebrated in Goa each year.

Which of the statements given above are correct?

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

Correct Option: (C)

Explanation:

- Francis disembarked in Goa, the centre of Portuguese activity in the East, on May 6, 1542. Much of the next three years he spent on the southeastern coast of India among the simple, poor pearl fishers, the Paravas. Francis travelled tirelessly from village to village instructing and confirming them in their faith. His evident goodness and the force of his conviction overcame difficulties of verbal communication.
- Meanwhile, he had come to realize that the way to the conversion of Japan lay through China; it was to the Chinese that the Japanese looked for wisdom. He never reached China, however. On December 3, 1552, Francis died of fever on the island of Sancian (Shangchuan, off the Chinese coast) as he attempted to secure entrance to the country, then closed to foreigners

Sources: <https://www.britannica.com/biography/Saint-Francis-Xavier>

100. With reference to the history of ancient India, which of the following statements is/are correct?

1. Mitakshara was the civil law for upper castes and Dayabhaga was the civil law for lower castes.
2. In the Mitakshara system, the sons can claim right to the property during the lifetime of the father, whereas in the dayabhaga system, it is only after the death of the father that the sons can claim right to the property.
3. The Mitakshara system deals with the matters related to the property held by male members only of a family, whereas the Dayabhaga system deals with the matters related to the property held by both male and female members of a family.

Select the correct answer using the code given below.

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

Correct Option: (B)

Explanation:

- The Dayabhaga and The Mitakshara are the two schools of law that govern the law of succession of the Hindu Undivided Family Under Indian Law.

- According to the Mitakshara law school a joint family refers only to the male member of a family and extends to include his son, grandson and great-grandson. They collectively have co-ownership/Coparcenary in the Joint Family. Thus, a son by birth acquires an interest in the ancestral property of the joint family. Under the Dayabhaga law school, the son has no automatic ownership right by birth but acquires it on the demise of his father.
- In the Mitakshara system the wife cannot demand partition. She, however, has the right to a share in any partition effected between her husband and her sons. Under the Dayabhaga this right does not exist for the women because the sons cannot demand partition as the father is the absolute owner. In both the systems, in any partition among the sons, the mother is entitled to a share equal to that of a son. Similarly, when a son dies before partition leaving the mother as his heir, the mother is entitled to a share of her deceased son as well as share in her own right when there is a partition between the remaining sons.

Sources: <https://bailmeout.in/difference-between-mitakshara-and-dayabhaga-school-hindu-law/>