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Police Sub-Inspector (PSI)-402



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Police Sub-Inspector (PSI)-402 - Solved Paper with Detailed Explanations

Paper-2

Q1. In a certain code language, 'PEN - TAN' is written as '0' (zero). How is 'DEN - COB' written in that code language?

- (1) 8
- (2) 3
- (3) 9
- (4) 7

Correct Answer: (2) 3

Explanation: The code is based on the difference between the alphabetical values of the two words. $PEN = 16+5+14 = 35$ and $TAN = 20+1+14 = 35$, so the difference is 0. $DEN = 4+5+14 = 23$ and $COB = 3+15+2 = 20$; the difference is 3.

Q2. Consider the following statements with reference to Moidams - the mound burial system in Assam: A) Moidams means home for spirit. B) It is part of Tai-Ahom culture. C) These mounds were initially built with wood, later with stone and burnt bricks. D) Tai-Ahom people established Charaideo as their first city and royal necropolis.

- (1) A & B are correct
- (2) A, B & C are correct
- (3) A, B & D are correct
- (4) A, B, C and D are correct

Correct Answer: (4) A, B, C and D are correct

Explanation: Moidams are the royal mound-burial structures of the Tai-Ahom tradition in Assam, especially associated with Charaideo. The word is commonly explained as a resting/home place for the spirit. The construction tradition evolved from wooden structures to stone and burnt-brick structures.

Q3. With reference to Indian martial art forms, which one of the following is NOT matched correctly?

- (1) Gatka - Punjab
- (2) Thoda - Madhya Pradesh
- (3) Inbuan wrestling - Mizoram
- (4) Silambam - Tamil Nadu

Correct Answer: (2) Thoda - Madhya Pradesh

Explanation: Gatka is associated with Punjab, Inbuan wrestling with Mizoram and Silambam with Tamil Nadu. Thoda is a traditional martial art/archery form of Himachal Pradesh, not Madhya Pradesh.

Q4. Match the following folk songs with the respective states: a) Sohar b) Villupattu c) Bhuta Song d) Jhoori. States: i) Kerala ii) Himachal Pradesh iii) Tamil Nadu iv) Bihar

- (1) a-ii, b-i, c-iii, d-iv
- (2) a-iii, b-iv, c-ii, d-i
- (3) a-ii, b-iv, c-iii, d-i
- (4) a-iv, b-iii, c-i, d-ii

Correct Answer: (4) a-iv, b-iii, c-i, d-ii

Explanation: Sohar is a birth-related folk song popular in Bihar and eastern India. Villupattu is a bow-song tradition of Tamil Nadu. Bhuta songs are linked with Kerala/Tulu cultural traditions, and Jhoori is associated with Himachal Pradesh.

Q5. With regard to Jnanpith Award, out of 23 eligible languages which of the following languages got the award till now? A) Kashmiri B) Konkani C) Manipuri D) Santhali E) English

- (1) A, B and D are correct
- (2) B, C and D are correct
- (3) A, B and E are correct
- (4) A, B, C, D and E are correct

Correct Answer: (3) A, B and E are correct

Explanation: Kashmiri, Konkani and English have had Jnanpith awardees. Manipuri and Santhali are among the scheduled languages but had not received the Jnanpith award up to the relevant period.

Q6. Which of the following statements are correct with regard to the 2024 ICC Men's T20 World Cup? a) It was the 9th edition. b) India was the host country. c) India defeated Pakistan in the final. d) Jasprit Bumrah received Player of the Tournament.

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

Correct Answer: (3) a and d only

Explanation: The 2024 ICC Men's T20 World Cup was the 9th edition. It was hosted by the West Indies and the USA, not India. India defeated South Africa in the final, and Jasprit Bumrah was Player of the Tournament.

Q7. Match the Indian sports personalities with the sports they are associated with: a) Manika Batra b) Harmanpreet Singh c) Chirag Shetty d) Balraj Panwar. Sports: i) Hockey ii) Table Tennis iii) Rowing iv) Badminton v) Boxing

- (1) a-v, b-i, c-iii, d-ii

- (2) a-ii, b-i, c-iv, d-iii
- (3) a-ii, b-v, c-iv, d-iii
- (4) a-i, b-iv, c-iii, d-ii

Correct Answer: (2) a-ii, b-i, c-iv, d-iii

Explanation: Manika Batra is a table tennis player, Harmanpreet Singh is a hockey player, Chirag Shetty is a badminton doubles player and Balraj Panwar is associated with rowing.

Q8. Which of the following statements is correct in respect of nomination of Anglo-Indians to the Lok Sabha?

- (1) 101st Constitutional Amendment Act provided the provision
- (2) 104th Constitutional Amendment Act removed the provision
- (3) 102nd Constitutional Amendment Act removed the provision
- (4) 99th Constitutional Amendment Act removed the provision

Correct Answer: (2) 104th Constitutional Amendment Act removed the provision

Explanation: The earlier constitutional provision allowed nomination of Anglo-Indian members to the Lok Sabha. This provision ceased through the 104th Constitutional Amendment Act, 2019.

Q9. Consider the statements: Statement 1 - The Railway Budget was separated from the General Budget in 1924 on the recommendations of the Acworth Committee Report (1921). Statement 2 - The objective was to introduce flexibility in Railway Finance.

- (1) Both Statement 1 and Statement 2 are correct
- (2) Statement 1 is correct, Statement 2 is incorrect
- (3) Both statements do not reflect the objectives
- (4) Statement 1 is incorrect and Statement 2 is incorrect

Correct Answer: (1) Both Statement 1 and Statement 2 are correct

Explanation: The Acworth Committee recommended separating railway finances from general finances. The separation gave greater flexibility and financial focus to railway administration and investment.

Q10. Consider the pairs regarding Koppen's climatic classification in India: a) Coromandel - As b) Western Coast - Amw c) Hot desert of Rajasthan - BShw

- (1) a only
- (2) a and b only
- (3) b only
- (4) a, b and c

Correct Answer: (2) a and b only

Explanation: The Coromandel Coast has a tropical savanna/dry-summer type often denoted As, and the western coast has a monsoon climate (Amw). The hot desert of Rajasthan is generally BWhw, while BShw denotes hot semi-arid/steppe areas, so c is incorrect.

Q11. Final award of the Bachawat Commission Tribunal (1973) allocated ____ of Krishna river water to Karnataka State.

- (1) 1111 TMC
- (2) 1011 TMC
- (3) 911 TMC
- (4) 811 TMC

Correct Answer: Defective / No correct option

Explanation: The KWDT-I/Bachawat award allocated 700 TMC to Karnataka under Scheme A. Since 700 TMC is not among the printed options, the question is defective.

Q12. Match List I with List II showing important rivers of Europe and the sea into which they flow: a) The Rhine b) The Rhone c) The Volga d) The Onega. Seas: i) North Sea ii) Black Sea iii) Caspian Sea iv) White Sea

- (1) a-i, b-ii, c-iii, d-iv
- (2) a-ii, b-iii, c-i, d-iv
- (3) a-iv, b-iii, c-ii, d-i
- (4) a-i, b-iv, c-iii, d-ii

Correct Answer: Defective / No exact option

Explanation: Rhine flows into the North Sea, Volga into the Caspian Sea and Onega into the White Sea. The Rhone flows into the Mediterranean Sea, which is not listed. Therefore no printed option is fully correct.

Q13. Consider the solar power plants: a) Elesandra b) Itnal c) NP Kunta d) Yapaladinni e) Galiveedu. Which are located in Karnataka?

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

Correct Answer: (2) a, b and d

Explanation: Elesandra, Itnal and Yapaladinni are solar power locations in Karnataka. NP Kunta and Galiveedu are associated with Andhra Pradesh, not Karnataka.

Q14. From source to mouth, which is the correct sequence of hydropower houses along the Kali River Valley?

- (1) Nagazhari - Supa - Kudasalli - Kadra
- (2) Supa - Nagazhari - Kudasalli - Kadra
- (3) Supa - Nagazhari - Kadra - Kudasalli
- (4) Nagazhari - Kudasalli - Supa - Kadra

Correct Answer: (2) Supa - Nagazhari - Kudasalli - Kadra

Explanation: Supa is the upstream dam/power station in the Kali valley. Downstream sequence moves through Nagazhari and Kudasalli before reaching Kadra near the lower valley.

Q15. Match List I and List II: a) Centre for Arid Zone Research Institute b) Institute of Wood Science Technology c) Centre for Forest Productivity d) Centre for Social Forestry and Environment. Cities: i) Bengaluru ii) Allahabad iii) Jodhpur iv) Ranchi

- (1) a-iii, b-i, c-ii, d-iv
- (2) a-iii, b-i, c-iv, d-ii
- (3) a-iii, b-iv, c-ii, d-i
- (4) a-iii, b-iv, c-i, d-ii

Correct Answer: (2) a-iii, b-i, c-iv, d-ii

Explanation: CAZRI is at Jodhpur, IWST is at Bengaluru, Centre for Forest Productivity is at Ranchi, and Centre for Social Forestry and Eco-Rehabilitation is at Allahabad/Prayagraj.

Q16. Which one of the following tribes is not correctly matched?

- (1) Birhor - Chhattisgarh
- (2) Apatani - Arunachal Pradesh
- (3) Kadar - Tamil Nadu
- (4) Jaunsari - Maharashtra

Correct Answer: (4) Jaunsari - Maharashtra

Explanation: The Jaunsari tribe/community is mainly associated with the Jaunsar-Bawar region of Uttarakhand, not Maharashtra. The other pairs are acceptable in standard GK context.

Q17. Consider the statements about National Parks of Karnataka: a) Moyar river passes through southern Bandipur. b) Bannerghatta is part of an elephant corridor connecting B.R. Hills and Sathyamangalam forests. c) Kudremukh NP is spread over Dakshina Kannada, Udipi and Chikkamagaluru. d) Nagarhole is the only habitat in Asia where black panther is found.

- (1) a, b and c are correct
- (2) b, c and d are correct
- (3) a, b and d are correct

(4) only a and b are correct

Correct Answer: (1) a, b and c are correct

Explanation: Statements a, b and c are correct in the exam context. Statement d is incorrect because black panthers are not restricted only to Nagarahole; melanistic leopards occur in other forest landscapes too.

Q18. Match correctly: a) Inner Core b) Outer Core c) Mantle d) Crust with i) 5-40 km ii) 2895 km iii) 1255 km iv) 2245 km

(1) a-iii, b-i, c-iv, d-ii

(2) a-ii, b-iii, c-iv, d-i

(3) a-iv, b-iii, c-ii, d-i

(4) a-iii, b-iv, c-ii, d-i

Correct Answer: (4) a-iii, b-iv, c-ii, d-i

Explanation: Approximate thicknesses are: crust 5-40 km, mantle about 2895 km, outer core about 2245 km, and inner core about 1255 km.

Q19. Statements on reflection by plane mirrors: i) Reflection from a plane mirror is irregular reflection. ii) A plane mirror forms only a single image of an object. iii) By varying the angle between two plane mirrors, different numbers of images can be obtained.

(1) i correct, ii and iii wrong

(2) i wrong, ii and iii correct

(3) i and ii correct, iii wrong

(4) i and iii correct, ii wrong

Correct Answer: (2) Statement i is wrong but ii and iii are correct

Explanation: A plane mirror produces regular reflection, not irregular reflection. A single plane mirror forms one image. When two plane mirrors are inclined at different angles, the number of images changes according to the angle.

Q20. Consider the statements: I) Government should increase tax rates during deflationary trends. II) Tax is an important fiscal policy instrument.

(1) I correct, II incorrect

(2) I incorrect, II correct

(3) Both correct and II explains I

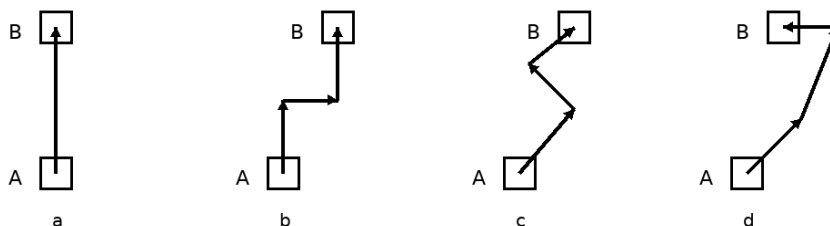
(4) Both correct but II does not explain I

Correct Answer: (2) Statement I is incorrect but Statement II is correct

Explanation: During deflation, governments generally reduce taxes or increase spending to stimulate demand. Taxation is indeed a major fiscal policy instrument, so Statement II is correct.

Q21. An object is lifted from point A to B against gravity along four different paths as shown. Pick the correct option.

- (1) Work done in all four cases is equal
- (2) Work done is maximum for b and c
- (3) Work done is minimum for a
- (4) Work done is maximum for d



Correct Answer: (1) Work done to lift the object in all four cases is equal

Explanation: Against gravity, work done depends only on vertical height gained (mgh), not on the path taken. Since all paths lift the object from the same A to the same height B, the work done is equal.

Q22. Ice point and boiling point of water: a) Celsius scale: 0 C and 100 C b) Fahrenheit scale: 32 F and 222 F c) Kelvin scale: 273 K and 373 K. Which are correct?

- (1) a, b and c
- (2) a and b
- (3) b and c
- (4) a and c

Correct Answer: (4) a and c

Explanation: Celsius values 0 C and 100 C are correct. Kelvin values are approximately 273 K and 373 K. Fahrenheit boiling point is 212 F, not 222 F, so b is incorrect.

Q23. Soft drink beverages are usually stored in PET bottles. Expand PET.

- (1) Poly ethylene terephthalate
- (2) Poly ethyl toluene
- (3) Propyl ethyl terephthalate
- (4) Phenyl ethanyl terephthalate

Correct Answer: (1) Poly ethylene terephthalate

Explanation: PET stands for polyethylene terephthalate, a lightweight and recyclable polymer widely used for beverage bottles.

Q24. Read the statements: a) CO₂ is a major greenhouse gas. b) CFCs can cause ozone degradation. c) In Three Mile Island, accidental radioactive leakage occurred. d) Greenhouse effect is due to release of agrochemicals into water.

- (1) a, b, c only
- (2) b, c, d only
- (3) a, c, d only
- (4) a, b, d only

Correct Answer: (1) a, b, c only

Explanation: CO₂ contributes to greenhouse warming, CFCs damage the ozone layer, and Three Mile Island is known for a nuclear accident. Agrochemicals in water cause water pollution/eutrophication, not the greenhouse effect.

Q25. Statement I: Acid rain has pH less than 5.6. Statement II: Acid rain contains acids such as nitric acid and sulphuric acid.

- (1) Both correct and II explains I
- (2) Both correct but II does not explain I
- (3) I correct but II incorrect
- (4) I incorrect but II correct

Correct Answer: (1) Both correct and II explains I

Explanation: Acid rain is more acidic than normal rain and typically has pH below 5.6. This acidity is mainly due to sulphuric and nitric acids formed from SO₂ and NO_x emissions, so Statement II explains Statement I.

Q26. Statement I: Resistivity of a material does not depend on nature of substance and temperature. Statement II: Resistivity is a characteristic property of the material.

- (1) Both true and II explains I
- (2) Both true but II does not explain I
- (3) I true and II false
- (4) I false and II true

Correct Answer: (4) Statement I is false and Statement II is true

Explanation: Resistivity depends on the nature of material and also changes with temperature. It is a characteristic property of a given material at a specified temperature.

Q27. A person exhibits symptoms such as increased alertness, pupillary dilation, piloerection and sweating in an emergency. The hormones responsible are:

- (1) Oxytocin and Vasopressin

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- (2) Insulin and Glucagon
- (3) Estrogen and Progesterone
- (4) Adrenaline and Noradrenaline

Correct Answer: (4) Adrenaline and Noradrenaline

Explanation: Emergency or fight-or-flight responses are mediated mainly by adrenaline and noradrenaline from the adrenal medulla. They increase alertness, heart rate, sweating and pupil dilation.

Q28. Match diseases with deficiency/related hormone or substance: a) Goitre b) Acromegaly c) Diabetes insipidus d) Diabetes mellitus. i) Vasopressin ii) Insulin iii) Growth hormone iv) Iodine

- (1) a-iv, b-iii, c-i, d-ii
- (2) a-i, b-ii, c-iii, d-iv
- (3) a-iii, b-ii, c-i, d-iv
- (4) a-ii, b-iii, c-iv, d-i

Correct Answer: (1) a-iv, b-iii, c-i, d-ii

Explanation: Goitre is commonly linked with iodine deficiency. Acromegaly is related to excess growth hormone, diabetes insipidus to deficiency of vasopressin/ADH, and diabetes mellitus to insulin deficiency or insulin resistance.

Q29. To remove particulate matter from exhaust in a thermal power plant to reduce pollution, which can be used?

- (1) Muffler
- (2) Incinerator
- (3) Electrostatic precipitator
- (4) Catalytic converter

Correct Answer: (3) Electrostatic precipitator

Explanation: Electrostatic precipitators charge dust particles and collect them on plates, thereby removing fly ash and particulate matter from flue gases.

Q30. Match rivers with tributaries: a) Cauvery b) Godavari c) Narmada d) Krishna. i) Manjra-Wardha-Indravati ii) Hiran-Barna-Shakkar iii) Koyna-Ghataprabha-Bhima iv) Harangi-Hemavati-Kabini

- (1) a-iii, b-i, c-ii, d-iv
- (2) a-iv, b-i, c-ii, d-iii
- (3) a-i, b-iii, c-ii, d-iv
- (4) a-iv, b-ii, c-iii, d-i

Correct Answer: (2) a-iv, b-i, c-ii, d-iii

Explanation: Harangi, Hemavati and Kabini are tributaries of Cauvery. Manjra, Wardha and Indravati are linked with Godavari. Hiran, Barna and Shakkar are Narmada tributaries; Koyna, Ghataprabha and Bhima belong to Krishna system.

Q31. Identify the correct names of temperate grasslands: a) Savannah, Campos, Lianos b) Pampas, Prairie, Down c) Savannah, Prairie, Veld d) Veld, Savannah, Campos

- (1) Only d is correct
- (2) a and b are correct
- (3) Only b is correct
- (4) c and d are correct

Correct Answer: (3) Only b is correct

Explanation: Pampas, Prairies and Downs are temperate grasslands. Savannah, Campos and Llanos are tropical grassland types, so the mixed options are incorrect.

Q32. Disease-resistant varieties: A is resistant wheat, B is resistant cowpea, C is hybrid-resistant chilli. Identify A, B and C.

- (1) A-Pusa Komal, B-Himgiri, C-Pusa Sadabahar
- (2) A-Pusa Sadabahar, B-Pusa Komal, C-Himgiri
- (3) A-Pusa Sadabahar, B-Himgiri, C-Pusa Komal
- (4) A-Himgiri, B-Pusa Komal, C-Pusa Sadabahar

Correct Answer: (4) A-Himgiri, B-Pusa Komal, C-Pusa Sadabahar

Explanation: Himgiri is a disease-resistant wheat variety, Pusa Komal is a cowpea variety, and Pusa Sadabahar is a chilli variety known for disease resistance.

Q33. Statement I: It is always easier to roll a body than to slide it over another. Statement II: Rolling friction is smaller than sliding friction.

- (1) Both statements are wrong
- (2) I correct but II wrong
- (3) I wrong but II correct
- (4) Both statements are correct

Correct Answer: (4) Both statements are correct

Explanation: Rolling friction is much smaller than sliding friction because deformation and interlocking are less. Hence rolling a body generally requires less force than sliding it.

Q34. Which is not a correct method to prevent corrosion of metal?

- (1) Covering metal surface by paint

- (2) Covering metal with other metals such as Sn, Zn
- (3) Galvanisation
- (4) Keeping metal in acidified water

Correct Answer: (4) Keeping metal in acidified water

Explanation: Painting, tinning, zinc coating and galvanisation protect the metal from air and moisture. Acidified water accelerates corrosion and is therefore not a preventive method.

Q35. Quit India underground activities: a) Socialists and Forward Bloc members were heavily involved. b) Usha Mehta started an underground radio in Poona. c) The underground movement aimed to maintain public morale and provide guidance.

- (1) a and b only
- (2) b and c only
- (3) a and c only
- (4) a, b and c

Correct Answer: (3) a and c only

Explanation: Underground activities during Quit India involved socialists and Forward Bloc workers, and helped maintain morale and guidance. Usha Mehta did start underground Congress Radio, but it was in Bombay, not Poona.

Q36. With reference to Shyamji Krishna Varma: a) Founded Ghadar Party b) Started Indian Sociologist journal c) Established Indian Home Rule Society. How many are correct?

- (1) One only
- (2) Two only
- (3) All the three
- (4) None

Correct Answer: (2) Two only

Explanation: Shyamji Krishna Varma started The Indian Sociologist and established the Indian Home Rule Society in London. The Ghadar Party was not founded by him.

Q37. How many of the following regions were merged with Unified Karnataka in 1956 from Madras Presidency? a) Kollegal b) Ballary c) Dakshina Kannada d) Amindivi

- (1) Only one
- (2) Only two
- (3) Only three
- (4) All the four

Correct Answer: (3) Only three

Explanation: Kollegal, Bellary and Dakshina Kannada/South Kanara areas became part of the unified Mysore State/Karnataka reorganisation context. Amindivi islands did not merge with Karnataka; they went into the Lakshadweep Union Territory arrangement.

Q38. With reference to organisations of the freedom movement in Karnataka, consider: a) Mazzini Club - Gangadhar Rao Deshpande b) Charka Sangha - Hanumantharaya Deshpande c) Hindustani Sevadai - Hardekar Manjappa. How many pairs are correctly matched?

- (1) Only one
- (2) Only two
- (3) All the three
- (4) None

Correct Answer: (4) None

Explanation: Mazzini Club is associated with Govindrao Yalgi and Hanumantha Rao Deshpande, not Gangadhar Rao Deshpande. Hindustani Seva Dal is associated with N.S. Hardikar. The listed pairings are therefore not correctly matched in the standard account.

Q39. How many of the following Portuguese travellers visited the Vijayanagara Empire? a) Domingo Paes b) Afanasy Nikitin c) Fernao Nuniz d) Niccolo de' Conti

- (1) Only one
- (2) Only two
- (3) Only three
- (4) All the four

Correct Answer: (2) Only two

Explanation: Domingo Paes and Fernao Nuniz were Portuguese travellers associated with accounts of Vijayanagara. Afanasy Nikitin was Russian and Niccolo de' Conti was Italian/Venetian, not Portuguese.

Q40. With reference to Hoysala temples: a) Ekakuta - Channakesava Temple, Belur b) Dwikuta - Hoysaleswara Temple, Halebeedu c) Trikuta - Lakshmi Temple, Doddagaddavalli d) Chatushkuta - Veeranarayana Temple, Belavadi. How many are correctly matched?

- (1) Only one
- (2) Only two
- (3) Only three
- (4) All the four

Correct Answer: (2) Only two

Explanation: Chennakesava at Belur is usually treated as ekakuta and Hoysaleswara at Halebidu as dwikuta. Lakshmi Devi temple at Doddagaddavalli is famous as a chatushkuta shrine, and Veeranarayana at Belavadi is associated with trikuta form, so c and d are reversed/incorrect.

Q41. Science and technology of Gupta period: a) Aryabhata's Aryabhatiya is a mathematical work. b) Romaka Siddhanta is a work on astronomy belonging to Gupta period. c) Progress in metallurgy led to bronze Buddha statues. Which statements are correct?

- (1) a and b
- (2) a and c
- (3) b and c
- (4) a, b, c and d (misprinted option)

Correct Answer: All listed statements a, b and c are correct; printed option (4) appears misprinted

Explanation: Aryabhatiya is a major mathematical-astronomical text. Romaka Siddhanta belongs to the astronomy tradition of the period, and Gupta-age metallurgy/art saw important bronze and metal images. Since only a, b and c are listed but option (4) says a, b, c and d, the option is a printing error; choose the option intended for all listed statements.

Q42. Which tribal rebellions took place in the Chotanagpur region? a) Kol Rebellion b) Rampa Rebellion c) Santhal Rebellion d) Munda Rebellion

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

Correct Answer: (2) a, c and d only

Explanation: Kol and Munda rebellions are directly associated with the Chotanagpur region. Santhal rebellion is associated with the Santhal Pargana/adjacent tribal belt of eastern India. Rampa rebellion occurred in the Godavari agency area of present Andhra Pradesh.

Q43. Buddhist councils and patronage: a) First - Shishunaga b) Second - Haryanka c) Third - Maurya d) Fourth - Kushana. Which are correctly matched?

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

Correct Answer: (3) c and d

Explanation: The First Council was under Ajatashatru of the Haryanka dynasty, and the Second under Kalashoka/Shishunaga line; hence a and b are not correct. The Third was patronised by Ashoka of the Maurya dynasty and the Fourth by Kanishka of the Kushana dynasty.

Q44. With reference to Rajatarangini: a) It was written by Kalhana. b) It is written in Sanskrit language. c) It deals with the history of Harshavardhana. How many are correct?

- (1) Only one
- (2) Only two
- (3) All the three
- (4) None

Correct Answer: (2) Only two

Explanation: Rajatarangini was written by Kalhana in Sanskrit. It is primarily a chronicle of the kings of Kashmir, not a history of Harshavardhana of Kannauj.

Q45. WHO declared Mpox outbreak a public health emergency of international concern. Which statements are correct? a) Mpox virus belongs to same family as smallpox virus b) It spreads through direct skin-to-skin contact c) It is zoonotic d) Variants are called clades

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

Correct Answer: (4) a, b, c and d are correct

Explanation: Mpox is an orthopoxvirus related to smallpox virus. It is zoonotic, spreads through close contact including skin-to-skin contact, and its variants/lineages are classified as clades.

Q46. Which statement is correct with reference to LK-99?

- (1) It is a lead-based compound supposed to possess superconducting properties as claimed by Korean scientists
- (2) It is a recent Covid variant identified in EU lab
- (3) It is an additive to petroleum fuels for BS-6 engines
- (4) It is the name of an island discovered near the South Pole

Correct Answer: (1) Lead-based claimed superconductor

Explanation: LK-99 came into news as a copper-substituted lead apatite compound claimed by Korean researchers to show room-temperature superconductivity. The claim was later widely scrutinised, but the description in option (1) identifies the topic.

Q47. Match regions in news with countries: a) Kursk b) Tigray c) St Martin Island d) Kachin e) Nagorno-Karabakh. Countries: i) Myanmar ii) Russia iii) Azerbaijan iv) Ethiopia v) Bangladesh

- (1) a-ii, b-i, c-iii, d-iv, e-v
- (2) a-iii, b-ii, c-v, d-i, e-iv
- (3) a-ii, b-iv, c-v, d-i, e-iii

(4) a-v, b-iv, c-i, d-ii, e-iii

Correct Answer: (3) a-ii, b-iv, c-v, d-i, e-iii

Explanation: Kursk is in Russia, Tigray is in Ethiopia, St Martin Island is related to Bangladesh, Kachin is in Myanmar and Nagorno-Karabakh is associated with Azerbaijan.

Q48. With reference to Government of India Budget 2024-25: a) Purvodaya targets Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Andhra Pradesh and West Bengal. b) Plan to develop Amritsar-Kolkata Industrial Corridor with node at Patna. c) Additional fund allocation for Hyderabad-Bangalore Industrial Corridor. d) Additional fund allocation to Kosi-Mechi river link.

(1) a and c

(2) a and b

(3) c and d

(4) a, b, c and d

Correct Answer: (3) c and d are correct

Explanation: Purvodaya was framed for eastern India including Bihar, Jharkhand, West Bengal, Odisha and Andhra Pradesh, so the listed states in a are not correct. The industrial node referred to in Bihar was Gaya, not Patna. Statements c and d match the budget announcements.

Q49. Pradhan Mantri JI-VAN Yojana: a) Promotes 2G biofuels from non-food crops/agri residues/waste b) Ethanol will be supplied to OMCs for blending c) 2G biofuel technology uses micro algae to produce ethanol d) India's first 2G ethanol biorefinery project was started in Bhatinda, Punjab

(1) a and b

(2) a, b and c

(3) a, b and d

(4) a, b, c and d

Correct Answer: (1) a and b are correct

Explanation: The scheme supports second-generation ethanol from lignocellulosic biomass, agricultural residues and waste, and links ethanol supply with OMC blending. Microalgae is generally treated under advanced/third-generation biofuels, and the first major 2G ethanol plant was not at Bhatinda.

Q50. Gobekli Tepe, which was in news recently, is related to:

(1) Archaeological site in Turkey

(2) Conflict zone in Ukraine

(3) Dark oxygen discovered in Pacific Ocean

(4) Missile testing site in Iran

Correct Answer: (1) Archaeological site in Turkey

Explanation: Gobekli Tepe is a prehistoric archaeological site in south-eastern Turkey, famous for early monumental stone structures.

Q51. Which statements are correct with reference to the 10th Karnataka Bird Festival held in 2024? a) Hosted by Karnataka Forest Department, Jungle Lodges and Resorts and Karnataka Ecotourism Development Board b) Organised along the Krishna River in Bagalkot c) Indian roller was mascot d) Separate cell for bird research was decided

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

Correct Answer: (1) a and b only

Explanation: The festival was organised by the Karnataka Forest Department/Jungle Lodges/Karnataka Ecotourism bodies at Bagalkot near the Krishna/Almatti backwater region. The mascot was the Greater Flamingo, not Indian Roller, so c is incorrect.

Q52. What is the objective of the Amitabh Kant committee constituted in 2023?

- (1) To examine stalled real estate projects and revive them
- (2) To reduce trade deficit and promote export
- (3) To provide roadmap for revival of BSNL
- (4) To reduce subsidies on chemical fertilizer

Correct Answer: (1) To examine stalled real estate projects and revive them

Explanation: The committee headed by Amitabh Kant was constituted to examine problems of stalled real estate projects and recommend measures for their completion and revival.

Q53. Which countries are members of both QUAD and Middle East QUAD (I2U2)? a) India b) Australia c) USA d) UAE

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

Correct Answer: (2) a and c

Explanation: The QUAD consists of India, USA, Japan and Australia. I2U2 consists of India, Israel, UAE and USA. The common members are India and USA.

Q54. National Critical Minerals Mission: a) Reinforces self-reliance in raw materials essential for economic growth b) Reinforces critical mineral value chain from exploration to recycling c) PLI for critical mineral recycling d) Ensures self-sufficiency in industrial demands for critical minerals

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

Correct Answer: (4) a, b, c and d

Explanation: The mission is designed to secure critical minerals through exploration, mining, processing, recycling and value-chain strengthening. It also supports self-reliance and industrial security in critical mineral supply.

Q55. Select the chronological order of establishments: a) Mysore University b) Bank of Mysore Ltd c) Karnataka Sahitya Parishad d) Mythic Society

- (1) a, b, c, d
- (2) d, b, a, c
- (3) d, b, c, a
- (4) b, d, c, a

Correct Answer: (3) d, b, c, a

Explanation: The Mythic Society was established in 1909, Bank of Mysore in 1913, Karnataka Sahitya Parishad in 1915 and University of Mysore in 1916.

Q56. Match Chola land categories: a) Brahmadeya b) Devadana c) Pallichchandam d) Shalabhoga.
Meanings: i) Jain institutions ii) school maintenance iii) Brahmanas iv) temples

- (1) a-iv, b-iii, c-ii, d-i
- (2) a-i, b-iii, c-ii, d-iv
- (3) a-ii, b-iv, c-i, d-iii
- (4) a-iii, b-iv, c-i, d-ii

Correct Answer: (4) a-iii, b-iv, c-i, d-ii

Explanation: Brahmadeya was land gifted to Brahmanas, Devadana to temples, Pallichchandam to Jain institutions, and Shalabhoga for maintenance of schools/education.

Q57. Assertion: Mahmud Ghazni made 17 raids on India. Reason: He wanted to establish a Muslim empire in India.

- (1) Both correct and R explains A
- (2) Both correct but R does not explain A
- (3) A correct but R incorrect

(4) A incorrect but R correct

Correct Answer: (3) A correct but R incorrect

Explanation: Mahmud Ghazni is traditionally associated with 17 raids into India. His chief aim was plunder, wealth and prestige, not establishing a permanent Indian empire.

Q58. Which pairs are correctly matched? a) Ramnarayan - Deputy Diwan of Bengal b) Shah Alam - Nawab of Bengal c) Shuja-ud-daula - Nawab of Arcot d) Mir Jafar - Nawab of Bengal

(1) a and b

(2) b and c

(3) a and d

(4) c and d

Correct Answer: (3) a and d

Explanation: Ramnarayan was associated with the Bengal administration and Mir Jafar was Nawab of Bengal. Shah Alam was Mughal emperor, and Shuja-ud-daula was Nawab of Awadh, not Arcot.

Q59. Which incidents and persons are correctly matched? a) Assassination of Curzon Wylie - Madan Lal Dhingra b) Murder of St. Stephen/Stevens - Shanti and Suniti Chaudhary c) Bomb in Central Legislative Assembly - Bhagat Singh d) Seizure of Chittagong armoury - Rajguru

(1) a and b only

(2) a and c only

(3) a and d only

(4) b and c only

Correct Answer: Defective / No exact option

Explanation: a is correct; b refers to the assassination of magistrate Stevens by Shanti Ghosh and Suniti Choudhury; c is also associated with Bhagat Singh (with Batukeshwar Dutt). d is incorrect because Chittagong armoury raid is associated with Surya Sen. Since a, b and c are correct but no such option is printed, the question is defective.

Q60. Match software types: a) System Software b) Public Domain Software c) Application Software d) Open Source Software. i) free to download/view/modify/distribute source code ii) controls operational and processing capabilities iii) shareware/freeware iv) solves a specific problem

(1) a-ii, b-iv, c-iii, d-i

(2) a-iv, b-iii, c-ii, d-i

(3) a-ii, b-i, c-iv, d-iii

(4) a-ii, b-iii, c-iv, d-i

Correct Answer: (4) a-ii, b-iii, c-iv, d-i

Explanation: System software manages the computer system. Application software solves user-specific tasks. Open source software permits viewing/modifying/distributing source code. Public domain/freeware/shareware is placed under the free-use category in this exam context.

Q61. The President of India renamed two halls in Rashtrapati Bhavan. Identify correctly matched pairs: a) Durbar Hall - Ganatantra Mandap b) Ashok Hall - Ashok Mandap c) Banquet Hall - Annapurna Mandap d) Durbar Hall - Swatanrya Mandap

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

Correct Answer: (4) a and b only

Explanation: Durbar Hall was renamed Ganatantra Mandap and Ashok Hall was renamed Ashok Mandap. The other two pairings are not the official changes.

Q62. Why is impartiality necessary for a civil servant? a) Fulfilling all interests equitably b) Upholding professional ethics c) Working in favour of majoritarianism d) Promoting interests of weaker sections e) Acting according to constitutional mandate. Which statement is wrong?

- (1) a, b and e
- (2) d only
- (3) c only
- (4) All are correct

Correct Answer: (3) c only

Explanation: Impartiality means fair treatment according to law and constitutional morality. Working in favour of majoritarianism is inconsistent with impartial administration, whereas the other statements support fair and ethical public service.

Q63. Saumitra Kumar Haldar is the chairman of CWMA. Expand CWMA.

- (1) Canal Water Management Authority
- (2) Cauvery Water Management Authority
- (3) Central Water Management Authority
- (4) Cauvery Water Maintenance Authority

Correct Answer: (2) Cauvery Water Management Authority

Explanation: CWMA stands for Cauvery Water Management Authority, the authority created for implementation and management of Cauvery water-sharing arrangements.

Q64. Expand OWASP in reference to cyber security.

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- (1) Open World Advanced Security Project
- (2) Open Web Application Security Project
- (3) Open World Application Security Project
- (4) Open Web Application Service Plan

Correct Answer: (2) Open Web Application Security Project

Explanation: OWASP is a global non-profit community and project dealing with web application security practices, vulnerabilities and guidance.

Q65. Match network security terms: a) Denial of Service b) Virus c) Ransomware d) Malware. i) Clop attack ii) Yo-Yo attack iii) Brain iv) Melissa

- (1) a-ii, b-i, c-iii, d-iv
- (2) a-ii, b-iv, c-i, d-iii
- (3) a-ii, b-iii, c-i, d-iv
- (4) a-iii, b-ii, c-i, d-iv

Correct Answer: (3) a-ii, b-iii, c-i, d-iv

Explanation: Yo-Yo attack is associated with denial-of-service/cloud scaling abuse. Brain is an early computer virus, Clop is ransomware, and Melissa is a malware/virus example.

Q66. Match transportation infrastructure initiatives with aims: a) Gati Shakti b) Bharatmala Pariyojana c) Parvatmala Pariyojana d) Bhoomi Rashi. i) Efficient logistics network ii) ropeways iii) online land acquisition iv) highways and road network

- (1) a-iv, b-ii, c-iii, d-i
- (2) a-i, b-iv, c-ii, d-iii
- (3) a-iii, b-ii, c-i, d-iv
- (4) a-i, b-iii, c-ii, d-iv

Correct Answer: (2) a-i, b-iv, c-ii, d-iii

Explanation: PM Gati Shakti integrates infrastructure/logistics planning, Bharatmala develops highways, Parvatmala promotes ropeways, and Bhoomi Rashi digitises land acquisition for highways.

Q67. Regarding 'Hindu Rate of Growth': a) Term coined by Prof. Raj Krishna in 1978 b) It described low Indian economic growth from 1950s to 1980s c) It averaged around 4%. Which statements are correct?

- (1) a and b only
- (2) a only
- (3) b and c only
- (4) a, b and c

Correct Answer: (4) a, b and c

Explanation: The phrase was popularised by economist Raj Krishna for India's slow growth in the pre-liberalisation decades. The growth rate is generally described as around 3.5-4%, so all three are acceptable in exam context.

Q68. Statements regarding TISCO: a) Established in 1907 b) Started at Sakchi c) Raw materials from Odisha and Chhattisgarh d) Kharkai and Subarnarekha rivers ensured water supply

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

Correct Answer: (4) a, b, c and d

Explanation: TISCO was founded in 1907 at Sakchi, later Jamshedpur. The region had access to iron ore/coal from nearby mineral belts and water from Kharkai and Subarnarekha rivers.

Q69. Raitha Sanjeevini: a) KSAMB provides Rs. 50,000 for farmer death during agricultural operation b) Farmers do not pay premium c) All APMCs compulsorily contribute d) Compensation ranges from Rs. 1500 to Rs. 15,000. Which statements are incorrect?

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

Correct Answer: (2) a and d

Explanation: In the updated scheme context, death compensation and disability/injury compensation amounts are higher than the older figures printed in a and d. The premium is not paid by farmers and APMC contribution is part of the scheme structure.

Q70. PM-PRANAM: a) Announced in Union Budget 2024-25 b) Reduces dependency on chemical fertiliser and promotes organic/biofertiliser c) Rs. 50,000 crore earmarked d) Encourages sustainable agricultural practices

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

Correct Answer: (3) b and d are correct

Explanation: PM-PRANAM aims to incentivise states to reduce chemical fertiliser use and promote alternative/sustainable nutrient management. It was announced earlier than 2024-25 and operates through savings-linked incentives, not a fixed Rs. 50,000 crore earmark.

Q71. Justice Amitava Roy Committee: a) Constituted by Ministry of Law and Justice b) To look into prison reforms c) One-member committee d) Telemedicine in prisons was one suggestion

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

Correct Answer: (3) b and d are correct

Explanation: The Supreme Court constituted the Justice Amitava Roy Committee for prison reforms; it was not simply a Ministry of Law and Justice committee. Telemedicine and reform measures for prisons were among the committee's recommendations.

Q72. GI tag pairs: a) Kani shawl - Jammu and Kashmir b) Kotpad handloom fabric - Jharkhand c) Tangaliya shawl - Assam d) Bhavani Jamakkalam - Tamil Nadu

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

Correct Answer: (2) a and d only

Explanation: Kani shawl is associated with Jammu and Kashmir and Bhavani Jamakkalam with Tamil Nadu. Kotpad handloom fabric is from Odisha and Tangaliya shawl from Gujarat, so b and c are wrong.

Q73. Statement I: Carbon tax is levied on carbon emissions arising while producing goods. Statement II: Carbon taxes make hidden social costs visible.

- (1) I correct, II not correct
- (2) I incorrect, II correct
- (3) Both correct and II explains I
- (4) Both correct but II does not explain I

Correct Answer: (3) Both correct and II explains I

Explanation: Carbon taxes price the carbon emitted during production/consumption. This internalises the external social cost of pollution and climate damage, so Statement II explains the logic of Statement I.

Q74. Against whom did Carlos Alcaraz win the 2024 men's singles Wimbledon title, and to which country does that opponent belong?

- (1) Novak Djokovic - Spain
- (2) Rafael Nadal - Spain
- (3) Roger Federer - Switzerland

(4) Novak Djokovic - Serbia

Correct Answer: (4) Novak Djokovic - Serbia

Explanation: Carlos Alcaraz defeated Novak Djokovic in the 2024 Wimbledon men's singles final. Djokovic represents Serbia.

Q75. Green Credit Programme areas: a) Afforestation b) Water conservation c) Stemming water pollution d) Waste management e) Mangrove conservation. Which are eligible to receive green credits?

(1) a, b, c and d

(2) b, c and e

(3) a, b, d and e

(4) b, c, d and e

Correct Answer: (3) a, b, d and e

Explanation: The Green Credit Programme covers activities such as tree plantation/afforestation, water conservation, waste management and mangrove conservation. The printed wording 'stemming water pollution' is not one of the standard listed activity categories in this form.

Q76. Plastic mitigation: a) Global Plastics Treaty negotiations involving at least 175 UN members convened in 2024 b) Goal is to finalise legal document by end of 2028 c) India in 2022 brought Plastic Waste Management Amendment Rules d) These rules banned 29 categories of single-use plastic. Which are correct?

(1) a and b only

(2) a and c only

(3) b and c only

(4) b and d only

Correct Answer: (2) a and c only

Explanation: The global plastic treaty negotiations were active in 2024 with broad UN participation. The target was not 2028, and India's 2022 single-use plastic ban covered identified items but not 29 categories as printed.

Q77. Which statements are correct about Adjournment Motion? a) Must be supported by not less than 100 members b) Raises a definite, urgent public matter c) Should not cover more than one matter d) Should not deal with a matter under court adjudication

(1) a, b, c and d

(2) a, b and c

(3) a, c and d

(4) b, c and d

Correct Answer: (4) b, c and d

Explanation: An adjournment motion must raise a definite, urgent matter of public importance and cannot cover multiple matters or sub judice matters. It requires support of 50 members, not 100.

Q78. Match constitutional terms: a) Republic b) Secular c) Democratic d) Sovereign. i) Head of state not hereditary monarch ii) State does not recognise any religion as state religion iii) Government authority from the will of people iv) Internally supreme and externally independent

(1) a-i, b-ii, c-iii, d-iv

(2) a-i, b-iii, c-ii, d-iv

(3) a-ii, b-iii, c-iv, d-i

(4) a-iii, b-ii, c-i, d-iv

Correct Answer: (1) a-i, b-ii, c-iii, d-iv

Explanation: Republic means an elected/non-hereditary head of state. Secular means no state religion. Democratic means authority of government comes from people, and sovereign means internal supremacy plus external independence.

Q79. Duties of Prime Minister under Article 78: a) Communicate decisions of Council of Ministers to President b) Take prior Presidential sanction for state reorganisation Bill c) Furnish information relating to proposals for legislation as President calls for d) Submit ministerial decisions to Council if President requires

(1) a and b

(2) a, c and d

(3) b and d

(4) a and c

Correct Answer: (2) a, c and d

Explanation: Article 78 requires the Prime Minister to communicate decisions, furnish information sought by the President, and submit certain matters to the Council of Ministers when required. Prior Presidential recommendation for state reorganisation is under Article 3 and is not an Article 78 duty.

Q80. Who said: 'Indian Union is a unitary state with subsidiary federal features rather than a federal state with subsidiary unitary features'?

(1) Dr. B.R. Ambedkar

(2) Morris Jones

(3) K.C. Wheare

(4) Ivor Jennings

Correct Answer: (3) K.C. Wheare

Explanation: K.C. Wheare described India as quasi-federal and emphasised the strong unitary bias of the Indian constitutional system.

Q81. The total number of ministers, including the Prime Minister, in the Council of Ministers shall not exceed 15% of total members of Lok Sabha. Choose the correct answer.

- (1) Inserted by the 91st Constitutional Amendment Act
- (2) Inserted by the 42nd Constitutional Amendment Act
- (3) Inserted by the 44th Constitutional Amendment Act
- (4) Inserted by the 92nd Constitutional Amendment Act

Correct Answer: (1) 91st Constitutional Amendment Act

Explanation: The 91st Constitutional Amendment Act, 2003 inserted the ceiling of 15% on the size of the Council of Ministers to discourage oversized ministries.

Q82. Under which circumstance does anti-defection law not apply to a Member of Parliament?

- (1) Nominated member joins party after six months
- (2) Member abstains from voting contrary to party direction
- (3) Independent member joins party after election
- (4) Member leaves party due to merger of that party with another party

Correct Answer: (4) Merger of party with another party

Explanation: The Tenth Schedule provides protection in cases of valid merger of a political party subject to conditions. Joining another party by independent/nominated members or defying whip can attract disqualification.

Q83. Chief Minister of State: a) Ex-officio chairperson of State Disaster Management Authority b) de jure Executive c) ex-officio chairman of State Planning Board d) must be member of Legislative Council. Which are incorrect?

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

Correct Answer: (3) b and d only

Explanation: The Governor is the de jure executive; the Chief Minister is the real/de facto executive. A Chief Minister need not be a member of the Legislative Council specifically; he/she may be from either House or must become a legislator within the constitutional time.

Q84. Which provisions are non-justiciable? a) Secure living wage for workers b) Promote welfare of people c) Freedom to manage religious affairs d) Uphold sovereignty, unity and integrity of India

- (1) a and b only
- (2) a, b and c only

- (3) a, b, c and d
- (4) a, b and d only

Correct Answer: (4) a, b and d only

Explanation: Living wage and welfare of people are DPSPs, while sovereignty/unity/integrity is a Fundamental Duty; both are non-justiciable. Freedom to manage religious affairs is a Fundamental Right and justiciable.

Q85. Which interchange in signs would make the equation $10 - 2 + 9 \times 2 \div 4 = 19$ correct?

- (1) - and \div
- (2) - and +
- (3) \div and \times
- (4) \times and +

Correct Answer: (1) - and \div

Explanation: Interchanging '-' and ' \div ' gives $10 \div 2 + 9 \times 2 - 4 = 5 + 18 - 4 = 19$. Other interchanges do not produce 19 under BODMAS.

Q86. In the series one number is incorrect: 25, 32, 64, 71, 74, 291, 1746

- (1) 291
- (2) 1746
- (3) 74
- (4) 32

Correct Answer: (3) 74

Explanation: The pattern is +7, $\times 2$, +7, $\times 4$, +7, $\times 6$: $25+7=32$, $32 \times 2=64$, $64+7=71$, $71 \times 4=284$, $284+7=291$, $291 \times 6=1746$. Therefore 74 should have been 284.

Q87. Out of 150 students, 45 passed in Management, 50 in Accounts, 30 in Costing, 30 in both Management and Accounts, 32 in both Accounts and Costing, 35 in both Management and Costing, and 25 in all three. Find those who passed in at least one subject.

- (1) 53
- (2) 63
- (3) 43
- (4) 73

Correct Answer: (1) 53

Explanation: Using inclusion-exclusion: $n(A \cup B \cup C) = 45 + 50 + 30 - (30 + 32 + 35) + 25 = 53$. Thus 53 students passed in at least one subject.

Q88. A person walks on an escalator at 4 steps/sec and reaches the other end in 15 seconds. Coming back at the same walking speed, he reaches the starting point in 45 seconds. Number of steps on the escalator?

- (1) 60
- (2) 90
- (3) 72
- (4) 45

Correct Answer: (2) 90

Explanation: Let escalator speed be e steps/sec and total visible steps be N . Going with escalator: $N=(4+e)15$. Coming against it: $N=(4-e)45$. Equating gives $60+15e=180-45e$, so $e=2$ and $N=(4+2)15=90$.

Q89. If ticket price is increased by 14% and audience reduces by 22%, what is the effect on revenue?

- (1) Decrease by 10.18%
- (2) Increase by 10.18%
- (3) Decrease by 11.08%
- (4) Increase by 11.08%

Correct Answer: (3) Decrease by 11.08%

Explanation: Net percentage change = $14 - 22 + (14 \times -22)/100 = -8 - 3.08 = -11.08\%$. Hence revenue decreases by 11.08%.

Q90. In a test, passing percentages for girls and boys are 35% and 45%. A boy scored 280 and failed by 80. How many more marks did a girl need to pass if she scored 108?

- (1) 140
- (2) 132
- (3) 160
- (4) 12

Correct Answer: Defective / Correct value is 172

Explanation: Boy's pass mark = $280+80 = 360$. Since 360 is 45%, total marks = 800. Girl's pass mark = 35% of 800 = 280. If she scored 108, she needs $280-108 = 172$ marks, which is not in the options.

Q91. The average of 10 numbers is 40. Later, 18 and 21 were misread as 81 and 12. Find the correct average.

- (1) 63.6
- (2) 34.6
- (3) 43.6
- (4) 24.6

Correct Answer: (2) 34.6

Explanation: Wrong total = $40 \times 10 = 400$. Misreading 18 as 81 adds 63, while misreading 21 as 12 subtracts 9, so net excess = 54. Correct sum = $400 - 54 = 346$, average = 34.6.

Q92. Out of 15 applicants, 5 are women and 10 are men. If 2 persons are selected, probability that at least one selected person is a woman is:

- (1) $4/7$
- (2) $3/7$
- (3) $1/5$
- (4) $4/5$

Correct Answer: (1) $4/7$

Explanation: Probability of at least one woman = $1 - \text{probability of both men} = 1 - ({}^{10}C_2/{}^{15}C_2) = 1 - 45/105 = 60/105 = 4/7$.

Q93. An examination paper has 9 questions: 5 with 3 possible answers each, 3 with 2 possible answers each, and 1 with 5 possible answers. Total possible answer combinations?

- (1) 9820
- (2) 9610
- (3) 9720
- (4) 8140

Correct Answer: (3) 9720

Explanation: Total combinations = $3^5 \times 2^3 \times 5 = 243 \times 8 \times 5 = 9720$.

Q94. If cube root of 300763 is 67, find the value of $\text{cube_root}(300.763) + \text{cube_root}(0.300763) + \text{cube_root}(0.000300763)$.

- (1) 67.007
- (2) 6.347
- (3) 71.437
- (4) 7.437

Correct Answer: (4) 7.437

Explanation: Since $300.763 = 300763/1000$, its cube root is $67/10 = 6.7$. Similarly, cube roots of 0.300763 and 0.000300763 are 0.67 and 0.067. Sum = $6.7 + 0.67 + 0.067 = 7.437$.

Q95. An error of 2% in excess is made while measuring side of a square. Percentage error in calculated area?

- (1) 2%
- (2) 2.02%

(3) 4.04%

(4) 4%

Correct Answer: (3) 4.04%

Explanation: If side is measured as 1.02 times actual, area becomes $(1.02)^2 = 1.0404$ times actual. Error in area = 4.04%.

Q96. Find which one of the given letter figures does not belong to the group.

(1) a

(2) b

(3) c

(4) d

a)

N	H	Z
C	F	D
A	E	Q

b)

Z	C	H
F	A	N
Q	D	E

c)

H	D	N
F	D	Z
C	E	A

d)

A	C	G
Z	D	E
N	F	H

Correct Answer: (3) c

Explanation: In figure c, the letter D is repeated, while the other matrices use distinct letters without repetition. Therefore c does not follow the group pattern.

Q97. If 23rd October 2024 is Wednesday, what was the day on 10th March 2021?

(1) Monday

(2) Tuesday

(3) Wednesday

(4) Thursday

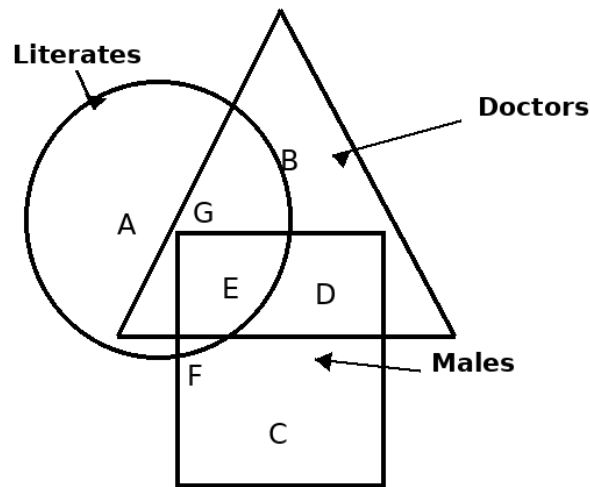
Correct Answer: (3) Wednesday

Explanation: The number of days between 10 March 2021 and 23 October 2024 is a multiple of 7. Therefore the weekday remains the same: Wednesday.

Q98. Study the diagram and identify the part showing literate males who are doctors.

(1) G

- (2) E
- (3) D
- (4) F

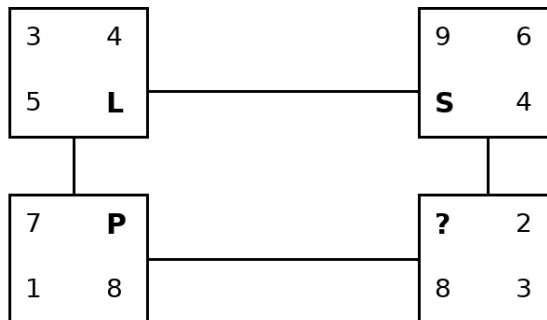


Correct Answer: (2) E

Explanation: The required region must lie inside all three sets: Literates, Doctors and Males. In the diagram, the common intersection of the circle, triangle and rectangle is marked E.

Q99. Find the English alphabet letter to be placed in place of '?' in the figure.

- (1) M
- (2) N
- (3) Q
- (4) R

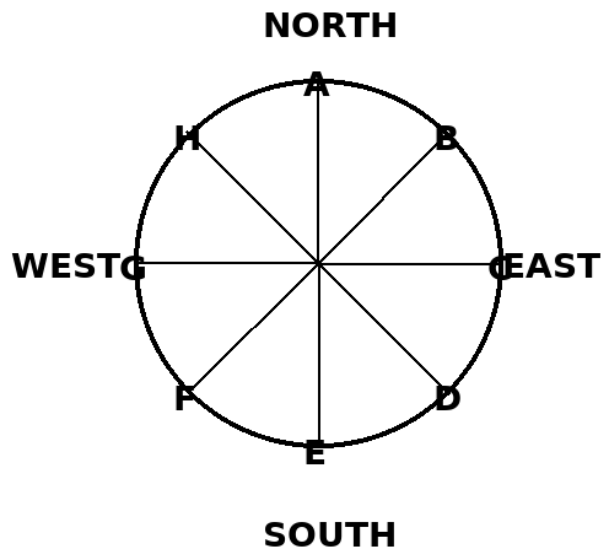


Correct Answer: (1) M

Explanation: Each letter is obtained by adding the three numbers in its box and converting the sum to the alphabet position. $3+4+5=12=L$, $9+6+4=19=S$, $7+1+8=16=P$; hence $2+8+3=13=M$.

Q100. Eight persons A, B, C, D, E, F, G and H sit around a circle facing opposite to centre. If they move five places anticlockwise, then which statement is correct?

- (1) A will face Southeast
- (2) C will face West
- (3) E will face Northeast
- (4) G will face North



Correct Answer: (1) A will face Southeast

Explanation: Starting from North, A moves five places anticlockwise to the South-East position. Since everyone faces away from the centre, A will face Southeast at the new position.

Answer Key

Q.No	Answer	Q.No	Answer	Q.No	Answer
1	(2) 3	2	(4) A, B, C and D are correct	3	(2) Thoda - Madhya Pradesh
4	(4) a-iv, b-iii, c-i, d-ii	5	(3) A, B and E are correct	6	(3) a and d only
7	(2) a-ii, b-i, c-iv, d-iii	8	(2) 104th Constitutional Amendment Act removed the provision	9	(1) Both Statement 1 and Statement 2 are correct
10	(2) a and b only	11	Defective / No correct option	12	Defective / No exact option
13	(2) a, b and d	14	(2) Supa - Nagazhari - Kodasalli - Kadra	15	(2) a-iii, b-i, c-iv, d-ii
16	(4) Jaunsari - Maharashtra	17	(1) a, b and c are correct	18	(4) a-iii, b-iv, c-ii, d-i
19	(2) Statement i is wrong but ii and iii are correct	20	(2) Statement I is incorrect but Statement II is correct	21	(1) Work done to lift the object in all four cases is equal
22	(4) a and c	23	(1) Poly ethylene terephthalate	24	(1) a, b, c only
25	(1) Both correct and II explains I	26	(4) Statement I is false and Statement II is true	27	(4) Adrenaline and Noradrenaline
28	(1) a-iv, b-iii, c-i, d-ii	29	(3) Electrostatic precipitator	30	(2) a-iv, b-i, c-ii, d-iii
31	(3) Only b is correct	32	(4) A-Hingiri, B-Pusa Komal, C-Pusa Sadabahar	33	(4) Both statements are correct
34	(4) Keeping metal in acidified water	35	(3) a and c only	36	(2) Two only
37	(3) Only three	38	(4) None	39	(2) Only two
40	(2) Only two	41	All listed statements a, b and c are correct; printed option (4) appears misprinted	42	(2) a, c and d only

43	(3) c and d	44	(2) Only two	45	(4) a, b, c and d are correct
46	(1) Lead-based claimed superconductor	47	(3) a-ii, b-iv, c-v, d-i, e-iii	48	(3) c and d are correct
49	(1) a and b are correct	50	(1) Archaeological site in Turkey	51	(1) a and b only
52	(1) To examine stalled real estate projects and revive them	53	(2) a and c	54	(4) a, b, c and d
55	(3) d, b, c, a	56	(4) a-iii, b-iv, c-i, d-ii	57	(3) A correct but R incorrect
58	(3) a and d	59	Defective / No exact option	60	(4) a-ii, b-iii, c-iv, d-i
61	(4) a and b only	62	(3) c only	63	(2) Cauvery Water Management Authority
64	(2) Open Web Application Security Project	65	(3) a-ii, b-iii, c-i, d-iv	66	(2) a-i, b-iv, c-ii, d-iii
67	(4) a, b and c	68	(4) a, b, c and d	69	(2) a and d
70	(3) b and d are correct	71	(3) b and d are correct	72	(2) a and d only
73	(3) Both correct and II explains I	74	(4) Novak Djokovic - Serbia	75	(3) a, b, d and e
76	(2) a and c only	77	(4) b, c and d	78	(1) a-i, b-ii, c-iii, d-iv
79	(2) a, c and d	80	(3) K.C. Wheare	81	(1) 91st Constitutional Amendment Act
82	(4) Merger of party with another party	83	(3) b and d only	84	(4) a, b and d only
85	(1) - and \div	86	(3) 74	87	(1) 53
88	(2) 90	89	(3) Decrease by 11.08%	90	Defective / Correct value is 172
91	(2) 34.6	92	(1) 4/7	93	(3) 9720
94	(4) 7.437	95	(3) 4.04%	96	(3) c
97	(3) Wednesday	98	(2) E	99	(1) M
100	(1) A will face Southeast				

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