Bihar Public Service Commission
$68{ }^{\text {th }}$ Combined (Preliminary) Competitive Examination
(Examination Date : 12.02.2023)
FINAL ANSWER KEY: General Studies

| Series-A |  | Series-B |  | Series-C |  | Series-D |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |
| 1 | A | 44 | B | 97 | C | 134 | A | No objection received. Hence this provisional answer is now final answer. |
| 2 | C | 45 | A | 98 | B | 135 | C | The Constituent Assembly sat for the first time on 9th December 1946 and final draft was ready on 26th Nov 1949 So it was precisely 2 years 11 months and 18 days. Hence answer ' C ' is correct and the objection is wrong/rejected. |
| 3 | C | 46 | A | 99 | B | 126 | C | Council of Ministers in a State is collectively responsible to the Legislative Assembly. Similarly Union Council of Ministers is responsible to the Parliament. That's why there are questions, debate, call attention motion etc in the LA/Parliament where Ministers give their replies. So correct answer is ' C ' and objection is baseless/wrong. |
| 4 | B | 47 | C | 100 | A | 127 | B | Gram kachahari/sarpanch is an old system. Though it works like a court for petty disputes etc, it is still a part of the Executive. The separation of power or the three pillars of State are legislature, executive \& judiciary. 73rd Amendment is about local self-governance and decentralisation of governance. It doesn't decentralise judiciary. Hence answer 'B' is correct and the objection is wrong/rejected. |
| 5 | D | 48 | D | 91 | D | 128 | D | Both B \& C options are correct. Hence answer 'D' is correct and the objection is wrong /rejected. |
| 6 | D | 49 | D | 92 | D | 129 | D | All the three options are associated with the Supreme Court of India. Hence answer ' $D$ ' is correct and the objection is wrong /rejected. |
| 7 | A | 50 | B | 93 | C | 130 | A | No objection received. Hence this provisional answer is now final answer. |
| 8 | E | 41 | E | 94 | E | 131 | E | The correct answer is option ' E '. Pecuniary jurisdiction was amended from 1 crore to 50 lakhs in Dec 2021, so no statement is incorrect. Hence answer ' E ' is correct and the objection is wrong /rejected. <br> Source MINISTRY OF CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION (Department of Consumer Affairs) NOTIFICATION New Delhi, the 30th December, 2021 G.S.R. 912(E) [F. No. J-9/1/2020-CPU] <br> https://consumeraffairs.nic.in/sites/default/files |
| 9 | C | 42 | A | 95 | B | 132 | C | No objection received. Hence this provisional answer is now final answer. |
| 10 | A | 43 | B | 96 | C | 133 | A | The correct answer is option 'A'. NES was launched in 1953. Hence answer ' A ' is correct and the objection is wrong / rejected. |
| 11 | A | 56 | B | 108 | C | 141 | A | All the statements are correct but only one option ' A ' is correct. Objection is wrong and hence rejected. |

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| Series-A |  | Series-B |  | Series-C |  | Series-D |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |
| 12 | D | 57 | D | 109 | D | 142 | D | All the three options are policy measures to improve the agricultural marketing in India. Hence answer ' D ' is correct and the objection is wrong/rejected. |
| 13 | B | 58 | C | 110 | A | 143 | B | No objection received. Hence this provisional answer is now final answer. |
| 14 | A | 59 | B | 101 | C | 144 | A | No objection received. Hence this provisional answer is now final answer. |
| 15 | E | 60 | E | 102 | E | 145 | E | The correct answer is option 'E'. 8th Five Year Plan was focused on HRD. Hence no option is correct. Objection is wrong and hence rejected. |
| 16 | A | 61 | B | 103 | C | 146 | A | The correct answer is option ' A '. The question is about the highest FDI recipient State amongst the 'following' that is amongst the given list of States only and not amongst all the States of India. Amongst all the States of India, answer would have been Maharashtra but as asked in the question, amongst the given list of States, correct answer is Karnataka. Hence answer 'A' is correct and the objection is wrong / rejected. |
| 17 | B | 62 | C | 104 | A | 147 | B | The Indian government introduced the Liberalised Exchange Rate Management System (LERMS) in March 1992 under Union Budget19921993. Hence answer 'B' is correct and the objection is wrong / rejected. |
| 18 | E | 63 | E | 105 | E | 148 | E | The correct answer is option ' E '. Statement 4 (Literature) in false. Since all the options A, B \& C contains statement 4 . Hence none of the options are correct and the objection is wrong / rejected. |
| 19 | A | 64 | B | 106 | C | 149 | A | Niti Aayog has come out with a poverty index based on research/ analysis of various parameters. But for this, Niti Aayog doesn't do any survey. Instead, it depends on survey data provided by NSSO and also various reports/ analysis of other think tanks, educational institutions etc. Hence answer 'A' is correct and the objection is wrong/rejected. |
| 20 | C | 65 | A | 107 | B | 150 | C | No objection received. Hence this provisional answer is now final answer. |
| 21 | A | 51 | B | 111 | C | 139 | A | Correct answer is ' A '. Objection is baseless and wrong hence rejected. |
| 22 | Deleted | 52 | Deleted | 112 | Deleted | 140 | Peleted | Question doesn't specify such a district amongst given (following) 3 districts only or all districts in Bihar or in India. So it should be deleted. Hence the objection is wrong / rejected. |
| 23 | A | 53 | B | 113 | C | 136 | A | No objection received. Hence this provisional answer is now final answer. |
| 24 | C | 54 | A | 114 | B | 137 | C | No objection received. Hence this provisional answer is now final answer. |
| 25 | D | 55 | D | 115 | D | 138 | D | Economy of Bihar is mainly agrarian with more than $2 / 3$ of population is still enaged in farming. So, options B \& C both are correct hence the correct answer is ' D '. Objection is wrong and hence rejected. |
| 26 | B | 70 | C | 124 | A | 12 | B | No objection received. Hence this provisional answer is now final answer. |
| 27 | B | 71 | C | 125 | A | 13 | B | No objection received. Hence this provisional answer is now final answer. |
| 28 | B | 72 | C | 126 | A | 14 | B | The correct answer is option ' B '. The term states Peoples Movements Refers to a general situation where different movements were organised in the princely states. These were variously referred to as States Peoples conference (NOT MOVEMENT), praja mandals and lok parishads option ' B ' |


| Series-A |  | Series-B |  | Series-C |  | Series-D |  | Remarks |
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| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |
|  |  |  |  |  |  |  |  | mentions PRAJA MANDAL which is the correct answer since other nomenclatures are not mentioned among the options. Hence answer ' B ' is correct and the objection is wrong / rejected. |
| 29 | C | 73 | A | 127 | B | 15 | C | Only option 'C' is not true. Options A \& B are both true. Hence correct answer is ' $C$ ' and objection is wrong, so rejected. |
| 30 | B | 74 | C | 128 | A | 1 | B | No objection received. Hence this provisional answer is now final answer. |
| 31 | D | 75 | D | 129 | D | 2 | D | Apart from option A, other options B \& C are also correct. Hence answer ' $D$ ' is correct and the objection is wrong / rejected. |
| 32 | C | 76 | A | 130 | B | 3 | C | No objection received. Hence this provisional answer is now final answer. |
| 33 | C | 77 | A | 116 | B | 4 | C | No objection received. Hence this provisional answer is now final answer. |
| 34 | B | 78 | C | 117 | A | 5 | B | Harijan Sevak Sangh was founded by Mahatma Gandhi in 1932 to eradicate untouchability in India. Omission of word 'Sevak' in thequestion does not materially alter it. Correct answer is ' B '. Hence objection is wrong and therefore rejected. |
| 35 | C | 79 | A | 118 | B | 6 | C | No objection received. Hence this provisional answer is now final answer. |
| 36 | A | 80 | B | 119 | C | 7 | A | No objection received. Hence this provisional answer is now final answer. |
| 37 | E | 66 | E | 120 | E | 8 | E | No objection received. Hence this provisional answer is now final answer. |
| 38 | B | 67 | C | 121 | A | 9 | B | Correct answer is ' B ' and there is no confusion in the phrasing of the question and its options. Objection is wrong and hence rejected. |
| 39 | A | 68 | B | 122 | C | 10 | A | No objection received. Hence this provisional answer is now final answer. |
| 40 | A | 69 | B | 123 | C | 11 | A | The correct answer is Swami Vidyanand. In Bihar, the pressure forthe launching of the NonCooperation movement has been building up much before it was officially decided by the Congress party at Nagpur Session in December 1920. Hence answer 'A' is correct and the objection is wrong/rejected. |
| 41 | E | 87 | E | 143 | E | 32 | E | In ancient times the area along these rivers to the south of the Ganga was known as Magadha. Takshashila was situated between Indus and Jhelum river. Chola was situated in the south of Godavari river. Anarta is a Vedic period kingdom of ancient India described in the Mahabharata, roughly forming the northern Gujarat state of India. So the only correct answer is Magadh which is not given in the answer options. Hence ' E ' answer is correct and the objection is wrong/rejected. |
| 42 | E | 88 | E | 144 | E | 33 | E | No objection received. Hence this provisional answer is now final answer. |
| 43 | B | 89 | C | 145 | A | 34 | B | No objection received. Hence this provisional answer is now final answer. |
| 44 | A | 90 | B | 146 | C | 35 | A | No objection received. Hence this provisional answer is now final answer. |
| 45 | B | 91 | C | 147 | A | 16 | B | Options A \& C are correct and only option is not correct. Hence answer 'B' is correct and the |

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| Series-A |  | Series-B |  | Series-C |  | Series-D |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |
|  |  |  |  |  |  |  |  | objection is wrong /rejected. |
| 46 | C | 92 | A | 148 | B | 17 | C | The correct answer is option ' C '. Muqaddam or Chowdhary was a village headman and in this capacity only was the highest revenue authority in the village and not just any revenue official or village accountant. Even today, village headmen are often called Choudhary in that region. Hence answer ' C ' is correct and the objection is wrong /rejected. |
| 47 | A | 93 | B | 149 | C | 18 | A | No objection received. Hence this provisional answer is now final answer. |
| 48 | C | 94 | A | 150 | B | 19 | C | No objection received. Hence this provisional answer is now final answer. |
| 49 | C | 95 | A | 131 | B | 20 | C | No objection received. Hence this provisional answer is now final answer. |
| 50 | C | 96 | A | 132 | B | 21 | C | No objection received. Hence this provisional answer is now final answer. |
| 51 | B | 97 | C | 133 | A | 22 | B | Permanent settlement was introduced in Bengal in 1793 by Lord Cornwallis. In it, zamindars were made the owners of land and authorised to collect rent from the peasants. They were required to pay a fixed amount to the Company every year. This amount could not be increased later, however if the zamindars failed to pay, the Company could sell their land via public auction. Later in 1822, Mahalwari system was introduced by Holt Mackenzie in India which had elements both from zamindari as well as ryotwari system. In this system, land owners - peasants/zamindars as the case may be - were required to pay revenue in cash which was not fixed and could be increased. This added to the miseries of the peasants who were compelled to go for cash crop (resulting in food shortage) and also had to borrow from money lenders resulting in imminent default, forfeiture of their land and emergence of bonded labour etc. Sir William Bentinck then Governor General of Bengal (1822-28) initiated reforms in this Mahalwari regulation of 1822 and later when he was Governor General of India (1828-33), introduced these reforms in 1833. <br> The recommendations of Holt Makenzie an officer in the Bengal Presidency regarding revenue settlement were incorporated in a Regulation of 1822 that formed the basis of the introduction of Mahalwari settlement in parts of north and central provinces that were subject to administration of Bengal Presidency. <br> Hence the answer option ' B ' is correct and objection is rejected. |
| 52 | B | 98 | C | 134 | A | 23 | B | No objection received. Hence this provisional answer is now final answer. |
| 53 | C | 99 | A | 135 | B | 24 | C | No objection received. Hence this provisional answer is now final answer. |
| 54 | B | 100 | C | 136 | A | 25 | B | The correct answer is option ' B '. Cabinet Mission was sent to work out a constitutional arrangement for transfer of power. It was neither sent to establish the Govt nor to work out details of |


| Series-A |  | Series-B |  | Series-C |  | Series-D |  | Remarks |
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| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | $\begin{array}{l}\text { Jinnah's demand for Pakistan. Hence the answer } \\ \text { option 'B' is correct and objection is rejected. }\end{array}$ |
| 55 | A | 81 | B | 137 | C | 26 | A | $\begin{array}{l}\text { No objection received. Hence this provisional } \\ \text { answer is now final answer. }\end{array}$ |
| 56 | A | 82 | B | 138 | C | 27 | A | $\begin{array}{l}\text { No objection received. Hence this provisional } \\ \text { answer in now final answer. }\end{array}$ |
| 57 | A | 83 | B | 139 | C | 28 | A | $\begin{array}{l}\text { The correct answer is option 'A'. Sir James David } \\ \text { Sifton was the Governor of Bihar and Orissa from }\end{array}$ |
| 7 April 1932 to 31 March 1936 and then Governor |  |  |  |  |  |  |  |  |$)$


| Series-A |  | Series-B |  | Series-C |  | Series-D |  | Remarks |
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| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |
| 79 | C | 129 | A | 9 | B | 54 | C | No objection received. Hence this provisional answer is now final answer. |
| 80 | A | 130 | B | 10 | C | 55 | A | No objection received. Hence this provisional answer is now final answer. |
| 81 | C | 101 | A | 11 | B | 56 | C | No objection received. Hence this provisional answer is now final answer. |
| 82 | A | 102 | B | 12 | C | 57 | A | No objection received. Hence this provisional answer is now final answer. |
| 83 | C | 103 | A | 13 | B | 58 | C | No objection received. Hence this provisional answer is now final answer. |
| 84 | B | 104 | C | 14 | A | 59 | B | No objection received. Hence this provisional answer is now final answer. |
| 85 | C | 105 | A | 15 | B | 60 | C | No objection received. Hence this provisional answer is now final answer. |
| 86 | E | 106 | E | 16 | E | 61 | E | The correct answer is option ' E '. Observatory Langat Singh College was not included in UNESCO list. It was a fake news duly clarified later. Hence the answer option ' E ' is correct and objection is rejected. <br> https://www.hindustantimes.com/science/unesco-says-observatory-in-biharcollege-not-included-in-world-heritage-list-101660031882706.html |
| 87 | E | 107 | E | 17 | E | 62 | E | No objection received. Hence this provisional answer is now final answer. |
| 88 | C | 108 | A | 18 | B | 63 | C | The correct answer is option ' C '. Sri Nitish Kumar inaugurated Ganga Jal Apurti Yojana at Rajgir on 27-11-2022 and at Bodh Gaya on 28-11-2022. The question refers to $28-11-2022$ only. Hence the answer option ' C ' is correct and objection is rejected. |
| 89 | B | 109 | C | 19 | A | 64 | B | No objection received. Hence this provisional answer is now final answer. |
| 90 | A | 110 | B | 20 | C | 65 | A | No objection received. Hence this provisional answer is now final answer. |
| 91 | B | 138 | C | 46 | A | 66 | B | No objection received. Hence this provisional answer is now final answer. |
| 92 | A | 139 | B | 47 | C | 67 | A | No objection received. Hence this provisional answer is now final answer. |
| 93 | C | 140 | A | 48 | B | 68 | C | The troposphere is the lowermost layer of the atmosphere. Its average height is 13 km and extends roughly to a height of 8 km near the poles and about 18 km at the equator. Temperature decreases with height. Hence answer ' C ' is correct and the objection is wrong /rejected. |
| 94 | B | 141 | C | 49 | A | 69 | B | No objection received. Hence this provisional answer is now final answer. |
| 95 | B | 142 | C | 50 | A | 70 | B | No objection received. Hence this provisional answer is now final answer. |
| 96 | A | 143 | B | 31 | C | 71 | A | Assam and Tripura don't have common border with Myanmar. So only option ' A ' is correct. Hence the objectionis wrong/rejected. |
| 97 | A | 144 | B | 32 | C | 72 | A | No objection received. Hence this provisional answer is now final answer. |
| 98 | A | 145 | B | 33 | C | 73 | A | The correct answer is option ' A '. Aw covers south India, not UP/ Bihar. Correct answer is Cwg. Hence the answer option ' A ' is correct and |


| Series-A |  | Series-B |  | Series-C |  | Series-D |  | Remarks |  |
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| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |  |
|  |  |  |  |  |  |  |  | objection is rejected. |  |
| 99 | B | 146 | C | 34 | A | 74 | B | No objection received. Hence this provisional answer is now final answer. |  |
| 100 | D | 147 | D | 35 | D | 75 | D | The correct answer is option 'D'. DVC has rich coal reserve but so have others. Hence the answer option ' D ' is correct and objection is rejected. |  |
| 101 | D | 148 | D | 36 | D | 76 | D | Maharashtra has always been a major sugar producing state and it produced around 138Lakh MT surpassing 102L MT of UP in 202223. All the three options are correct. Hence answer ' D ' is correct and the objection is wrong/rejected. |  |
| 102 | C | 149 | A | 37 | B | 77 | C | The correct answer is opt also called Cherry Blosso Karnataka, is a local w interior of Karnataka (not the hot weather season for coffee cultivation. Th 40 mm from Feb-April. Co is dominated in the hill states since coffee plant humidity etc. <br> On the other hand, tow summer season, pre-m common especially, in They help in the early ri are often referred to as ' NCERT) which are aroun regions. So correct ans Hence the answer opti objection is rejected. | on 'C'. Blossom shower, m or Coffee Shower in ind that blows in the in coastal Karnataka) in nd this shower is good usual rainfall is of 25 ffee production in India tracts of South Indian requires mild slope, less <br> wards the close of the monsoon showers are Kerala and Karnataka. ening of mangoes, and mango showers' (source 70 mm in April in these wer is mango shower. on ' C ' is correct and |
| 103 | C | 150 | A | 38 | B | 78 | C | Atmosphere is heated radiation. The sun emit because it is extremely energy to give off. Hence and the objection is wrong | by short wave solar shortwave radiation hot and has a lot of e answer ' $C$ ' is correct $\mathrm{g} /$ rejected. |
| 104 | D | 131 | D | 39 | D | 79 | D | The correct answer is option "D". Both Uttar Pradesh and Jharkhand state have common border with 8 districts of Bihar. We have verified this with maps of these three states where we find that the eastern tip of Katihar district touches Jharkhand and Western tip of Rohtas district touches Uttar Pradesh. The full list is given below:- |  |
|  |  |  |  |  |  |  |  | 1. W. Champaran | 1. Katihar |
|  |  |  |  |  |  |  |  | 2. Gopalganj | 2. Bhagalpur |
|  |  |  |  |  |  |  |  | 3. Siwan | 3. Banka |
|  |  |  |  |  |  |  |  | 4. Saran | 4. Jamui |
|  |  |  |  |  |  |  |  | 5. Buxer | 5. Nawada |
|  |  |  |  |  |  |  |  | 6. Bhojpur | 6. Gaya |
|  |  |  |  |  |  |  |  | 7. Rohtas | 7. Aurangabad |
|  |  |  |  |  |  |  |  | 8. Kaimur | 8. Rohtas |
|  |  |  |  |  |  |  |  | Hence the answer opt objection is rejected. | ' D ' is correct and |
| 105 | B | 132 | C | 40 | A | 80 | B | Ammapali railway statio station on Sahibganj lo | n is a halt railway p line. It is the last |

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| Series-A |  | Series-B |  | Series-C |  | Series-D |  | Remarks |
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| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |
|  |  |  |  |  |  |  |  | station in Bihar. Hence answer ' B ' is correct and the objection is wrong / rejected. |
| 106 | E | 133 | E | 41 | E | 81 | E | All the statements are correct but none of the option is correct. Hence the answer option ' E ' is correct and objection is rejected. |
| 107 | C | 134 | A | 42 | B | 82 | C | The Phalgu River originates from the confluence (somewhere in the range of 3 kilometers beneath Bodh Gaya) of the Lilajan river and Mohana river Hence answer ' C ' is correct and the objection is wrong/rejected. |
| 108 | A | 135 | B | 43 | C | 83 | A | In 1980s, the tea gardens were developed in Pothia and Thakurganj blocks of Kishanganj. Now, just 10 kms . away from the district headquarters you can see the beautiful tea gardens at Belwa along the road leading towards Thakurganj. Hence answer ' A ' is correct and the objection is wrong/rejected. |
| 109 | A | 136 | B | 44 | C | 84 | A | No objection received. Hence this provisional answer is now final answer. |
| 110 | A | 137 | B | 45 | C | 85 | A | The correct answer is option 'A'. Cereal based industry like Rice Millers dominate the agrobased industries in Bihar. Hence the answer option 'A' is correct and objection is rejected. |
| 111 | C | 6 | A | 61 | B | 106 | C | Thin black strips will only reduce the intensity of the light but will not cast any shadow as it is quite thin. Hence answer ' C ' is correct and the objection is wrong/rejected. |
| 112 | B | 7 | C | 62 | A | 107 | B | It is true that shrillness of sound is determined by its frequency but frequency and wavelength are inversely proportionate. So, it is also true to say that shrillness of sound depends on its wavelength. For example, shorter the wavelength means higher the frequency and more shrill sound. <br> Since frequency and wavelength are inseparably interlinked (velocity $=$ wavelength $x$ frequency and velocity is constant in a medium), the correct answer is ' B '. Objection is wrong and hence rejected. |
| 113 | A | 8 | B | 63 | C | 108 | A | The correct answer is option ' A '. The photoelectric effect is the emission of electrons when electromagnetic radiation, such as light, hits a material. And photoelectric device means which uses photoelectric effect, in other words which produces electricity / electric signal from light. Photovoltaic cell is one such device. Other devices in the option are exactly opposite of this, in other words, they produce light on flow of electricity. For example, photoemitting or light emitting diodes emit light on flow of electricity i.e. reverse of photoelectric effect. Similarly, photodiode |


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| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |
|  |  |  |  |  |  |  |  | changes its electrical properties on receiving light. It is like light controlled switch which allows flow of electricity on getting ;ight but it does not generate electricity. <br> Diodes have p-n junction which allows flow of electricity in one direction only. In photodiode this p-n junction barrier under dark condition is on both sides which means no electricity will flow under dark condition - like an open switch. But under light, the p-n junction barrier on one side reduces allowing flow of electricity - like a closed switch. This way photodiode works but clearly it does not produce electricity on its own. <br> Photovoltaic cells or commonly known as solar cells have vast use in digital technology. For example entire sattelite communication depends on it since this is the main source of power for it. Hence the answer option ' A ' is correct and objection is rejected. |
| 114 | C | 9 | A | 64 | B | 109 | C | Ball bearing are small balls/sphere. In a ball, surface of contact is just a point resulting in very less rolling friction. Hence answer ' C ' is correct and the objection is wrong / rejected. |
| 115 | C | 10 | A | 65 | B | 110 | C | No objection received. Hence this provisional answer is now final answer. |
| 116 | B | 11 | C | 66 | A | 111 | B | Two protons and two neutrons are bound together to form an alpha particle. High-energy electrons are known as beta particles. Obviously alpha particle is positively charged due to the presence of proton while beta particle is negatively charged due to the presence of electrons. Cathode ray is a stream of electrons leaving the negative electrode (cathode) in a discharge tube containing a gas at low pressure, or electrons emitted by a heated filament in certain electron tubes. It is neither radioactive emission nor positively charged. Hence answer 'B' is correct and the objection is wrong/rejected. |
| 117 | A | 12 | B | 67 | C | 112 | A | In a uniform circular motion, though the speed is constant but the direction is changing and as such velocity being a vector quantity, is changing. To change the direction / velocity, force is required which is called centripetal force. For example, if a stone tied to a string is rotated by a person, he has to hold the string tight i.e apply centripetal force otherwise, if he release the string, stone will fly away in the |


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| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |
|  |  |  |  |  |  |  |  | absence of centripetal force. Hence answer ' A ' is correct and the objection is wrong/rejected. |
| 118 | C | 13 | A | 68 | B | 113 | C | Energy conversion due to friction does not involve change in potential energy/ chemical energy. Even when an object is falling in air, its potential energy first gets converted into kinetic energy and then heat or sound etc. In battery, its chemical energy is converted into electrical energy as well as heat but friction has nothing to do in such conversion. <br> Frictional forces apply in a static condition as well as in a moving condition. The respective co-efficient of friction are called static co-efficient and dynamic co-efficient. While in the static condition, there is no displacement i.e. no work done and hence no energy conversion. It is in the dynamic condition, there is movement against the frictional force that there is energy loss by way of heat. In other words, kinetic energy is converted into heat. Correct answer is ' C ' and objection is wrong. Hence rejected. |
| 119 | B | 14 | C | 69 | A | 114 | B | No objection received. Hence this provisional answer is now final answer. |
| 120 | C | 15 | A | 70 | B | 115 | C | String length, diameter, density and tension determines the frequency in which it will vibrate. Since other three are fixed, it is the tension that sitarist tries to adjust to tune its natural frequency. And while playing the Sitar, he changes the effective length of the string by touching the string at different points with his finger. This is how we get different melodious notes (of varying frequency). Amplitude/intensity of sound is not determined by the tension in the string since it depends on how the Sitarist is playing. Even witha perfectly taut string, he can produce low or very high sound. But he cannot vary its natural frequency and that's why he has to adjust the tension beforehand. So, the correct answer is ' C '. Objection is wrong and hence rejected. |
| 121 | B | 16 | C | 71 | A | 86 | B | Krypton is a gas and kerosene is liquid. While both don't have fixed form, it is kerosene whose volume cannot be changed significantly with pressure / temperature whereas Krypton being a gas, its volume can be changed drastically with change of pressure / temperature. So, it is kerosene alone which has no fixed form but fixed volume. So the correct |


| Series-A |  | Series-B |  | Series-C |  | Series-D |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |
| 122 | A | 17 | B | 72 | C | 87 | A |  |
| 123 | D | 18 |  |  |  |  |  |  |


| Series-A |  | Series-B |  | Series-C |  | Series-D |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |
| 132 | C | 27 | A | 52 | B | 97 | C | Chlorophyll is a chemical photoreceptor that traps light for photosynthesis in plants. It absorbs light in the red (long wavelength) and the blue (short wavelength) regions of the visible light spectrum. Green light is not absorbed but reflected, making the plant appear green. Hence answer ' C ' is correct and the objectionis wrong/rejected. |
| 133 | A | 28 | B | 53 | C | 98 | A | No objection received. Hence this provisional answer is now final answer. |
| 134 | B | 29 | C | 54 | A | 99 | B | Transpiration is a process that involves loss of water vapour through the stomata of plants. The loss of water vapour from the plant cools the plant down when the weather is very hot, and water from the stem and roots moves upwards or is 'pulled' into the leaves. On the other hand, plants absorb water and minerals from the soil via their roots but water does not move upward due to absorption. Similarly, water escapes the tree through evaporation. Hence answer ' B ' is correct and the objection is wrong / rejected. |
| 135 | C | 30 | A | 55 | B | 100 | C | Presence of both DNA \& RNA in Chloroplast makes them qualified to self-replication. RNA primers are key to initiating DNA synthesis. They provide the initiation sequence necessary for DNA polymerase to synthesize new strands. So the correct answer is ' C '. Objection is wrong and hence rejected. |
| 136 | B | 1 | C | 56 | A | 101 | B | The carpal bones are the eight small bones that make up the wrist (or carpus) that connects the hand to the forearm. These bones are hard and will break if bent. Cartilage on the other hand, is a strong, flexible connective tissue that protects your joints and bones. Ear is an example of cartilage. Hence answer ' B ' is correct and the objection is wrong/rejected. |
| 137 | C | 2 | A | 57 | B | 102 | C | No objection received. Hence this provisional answer is now final answer. |
| 138 | A | 3 | B | 58 | C | 103 | A | The correct answer is option ' A '. At an angle around 45 degree but not right angle / 90 degree. Hence the answer option ' A ' is correct and objection is rejected. |
| 139 | B | 4 | C | 59 | A | 104 | B | No objection received. Hence this provisional answer is now final answer. |
| 140 | C | 5 | A | 60 | B | 105 | C | Muscles allow a person to move, speak, and chew. They control heartbeat, breathing, and digestion. Other seemingly unrelated functions, including temperature regulation and vision, also rely onthe muscular system. Muscles work in pair and become shorter, stiffer and thicker when contracted. So all the options are correct except for ' C '. So the correct answer is ' C '. Objection is wrong and hence rejected. |
| 141 | A | 34 | B | 86 | C | 123 | A | No objection received. Hence this provisional answer is now final answer. |
| 142 | C | 35 | A | 87 | B | 124 | C | No objection received. Hence this provisional answer is now final answer. |


| Series-A |  | Series-B |  | Series-C |  | Series-D |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |  |
| 143 | B | 36 | C | 88 | A | 125 | B | No objection received. Hence this provisional answer is now final answer. |
| 144 | B | 37 | C | 89 | A | 116 | B | No objection received. Hence this provisional answer is now final answer. |
| 145 | A | 38 | B | 90 | C | 117 | A | No objection received. Hence this provisional answer is now final answer. |
| 146 | E | 39 | E | 81 | E | 118 | E | The correct answer is option ' $E$ '. Every square is a rectangle and also rhombus. Every rhombus is a parallelogram. So all statements are correct and none is false. Hence the answer option ' E ' is correct and objection is rejected. |
| 147 | B | 40 | C | 82 | A | 119 | B | K is the mother of M and H . That means K is female hence option C is ruled out. Z is the grandmother of H . So K is either daughter / daughter-in-law of T\&Z. But A is the only daughter of $\mathrm{T}(\& Z)$ so K istheir daughter -in-law. Since $X$ is unmarried, so husband of $K$ is another son of T\&Z. Let's name it $Y$ who is brother of A. Since S is spouse (husband) of A (female) who is sister of Y. So Y is brother-inlaw of S. Since $K$ is wife of $Y$ hence answer is wife of brother-in- law. Hence answer ' B ' is correct and the objection is wrong / rejected. |
| 148 | E | 31 | E | 83 | E | 120 | E | No objection received. Hence this provisional answer is now final answer. |
| 149 | B | 32 | C | 84 | A | 121 | B | In this problem, pattern has to be found to solve it. In the first column, all the figures are even and in the last column, they are all prime number. In the middle column, both the figures are odd and also divisible by 7 i.e. HCF is 7 . So the missing number should also be odd and divisible by 7 . Hence answer 'B' is correct and the objection is wrong/rejected |
| 150 | C | 33 | A | 85 | B | 122 | C | No objection received. Hence this provisional answer is now final answer. |

