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SRI CHAITANYA IAS ACADEMY

TEST BOOKLET SERIES

TEST BOOKLET
GENERAL STUDIES

A

PAPER - I

Time Allowed : Two Hours

Maximum. Marks: 200

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. ENCODE CLEARLY THE TEST BOOKLET SERIES. AS THE CASE MAY BE IN THE APPROPRIATE PLACE IN THE ANSWER SHEET.
3. You have to enter your Roll Number on the Test Booklet in the Box provide alongside.

DO NOT write *anything else* on the Test Booklet.

4. This Test Booklet contains **100** items (questions). Each item comprises four responses (answer). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your response **ONLY** on the separate Answer Sheet provided. See directions in the Answer Sheet.
6. All items carry equal marks.
7. After You have completed filling in all your response on the Answer Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer Sheet**. You are permitted to take away with you the Test Booklet.
8. Sheet for rough work are appended in the Test Booklet at the end.

9. Penalty for Wrong answers:

THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS.

- (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, one-third of the marks assigned to that question will be deducted as penalty.
- (ii) If a candidate gives more than one answer, it will be treated as wrong answer even if one of the given answers happens to be correct and there will be same penalty as above to that question.
- (iii) If a question is left blank. i.e, no answer is given by the candidate, there will be no penalty for the question.

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1. Consider the following statements about Total Fertility Rate (TFR) in India :
- (1) India's goal is to achieve 2.0 TFR.
- (2) TFR urban is more than TFR rural.
- (3) Peninsular states are behind extra Peninsular states in TFR.
- (4) There is no state in India with below 2.0 TFR.
- Which of above statements is/are correct?
- (a) 1, 3 and 4 (b) 1, 2 and 3
- (c) 2 and 3 (d) 3 only
2. Consider the following statements about Cryogenic engines:
- (1) They are powered by Fuel and Oxidizer at very low temperatures
- (2) They are useful in launching satellites in higher orbits.
- (3) These engines have application only in the field of space.
- (4) India is yet to develop its Cryogenic engine
- Choose the correct answer from the codes given below:
- (a) 1, 2 and 3 (b) 1 and 2
- (c) 1, 2 and 4 (d) 1, 2, 3 and 4
3. Urban development that results from merging originally separate towns or cities is known as :
- (a) Suburb (b) Megapolis
- (c) Megacity (d) Conurbation
4. Which of the following are advantages of Cloud computing?
- (1) Security and privacy is more when compared to other existing technologies
- (2) Capital-expenditure is very less
- (3) Environmentally friendly when compared to other existing technologies
- Choose the correct answer from the codes given below:
- (a) 1 and 3 (b) 1 and 2
- (c) 2 and 3 (d) 1, 2 and 3
5. With reference to population pyramid, consider the following statements:
- (1) It is a set of histogram depicting sex composition and age structure.
- (2) India has regressive population pyramid structure.
- Which of the above statements is/are correct?
- (a) 1 only (b) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2
6. The apparent depth of a coin inside water tub decreases due to
- (a) Refraction of light
- (b) Reflection of light
- (c) Total internal reflection
- (d) Dispersion of light
7. Consider the following statements and select the plantation crop for which they are most suitable :
- (1) Constantly high temperature above 25°C is required.
- (2) Fairly evenly distributed annual rainfall over 200 cm.
- (3) Well drained soil.

<p>(a) Coffee (b) Cocoa (c) Wine (d) Rubber</p>	<p>(3) A person will be weighed more in New Delhi when compared to a person at Lhasa (Tibet)</p>																																		
<p>8. Which of the following is/are the functions of Petroleum Planning and Analysis?</p> <p>(1) Administration of subsidy on PDS Kerosene and domestic LPG.</p> <p>(2) Analyzing the trends in the international oil market and domestic prices.</p> <p>(3) Administration of freight subsidy for far flung areas</p> <p>Select the correct answer from the codes given below:</p> <p>(a) 1, 2 and 3 (b) 1 and 3 (c) 2 and 3 (d) 2 only</p>	<p>(4) A person will be weighed less near surface of the earth when compared to a person near to its centre</p>																																		
<p>9. Match List – I (Crop) with List – II (Major Regions) and select the correct answer from the codes given below the lists :</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">List – I</td> <td style="width: 50%;">List – II</td> </tr> <tr> <td>(A) Coffee</td> <td>(1) South America and Caribbean Region</td> </tr> <tr> <td>(B) Cocoa</td> <td>(2) West Africa</td> </tr> <tr> <td>(C) Tobacco</td> <td>(3) China – USA</td> </tr> <tr> <td>(D) Rubber</td> <td>(4) South East Asia</td> </tr> </table> <table border="0" style="width: 100%; margin-top: 10px;"> <tr> <td style="width: 25%; text-align: center;">A</td> <td style="width: 25%; text-align: center;">B</td> <td style="width: 25%; text-align: center;">C</td> <td style="width: 25%; text-align: center;">D</td> <td style="width: 25%; text-align: center;">A</td> <td style="width: 25%; text-align: center;">B</td> <td style="width: 25%; text-align: center;">C</td> <td style="width: 25%; text-align: center;">D</td> </tr> <tr> <td>(a) 1</td> <td>2</td> <td>3</td> <td>4</td> <td>(b) 2</td> <td>1</td> <td>3</td> <td>4</td> </tr> <tr> <td>(c) 1</td> <td>2</td> <td>4</td> <td>3</td> <td>(d) 2</td> <td>1</td> <td>4</td> <td>3</td> </tr> </table>	List – I	List – II	(A) Coffee	(1) South America and Caribbean Region	(B) Cocoa	(2) West Africa	(C) Tobacco	(3) China – USA	(D) Rubber	(4) South East Asia	A	B	C	D	A	B	C	D	(a) 1	2	3	4	(b) 2	1	3	4	(c) 1	2	4	3	(d) 2	1	4	3	<p>Which of the above statements are correct?</p> <p>(a) 1 and 2 (b) 2, 3 and 4 (c) 2 and 3 (d) 1, 2, 3 and 4</p>
List – I	List – II																																		
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<p>10. Consider the following statements about effects of acceleration due to gravity ‘g’</p> <p>(1) A person who buys 1 kg of tomatoes at equator will get more compared to at poles</p> <p>(2) A person who buys 1 kg of tomatoes at poles will get less compared to at equator</p>	<p>11. Which one of the following is not a native crop of America?</p> <p>(a) Maize (b) Wheat (c) Ground Nut (d) Tobacco</p> <p>12. Consider the following statements about MAGLEV technology:</p> <p>(1) It is based on the concept of super conductivity</p> <p>(2) Bullet trains functioning is based on this technology</p> <p>(3) Main limitation is, operations will stop if there are heavy rains, snow and ice fall</p> <p>(4) Its strong magnetic fields can create bio-hazard</p> <p>Select the correct answer from the codes given below :</p> <p>(a) 1, 2 and 3 (b) 2, 3 and 4 (c) 1, 2 and 4 (d) 1, 2, 3 and 4</p> <p>13. Alps Mountains are spread over:</p> <p>(a) France, Switzerland, Italy, Romania (b) France, Switzerland, Italy, Austria (c) France, Switzerland, Italy, Spain (d) France, Switzerland, Italy, Belgium</p>																																		

14. Consider the following statements about biotechnology:
- (1) Reprogenetics is the merger of reproductive medicine with genetics
 - (2) RNAi is a way of silencing genes responsible for illness
 - (3) Genomics is the science of improving a population by controlled breeding to increase the occurrence of desirable heritable characteristics
 - (4) Eugenics is concerned with the sequencing, analysis and structure of DNA
- Which of the above statements are correct
- (a) 1, 2 and 3 (b) 2, 3 and 4
 - (c) 1 and 2 (d) 1, 2 and 4
15. Arrange the following islands of Indonesia from West to East and select the correct answer from the given codes:
- (1) Sumatra (2) Java
 - (3) West Timor (4) Bali
- (a) 3 – 1 – 2 – 4 (b) 1 – 2 – 4 – 3
 - (c) 1 – 4 – 2 – 3 (d) 3 – 1 – 2 – 4
16. Consider the following statements about aedes aegypti (mosquito):
- (1) It is responsible for propagation of deadly diseases like Dengue, Malaria, Microcephaly
 - (2) It only bites during evenings
 - (3) It is also known as yellow fever mosquito
- Which of the above statements is/are correct?
- (a) 1, 2 and 3 (b) 2 and 3
 - (c) 3 only (d) 1 and 2
17. Which one of the following is **incorrect** about ‘Taungya System’?
- (a) It’s a form of social forestry system
 - (b) In this labour is permitted to raise crop but only side by side with forest species
 - (c) It is practiced under the control and supervision of the Forest Department
 - (d) Taungya System is practiced in Kerala, West Bengal, Uttar Pradesh and Tamil Nadu
18. Consider the following statements about Nuclear Medicine:
- (1) It uses radiation to diagnose and treat diseases
 - (2) It was initially developed using Iodine-131
 - (3) Iridium-192 is used to treat non-malignant disorders in the head
 - (4) Gamma cameras can view organs from many different organs
- Which of the above statements are correct?
- (a) 1, 2 and 3 (b) 2, 3 and 4
 - (c) 1 and 2 (d) 1, 2, 3 and 4
19. Which one of the following systems is not a type of Agro forestry systems:
- (a) Home Garden (b) Alley Cropping
 - (c) Protein Bank
 - (d) None of the above
20. Which of the following statements are correct about C and Ku Band ?
- (1) The frequency of Ku Band is greater than C band.
 - (2) C band performs better under adverse weather conditions in comparison to Ku band.

- (3) C band has a higher likelihood of terrestrial interference in comparison to Ku Band.
- (4) Equipment required for working on C-band is more expensive than on Ku Band
- Choose the correct answer from the codes given below:
- (a) 1, 2 and 3 (b) 1, 2 and 4
- (c) 1 and 3 (d) 1, 2, 3 and 4
21. Consider the following statements with reference to cropping patterns:
- (1) Multiple cropping refers to growing two or more crops in same field at the same time.
- (2) Alley cropping refers to planting rows of trees at wide spacing with companion crop grown in between.
- Which of the above statements is/are correct?
- (a) 1 only (b) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2
22. Which of the following functions are performed by the Liver?
- (1) Plays a role in immunity.
- (2) Helps in processing nutrients.
- (3) Helps in maintaining bloods clotting capacity.
- (4) Helps in purifying blood.
- Choose the correct answer from the codes given below:
- (a) 1, 2 and 3
- (b) 2, 3 and 4
- (c) 1 and 4
- (d) 1, 2, 3 and 4
23. Consider the following statements with reference to mulching:
- (1) Mulching is an agricultural practice where layer of organic or inorganic material is applied on soil surface.
- (2) It improves the health of soil and conserves soil moisture.
- (3) It gives rise to enhanced weed growth and hence reduced visual appearance.
- Choose the correct answer from the codes given below:
- (a) 2 only (b) 1 and 2
- (c) 2 and 3 (d) 1, 2 and 3
24. Which of the following are the potential benefits of nuclear fusion reactors?
- (1) Enough readily available fuel to last more than millions of years.
- (2) No green house gas emissions.
- (3) Nuclear Plants using fusion technology will produce more readily controllable nuclear wastes.
- (4) Deuterium and Lithium can be used as potential fuels.
- (a) 1, 2 and 3 (b) 2, 3 and 4
- (c) 1 and 4 (d) 1, 2, 3 and 4
25. With reference to shifting cultivation, which one of the following is not correctly matched:
- | Region | Name |
|--------------------------------|---------|
| (a) Central America and Mexico | Milpa |
| (b) Indonesia | Ladang |
| (c) Malaysia | Taungya |
| (d) None of the above | |

26. Which of the following statements with regard to two solar events – Solar Flare and Coronal Mass Ejection are correct?
- (1) Coronal Mass Ejection (CME) can cause serious problems for electrical systems on Earth.
- (2) Solar flares have no effect on terrestrial life.
- (3) All CMEs are accompanied by solar flares.
- (4) The Northern and Southern Lights (aurora borealis and aurora australis) are often associated with coronal mass ejections.
- (5) Both solar flares and coronal mass ejections are the result of magnetic activity on the Sun.
- (a) 1, 3 and 4 (b) 1, 4 and 5
- (c) 1, 2, 4 and 5
- (d) None of the above
27. With reference to Viticulture consider the following statements:
- (1) It is a branch of horticulture concerned with grape cultivation
- (2) Mediterranean region is best suited for its cultivation
- Which of the above statements is/are correct?
- (a) 1 only (b) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2
28. Hydrogen is being projected as the fuel for future. Which of the following processes are used to produce Hydrogen?
- (1) Steam Methane Reformation.
- (2) Gasification of Coal.
- (3) Gasification of biomass.
- (4) Electrolytic process – using electricity to produce hydrogen.
- (5) Photolytic process – using sunlight to produce hydrogen.
- (a) 2, 3, 4 and 5 (b) 1, 3, 4 and 5
- (c) 3, 4 and 5
- (d) None of the above
29. Consider the following statements:
- (1) Jowar is cultivated as a Kharif crop only.
- (2) Bajra is cultivated as a rabi crop only
- Which of the above statements is/are correct?
- (a) 1 only (b) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2
30. Which of the following statements with regard to type 1 and type 2 diabetes are correct?
- (1) The onset of type 1 is sudden whereas onset of type 2 is gradual.
- (2) Type 2 is more common than type 1.
- (3) In type 2, the body stops producing insulin.
- (4) The onset of type 2 is primarily due to lifestyle reasons whereas the onset of type 1 is unrelated to lifestyle.
- (5) Type 1 mostly affects children whereas type 2 mostly affects adults.
- Choose the correct answer from the codes given below:
- (a) 1, 2, 3 and 4
- (b) 2, 3, 4 and 5
- (c) 1, 3 and 5
- (d) 1, 2, 4 and 5

31. Consider the following statements with reference to categorisation of current fallow land use:
- (1) It is only land left uncultivated for more than five years.
- (2) Here, land cannot recoup fertility through natural process
- Which of the above statements is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
32. What do you understand by the term 'Dark Fermentation'?
- (a) reduce CO₂ in the atmosphere.
(b) produce Hydrogen as fuel from wastewater.
(c) dispose nuclear wastes.
(d) produce methane from organic waste.
33. Which of the following statements are correct with regard to Hepatitis (A, B, C, D and E)?
- (1) Hepatitis is the inflation of Liver due to viral infection.
(2) Hepatitis B vaccine is enough to keep type D at bay.
(3) Type B & C are mainly transmitted through blood transfusion.
(4) Type A & E are caused due to exposure to polluted food and water.
- (a) 1, 2 and 3 (b) 1, 3 and 4
(c) 2 and 4 (d) 1, 2, 3 and 4
34. Which one of the following form the base for the manufacture of stainless steel?
- (a) Chromium and Nickel
(b) Chromium and Zinc
(c) Nickel and Zinc
(d) Nickel only
35. Consider the following pairs :
- (1) Beriberi : Weak muscles and very little energy to work
(2) Scurvy : Bleeding gums, wounds take longer time to heal
(3) Rickets : Bones become soft and bent
(4) Goiter : Mental disability in children
- Which of the above pairs is/are correct?
- (a) 1 only (b) 1 and 2
(c) 2 and 3 (d) 1, 2, 3 and 4
36. Punjab is the leading producer of woolen goods in the country. Why?
- (1) It has high yielding exotic breeds of sheeps in large farms.
(2) It imports wool from neighbouring states.
(3) It has large market.
- Choose the correct answer from the codes given below:
- (a) 1 only (b) 2 and 3
(c) 3 only (d) 1, 2 and 3
37. Consider the following statements :
- (1) Ethiopia has been the largest recipient of Indian concessional lines of credit in Africa.
(2) President Ram Nath Kovind's visit is the first by an Indian president to Ethiopia.
- Which of the above statements is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

38. With reference to economic activities in forests, consider the following statements:
- (1) Gathering is an important economic activity associated with the tropical forest region.
- (2) Lumbering is predominantly done at large scale in temperate forest.
- (3) Lumbering provide poor quality hardwood
- Choose the correct answer from the codes given below:
- (a) 1 and 2 (b) 3 only
(c) 2 and 3 (d) 1, 2 and 3
39. Consider the following statements about short shadow:
- (1) When light shines on an opaque object from above, short shadow is cast.
- (2) When light shines from the side, the object makes a longer shadow.
- Which of the above statements is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
40. Consider the following :
- (1) Iraq (2) Syria
(3) Iran (4) Turkey
- In which of the above countries do we find 'Kurds'?
- (a) 1, 2 and 3 (b) 1, 2 and 4
(c) 2 and 4 (d) 1, 2, 3 and 4
41. Which of the following are platforms from which the BrahMos Missile can be launched?
- (1) Ships (2) Aircraft
(3) Land (4) Submarines
- Select the correct answer from the codes given below :
- (a) 1 and 2 (b) 1 and 4
(c) 1, 3 and 4 (d) 1, 2, 3 and 4
42. Match List – I (Port) with List – II (Country) and select the correct answer from the codes given below:
- | | |
|------------------------------|-------------------|
| List – I | List – II |
| (A) Duqm Port | (1) North America |
| (B) Shahid Beheshti Terminal | (2) South Korea |
| (C) Duluth | (3) Iran |
| (D) Busan | (4) Oman |
- | | | | | | | | | | |
|------|---|---|---|-------|-----|---|---|---|---|
| A | B | C | D | A | B | C | D | | |
| (a)4 | 3 | 1 | 2 | (b) 3 | 4 | 2 | 1 | | |
| (c) | 2 | 4 | 1 | 3 | (d) | 2 | 4 | 3 | 1 |
43. Consider the following with respect to Swachh Bharat Cess :
- (1) It is collected at the rate of 1.5% of the value of taxable service.
- (2) It is not leviable on services which are fully exempt from tax.
- (3) Proceeds of the SBC are credited to the Consolidated Fund of India.
- (4) SBC has been subsumed into the Goods and Service Tax
- Select the correct answer from the codes given below :
- (a) 1 and 3 (b) 2 and 3
(c) 2, 3 and 4 (d) 1, 2, 3 and 4
44. Arrange the following Island regions from North to South direction:
- (1) Paracel Island

<p>(2) Spratly Island</p> <p>(3) Scarborough Shoal</p> <p>(4) Senkaku Island</p> <p>(a) 4 – 3 – 1 – 2 (b) 4 – 1 – 3 – 2</p> <p>(c) 4 – 3 – 2 – 1 (d) 3 – 4 – 1 – 1</p>	<p>(c) In the hills, the atmospheric density is low and therefore a lot of heat is lost to the atmosphere</p> <p>(d) In the hills, the humidity is high and therefore a lot of heat is absorbed by the atmosphere leaving very little heat for cooking</p>
<p>45. In every day applications, danger signals are indicated by red light. Which of the following is the reason for using red light for such applications?</p> <p>(a) High scattering of red light</p> <p>(b) Red light travels with high velocity</p> <p>(c) Low scattering of red light</p> <p>(d) High sensitivity of red light</p>	<p>48. Which one of the following is not correctly matched?</p> <p>(a) Ahmadiyya (1) Pakistan</p> <p>(b) Yazidi (2) Iraq</p> <p>(c) Chakma (3) Bangladesh</p> <p>(d) Hajong (4) Tibet</p>
<p>46. State of Palestine forms borders with which of the following geographical entities:</p> <p>(1) Egypt (2) Jordan</p> <p>(3) Mediterranean Sea</p> <p>(4) Dead Sea (5) Lebanon</p> <p>Select the correct answer from the codes given below:</p> <p>(a) 2 and 4 (b) 1, 2 and 3</p> <p>(c) 1, 2, 3 and 4 (d) 1, 2, 3, 4 and 5</p>	<p>49. Which of the following is an example of green Manure/Bio-fertilizer?</p> <p>(1) Rice (2) Cow pea</p> <p>(3) Maize (4) Sesbania</p> <p>Select the correct answer from the codes given below:</p> <p>(a) 1 and 3 (b) 2 and 4</p> <p>(c) 1, 2 and 3 (d) 1, 2, 3 and 4</p>
<p>47. It takes much longer to cook food in the hills than in the plains, because</p> <p>(a) In the hills the atmospheric pressure is lower than that in the plains and therefore water boils at a temperature lower than 100°C causing an increase in cooking time.</p> <p>(b) Due to low atmospheric pressure on the hills, the water boils at a temperature higher than 100°C and therefore water takes longer to boil</p>	<p>50. With reference to coal in India, consider the following statements:</p> <p>(1) Anthracite coal is found more in India as compared to Bituminous coal.</p> <p>(2) Ash content is more in Indian coal as compared to imported coal</p> <p>(3) Rhur valley in Germany has the highest anthracite coal deposits in the world.</p> <p>Select the correct answer from the codes given below:</p> <p>(a) 2 and 3 (b) 1 and 2</p> <p>(c) 2 only (d) 1, 2 and 3</p>

51. Consider the following:
- 1) Methanol is a toxic, colourless, tasteless liquid with a very faint odour and is stored and handled like petrol.
- 2) Methanol's advantages include lower emissions, higher performance and lower risk of flammability than petrol.
- Which of the above statements regarding Methanol is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
52. Consider the following statements:
- (1) India is preparing a prototype advanced heavy water reactor at Kalpakkam.
- (2) Pressurised Heavy Water Reactor (PHWR), Faste Breeder Reactor and Advanced Heavy Water Reactor are part of India's three stage nuclear programme (three-stage fuel-cycle plan)
- (3) Descending order of electricity production in India: Thermal > Hydro > Nuclear > Renewable Energy.
- Select the correct answer from the codes given below:
- (a) 1 and 2 (b) 2 only
(c) 1, 2 and 3 (d) 1 and 3
53. A satellite is moved from a geostationary orbit to a higher orbit. Which statement about the orbit change is correct?
- (a) During the move, the gravitational potential energy decreases
- (b) The change in gravitational potential energy is independent of the mass of the satellite.
- (c) The work done is the difference between the gravitational potential energy of the higher orbit and that of the geostationary orbit.
- (d) The work done is the energy required to move the satellite, which is in the gravitational field, from a very large distance away, to the higher orbit.
54. With reference to definition of Census' town in India, which one of the following conditions is **incorrect**?
- (a) Minimum population size of 5000
- (b) At least 75% of total working population employed outside agricultural sector
- (c) A minimum population density of 400 person/sq km
- (d) None of the above.
55. Consider the following:
- (1) Essential fats are both saturated and unsaturated in nature
- (2) Sunflower is a rich source of Polyunsaturated Fatty Acids (PUFAs)
- (3) PUFA consumption is associated with lowering of LDL cholesterol
- Which of the above statements is/are correct?
- (a) 1 and 2 (b) 1 and 3
(c) 2 and 3 (d) 1, 2 and 3
56. What is the definition of Net Reproduction Rate?
- (a) The biological capacity of a female to reproduce
- (b) Projected number of women in the next generation as ratio of number in the present generation

- (c) Number of children an average women would bear if she would have child bearing experience in particular age group.
- (d) Crude Birth Rate - Infant Mortality Rate
57. Consider the following:
- (1) Nickel (2) Cadmium
- (3) Zinc (4) Lead
- (5) Carbon
- Which of the above pairs of materials are used in rechargeable batteries (which are generally used in equipment like torch lights)?
- (a) 3 and 4 (b) 2 and 4
- (c) 1 and 2 (d) 4 and 5
58. With reference to Rural Settlement Classification, the village settlement where several roads converge is known as:
- (a) Circular pattern
- (b) Radial Pattern
- (c) Star pattern
- (d) Rectangular pattern
59. Most of nuclear radiation incidents and accidental releases or irradiations occur in which of the following cases?
- (a) During nuclear fuel reprocessing
- (b) During transport and disposal of nuclear waste
- (c) During refuelling of reactors
- (d) In the field of nuclear medicine and medical imaging
60. Which one of the following statements is **incorrect**?
- (a) India has the fourth largest rail network in the world
- (b) Rail transport in India predominantly uses meter guage
- (c) Railway share in goods traffic is lower than road transport
- (d) None of the above
61. DNA is the genetic material in our cells which controls heredity and plays a large role in determining our physical characteristics. Which of the following statements is/are correct with regard to DNA?
- (1) Identical twins can have different finger prints
- (2) DNA can show a person's gender
- (3) Red blood cells are the best source of DNA
- (a) 1 only (b) 1 and 2
- (c) 1 and 3 (d) 2 and 3
62. Match List – I (Sector) with List – II (Jobs) and select the correct answer from the codes given below the lists :
- | List – I | | | | List – II | | | | | |
|----------------|---|---|---|----------------------------|-----|---|---|---|---|
| (A) Secondary | | | | (1) University Teaching | | | | | |
| (B) Tertiary | | | | (2) Business Analyst | | | | | |
| (C) Quinary | | | | (3) Wholesale Trade | | | | | |
| (D) Quaternary | | | | (4) Computer Manufacturing | | | | | |
| | A | B | C | D | | A | B | C | D |
| (a) | 4 | 3 | 1 | 2 | (b) | 3 | 4 | 1 | 2 |
| (c) | 4 | 3 | 2 | 1 | (d) | 3 | 4 | 2 | 1 |

<p>63. Which of the following is correct with regard to Black Holes?</p> <p>(a) These are bright spots on the Sun</p> <p>(b) These are collapsing objects of low density</p> <p>(c) These are depression in heavenly bodies</p> <p>(d) These are collapsing objects of high density</p>	<p>List – I</p> <p>(A) National Waterway 3</p> <p>(B) National Waterway 2</p> <p>(C) National Waterway 4</p> <p>(D) National Waterway 6</p>	<p>List – II</p> <p>(1) Vijayawada</p> <p>(2) Silchar</p> <p>(3) Kochi</p> <p>(4) Guwahati</p>
<p>64. Consider the following statements:</p> <p>(1) Eastern Dedicated Freight Corridor (EDFC) passes through six states.</p> <p>(2) EDFC runs between Dadri (Uttar Pradesh) and Dankuni (near Kolkata)</p> <p>Which of the above statements is/are correct?</p> <p>(a) 1 only (b) 2only</p> <p>(c) Both 1 and 2 (d) Neither 1 nor 2</p>	<p>A B C D</p> <p>(a) 3 2 1 4</p> <p>(c) 1 4 2 3</p>	<p>A B C D</p> <p>(b) 3 4 1 2</p> <p>(d) 1 2 3 4</p>
<p>65. Consider the following statements regarding Malaria</p> <p>(1) Carriers of Sickle cell anaemia are resistant to Malaria.</p> <p>(2) Malaria by Plasmodium falsiparum is more common in African hilly areas.</p> <p>(3) Plasmodium infects T lymphocytes of the blood.</p> <p>(4) Malaria is a protozoal infection.</p> <p>Which of the above statements is/are correct?</p> <p>(a) 1, 2 and 3</p> <p>(b) 1, 2 and 4</p> <p>(c) 1, 2, 3 and 4</p> <p>(d) 2, 3 and 4</p>	<p>67. Graphite is a soft solid lubricant extremely difficult to melt. Which of the following is the reason for this behaviour?</p> <p>(a) It is a non-crystalline substance</p> <p>(b) It has molecules of variable molecular masses.</p> <p>(c) It has rings of strongly bound carbon atoms with weak interpolate bonds</p> <p>(d) All the above</p>	<p>68. Match List – I (District) with List – II (Rich source of) and select the correct answer from the codes given below the lists :</p> <p>List – I List – II</p> <p>(A) Almora (1) Gypsum</p> <p>(B) Bikaner (2) Kyanite</p> <p>(C) Singhbum (3) Magnesite</p> <p>A B C A B C</p> <p>(a) 3 2 1 (b) 3 1 2</p> <p>(c) 2 1 3 (d) 1 2 3</p>
<p>66. Match List – I (Inland Waterways) with List – II (City/Route) and select the correct answer from the codes given below the lists :</p>	<p>69. Consider the following statements:</p> <p>(1) Stimulates formation of antibodies</p> <p>(2) Destroys normal bacteria</p>	

- Which of the above is/are functions of antigens in human body?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
70. Which one of the following rocks in India produces manganese?
- (a) Gondwana (b) Dharwar
(c) Vindhya (d) Tertiary
71. Which of the following explains the difference between Myoglobin and Haemoglobin?
- (a) Myoglobin has much higher affinity for the oxygen atom than the haemoglobin.
(b) Myoglobin is not a coloured conjugated protein while haemoglobin is a coloured conjugated protein
(c) Myoglobin is not a constituent of the blood while haemoglobin is a constituent of blood.
(d) None of the above
72. Match List – I (Mineral) with List – II (Place) and select the correct answer from the codes given below the lists :
- | List – I | | | | List – II | | | | | |
|---------------|---|---|---|----------------|-----|---|---|---|---|
| (A) Mica | | | | (1) Chindwana | | | | | |
| (B) Diamond | | | | (2) Bellary | | | | | |
| (C) Manganese | | | | (3) Panna | | | | | |
| (D) Copper | | | | (4) Hazaribagh | | | | | |
| | A | B | C | D | | A | B | C | D |
| (a) | 1 | 2 | 3 | 4 | (b) | 1 | 3 | 2 | 4 |
| (c) | 4 | 3 | 2 | 1 | (d) | 1 | 3 | 4 | 2 |
73. Consider the following statements about fats:
- (1) Fats are made of glycerol and fatty acids.
(2) Like carbohydrates, fats contain carbon, hydrogen and oxygen atoms
(3) Fats are generally solid at room temperature but if they are liquid at this temperature, they are called “oils”.
(4) On complete combustion, one gram of fat gives more energy than the energy provided by the same amount of glucose.
- Which of the above statements is/are correct?
- (a) 2 only (b) 3 and 4
(c) 1, 2, 3 and 4 (d) 1, 2 and 3
74. Which one among the following pairs of states is leading producer of tobacco in India?
- (a) Andhra Pradesh and Gujarat
(b) Karnataka and Maharashtra
(c) Maharashtra and Chhattisgarh
(d) Uttar Pradesh and Rajasthan
75. Consider the following statements with regard to Electromagnetic (EM) waves
- (1) Range of Electromagnetic radiation used to cook food in special ovens is Microwave
(2) Type of EM radiation used to look inside a human body without cutting it open is Radio wave.
(3) Type of EM radiation which gives people tans is ultra violet.
(4) Photocopiers do not use EM radiation
- Which of the above statements is/are correct?
- (a) 1 and 2 (b) 1, 2 and 3
(c) 1, 2, 3 and 4 (d) 1 and 3

76. Consider the following statements:
- (1) In India groundnut crop is raised mostly during the Kharif season under rainfed conditions
- (2) In India tobacco is cultivated only in black cotton soil
- Which of the above statements is/are correct?
- (a) 1 only (2) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2
77. Which of the following statements are correct, with respect to the New Swarnima Special Scheme for Women?
- (1) It is meant for Scheduled tribes.
- (2) Maximum Loan limit is Rs. 1,00,000/- per beneficiary.
- (3) The beneficiary woman is not required to invest any amount of her own on the projects.
- Select the correct answer from the codes given below :
- (a) 3 only (b) 1 and 2
- (c) 2 and 3 (d) 1, 2 and 3
78. Consider the following statements with reference to gypsum:
- (1) Rajasthan is the largest producer of gypsum in India.
- (2) Gypsum is mainly used for fertilizer, cement and plaster of paris
- Which of the above statements is/are correct?
- (a) 1 only
- (2) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
79. Which of the following bodies are responsible for the implementation of the Soil Health Management Scheme?
- (1) State Government.
- (2) National Centre of Organic Farming.
- (3) Soil and Land Use Survey of India.
- Select the correct answer from the codes given below :
- (a) 2 only (b) 1 and 3
- (c) 2 and 3 (d) 1, 2 and 3
80. On the banks of which river is Kathmandu located?
- (a) Arun (b) Saptkosi
- (c) Bagmati (d) Sunkosi
81. The Saubhagya Scheme has been implemented to tackle which of the following issues?
- (a) Rural health
- (b) Rural water conservation
- (c) Rural electrification
- (d) Rural Housing
82. Which one of the following terms describes not only the physical space occupied by an organism, but also its functional role in the community of the organism?
- (a) Ecotone
- (b) Ecological Niche
- (c) Habitat (d) Home Range
83. Which of the following statements is/are correct with reference to stem cells?
- (1) Stem cells are capable of dividing and renewing themselves for long periods

- (2) Stem cells are found in all organisms
- (3) Adult stem cells are undifferentiated and found only in bone marrow.
- Select the correct answer from the codes given below :
- (a) 1 and 2 (b) 1 and 3
- (c) 2 and 3 (d) 1, 2 and 3
84. Among the following types of biome, which one has the highest species diversity?
- (a) Temperate rainforest
- (b) Tropical rain forest
- (c) Temperate deciduous forest
- (d) Temperate grassland
85. Which of the following is related to 'No More 50' campaign?
- (a) Campaign calling for stronger and higher penalties for smoking in public place.
- (b) Campaign calling for stronger and higher penalties for Animal cruelty.
- (c) Campaign calling for stronger and higher penalties for Environmental pollution.
- (d) Campaign calling for stronger and higher penalties for Tax evading.
86. Consider the following statements with reference to Limpopo River :
- (1) It demarcates partial boundary between South Africa and Botswana
- (2) It crosses Tropic of Capricorn twice
- Which of the above statements is/are correct?
- (a) 1 only (b) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2
87. Which of the following statements is/are correct with reference to 'One Planet City Challenge'?
- (1) The One Planet City challenge was designed by United Nations Framework Convention on Climate Change (UNFCCC)
- (2) It invites cities in participating countries to report ambitious and innovative climate actions, and to demonstrate how they are delivering on the 2015 Paris Agreement
- (3) One planet City Challenge was formerly known as the Earth Hour City Challenge
- Which of the statements given above is/are correct?
- (a) 1, 2 and 3 (b) 1 and 2
- (c) 2 only (d) 2 and 3
88. Match List – I (Industries) with List – II (Important centre) and select the correct answer from the codes given below the lists :
- | | |
|-------------------|-----------------|
| List – I | List – II |
| (A) Automobile | (1) New England |
| (B) Iron & Steel | (2) Pittsburg |
| (C) Textile | (3) Boston |
| (D) Ship Building | (4) Detroit |
- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 4 | 2 | 1 | 3 |
| (b) | 1 | 3 | 2 | 4 |
| (c) | 2 | 4 | 1 | 3 |
| (d) | 1 | 3 | 4 | 2 |

89. Which of the following pairs is/are correctly matched?
- | Space craft | Purpose |
|-------------------|--|
| (1) BepiColombo : | It's a joint mission of the European Space Agency and the Japan Aerospace Exploration Agency to the planet Mercury |
| (2) Orion : | To orbit Jupiter and study its composition |
| (3) Akatsuki : | Japanese space probe to study the atmosphere of Venus. |
- Select the correct answer using the codes given below:
- (a) 1 and 2 (b) 1 and 3
(c) 1 only (d) 1, 2 and 3
90. With reference to major ports in India, consider the following statements:
- (1) India has presently equal number of major ports on both Eastern and Western Coast.
(2) Cabinet has approved thirteenth major port at Enayam, on the East Coast of Tamil Nadu.
- Which of the above statements is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
91. Which of the following statements is/are the advantages of thorium based nuclear reactors over Uranium based nuclear reactors?
- (1) They produce less waste than Uranium based nuclear reactors
(2) Thorium is more abundant in earth's crust than uranium
(3) They are cheaper than Uranium based reactors
- Select the correct answer from the codes given below :
- (a) 1 only (b) 1 and 2
(c) 2 and 3 (d) 1, 2 and 3
92. Recently India signed the multinational Ashgabat Agreement for multimodal transport. Which one of the following countries is not a member of the Agreement ?
- (a) Oman (b) Tajikistan
(c) Uzbekistan (d) Kazakhstan
93. Which of the following can be used in the biometric identification of a person?
- (1) Facial pattern (2) Pattern of veins
(3) Voice pattern
(4) The body movement while walking
- Select the correct answer from the codes given below :
- (a) 1 and 2 (b) 1, 2 and 3
(c) 1 and 3 (d) 1, 2, 3 and 4
94. Software Industry of India is affected by:
- (1) H1B Visa allotment in USA
(2) Foreign Exchange Rate Fluctuation
(3) Brain drain
(4) Indian Software Industry is lagging behind in Artificial Intelligence and Machine Learning technologies.
- Choose the correct answer from the codes given below:
- (a) 1 and 2 (b) 1, 2 and 3
(c) 1 and 3 (d) 1, 2, 3 and 4
95. Consider the following statements regarding Hydrogen and Atom bombs:

(1) Hydrogen bombs needs very high temperature compared to atom bombs.

(2) A Hydrogen bomb derives its energy through the fission of atoms while an atom bomb derives its energy from fusion.

Which of the above statements is/are correct?

(a) 1 only (b) 2 only

(c) Both 1 and 2 (d) Neither 1 nor 2

96. Consider the following statements:

(1) Horticulture includes fruits, vegetables, flowers and medicinal plants

(2) Food grain production was more than horticulture production in India during the previous year.

Which of the above statements is/are correct?

(a) 1 only (b) 2 only

(c) Both 1 and 2 (d) Neither 1 nor 2

97. Consider the following statements about Integrity Index:

(1) It will give annual rankings of Public Sector Undertakings only.

(2) It will be developed by Central Vigilance Commission.

Which of the above statements is/are correct?

(a) 1 only (b) 2 only

(c) Both 1 and 2 (d) Neither 1 nor 2

98. Seventh Session of Conference of Parties (COP-7) to WHO Framework Convention on Tobacco Control (FCTC) took place in Noida. Consider the following statements about this initiative :

(1) FCTC is the world's first Public Health Treaty under WHO

(2) Its sessions are held every year

(3) There is punishment for sale of tobacco production to minors with seven years rigorous imprisonment under Juvenile Justice Act.

Choose the correct answer from the codes given below:

(a) 1 and 2 (b) 1 and 3

(c) 1, 2 and 3 (d) None of the above

99. Consider the following statements with reference to Adopt a Heritage Scheme:

(1) Under Adopt a Heritage Scheme, Private, Public Sector Companies and Corporate Individuals were invited to adopt heritage sites and to take up responsibility for protecting them and promote sustainable tourism.

(2) It is a unique endeavour of Ministry of Culture in close collaboration with Ministry of Housing and Urban Affairs and Archeological Survey of India.

(3) Seven shortlisted companies were given 'Letters of Intent' for 14 monuments under 'Adopt a Heritage Scheme'.

Which of the above statements is/are correct?

(a) 1 and 2 (b) 2 and 3

(c) 1 and 3 (d) 1, 2 and 3

100. Match List – I with List – II and select the correct answer from the codes given below the lists :

List - I	List - II
(A) Gold	(1) Hazaribagh plateau
(B) Monazite	(2) Raichur
(C) Iron Ore	(3) Kerala
(D) Mica	(4) Kudremukh

A	B	C	D	A	B	C	D		
(a)	4	3	2	1	(b)	4	2	3	1
(c)	2	3	4	1	(d)	2	3	1	4