



DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO

TEST BOOKLET

GENERAL STUDIES PAPER – I

Science & Technology and Current Affairs

FLTS-6

**Booklet
Series**

A

Time Allowed: **2 Hour**

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 BOOK SERIES **A, B, C** OR **D** AS THE CASE MAY BE IN THE APPROPRIATE PLACE IN THE ANSWER SHEET.
3. You must enter your Roll Number on the Test Booklet in the Box provided alongside. **DO NOT** write **anything else** on the Test Booklet.
4. This Test Booklet contains **100 items** (questions). Each item is printed in **English**. Each item comprises four responses (answers). 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 must mark all your responses **ONLY** on the separate Answer Sheet provided. See directions in the Answer Sheet.
6. **All** items carry equal marks.
7. Sooner than you proceed to mark in the Answer Sheet the response to various items in the Test Booklet, you must fill in some particulars in the Answer Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses 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.
9. Sheets for rough work are appended in the Test Booklet at the end.

10. Penalty for Wrong answers:

THERE WILL BE A 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-fourth (0.5)** of the marks assigned to that question will be deducted as a penalty.
- ii. If a candidate gives **more than one answer**, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be the 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 that question.

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1. Consider the following statements regarding versions of the World Wide Web:

1. Web 1.0 was started in the first half of the 20th Century in North America.
2. Web 3.0 seeks to build a digital world where people would be able to “Read-Write-Execute” without the need of an intermediary.
3. Web 2.0 is also known as “Read only” internet.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 only**
- C. 1 and 3 only
- D. 1, 2 and 3

2. Consider the following statements:

1. Naxal affected areas in India are known as the 'Red Corridor'.
2. The Naxal movement started with the tribal-peasant uprising against landlords in Naxalbari village of Andhra Pradesh.

Which of the statements given above is/are correct?

- A. 1 only**
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

3. Regarding the NewSpace India Limited, consider the following statements:

1. It's located in Hyderabad.

2. It's under the administrative control of the PMO (Prime Minister Office).
3. The mission of NSIL is to undertake innovative research of new possibilities of life forms in space.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 only
- C. 1 and 3 only
- D. None**

4. Consider the following pairs:

Operation	Launched by
1. True Promise	Israel
2. Prosperity Guardian	United States
3. Sankalp	India

How many of the pairs given above is / are correctly matched?

- A. Only one
- B. Only two**
- C. Only three
- D. None

5. Consider the following statements with reference to 'Unified Geologic Map of the Moon'.

1. It is a joint venture of the NASA and Japan Aerospace Exploration Agency.
2. This map will be a blueprint of the Moon's surface geology for future human missions.

Which of the statements given above is/are not correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

6. With reference to the Stockholm International Peace Research Institute (SIPRI) latest report (Period 2019-23)

Consider the following statements:

1. Ukraine became the world's biggest importer of arms.
2. Russia remained India's main arms supplier, accounting for 36% of its arms imports.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2



ACS
Dibrugarh

7. Consider the following Statements with reference to India's Liquid Mirror Telescope (LMT):

1. It is the world's first Liquid-Mirror Telescope (LMT) to be commissioned for astronomy.
2. A conventional telescope is a stationary telescope whereas an LMT moves along the direction of the object of interest in the sky.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

8. Consider the following statements regarding Liquid Nano Urea?

1. It is an indigenously developed Urea, introduced by the Indian Farmers Fertiliser Cooperative Limited (IFFCO).
2. The efficiency of liquid nano urea is lower than the conventional urea.
3. India's first Liquid Nano Urea (LNU) plant is located at Vijaypur, Madhya Pradesh.

Which of the statements given above is/are correct?

A. 1 only

B. 3 only

C. 2 and 3 only

D. 1 and 3 only

9. 'Democracy Report 2024', recently seen in the news, was released by which of the following?

A. Reporters Without Borders

B. Association for Democratic Reforms

C. Amnesty International

D. V-Dem Institute

10. Consider the following statements regarding West Nile Virus:

1. West Nile Virus is a mosquito-borne, double stranded DNA virus.
2. Vaccine is available for West Nile Virus.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2**

11. Consider the following statements regarding “Gaganyaan”:

1. The Gaganyaan system module, called the Orbital Module will have three Indian astronauts, including a woman.
2. It will be launched by GSLV Mk III.
3. It will circle Earth at a high-earth-orbit.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 3 only**
- D. 1,2 and 3

12. Consider the following statements regarding “Rabies”:

1. The germs which cause rabies live in the saliva of the sick (rabid) animal.
2. In up to 99% of cases, domestic dogs are responsible for rabies virus transmission to humans.

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2**
- D. Neither 1 nor 2

13. With reference to the World Happiness Report 2024, consider the following statements:

1. India has been ranked 126th out of more than 140 countries.
2. Freedom from corruption is among the six variables used to measure the happiness Index.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2**
- D. Neither 1 nor 2

14. Consider the following statements regarding ‘Salt Industry of India’:

1. The Vacuum Evaporation Method involves evaporation of salt brine by steam heat in large commercial evaporators, called vacuum pans.
2. India is the second largest salt producing country in the world after China.

Which of the statements given above is/are correct?

- A. 1 only**
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

15. Which of the following statements is/are correct?

1. AlphaFold is a Deep Neural Network based protein structure prediction tool.

2. RoseTTaFold tool can predict the structure of protein complexes more accurately than AlphaFold.

3. There is no cure available for it.

Select the correct answer using the code given below:

- A. 1 only**
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

- A. 1 and 2 only
B. 1 and 3 only
C. 3 only
D. 1, 2 and 3

16. With reference to the National Archives of India, consider the following statements:

1. The National Archives of India is an attached Office under the Ministry of Home Affairs.
2. It was established on August 15, 1947, as a Record Department.
3. The National Archives of India is also the nodal agency for the implementation of the Public Records Act, 1993 and Public Record Rules, 1997.

18. Which of the following statements is/are correct?

1. *Trametes maxima* IIPLC-32, is a bacteria which has the potential to cause microbial degradation of pyrene.
2. Pyrene, possessing four benzene rings, belongs to the highly toxic class of Polycyclic aromatic hydrocarbons (PAHs)

Select the correct answer using the code given below:

- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Which of the statements given above are *not correct*?

- A. 1 and 2 only**
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

17. Consider the following statements regarding "African Swine Fever":

1. It was first detected in Africa in the 1920s.
2. It is a viral disease and can spread from animals to humans also.

19. Consider the following statements regarding the Small Satellite Launch Vehicle (SSLV):

1. It has two solid propulsion stages and a liquid propulsion based velocity-trimming module.
2. It can accommodate only one satellite.
3. It can be assembled both vertically and horizontally.

Which of the above statements is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 3 only**
- D. 1, 2 and 3

20. Consider the following statements in context of chronic fatigue syndrome:

1. It is a serious and debilitating disease, affects the nervous system and energy production in the body.
2. It is also known as “Myalgic Encephalomyelitis”.
3. It only affects children up to the age of five years.

Which of the statements given above is/are not correct?

- A. 1 only
- B. 1 and 2 only
- C. 1 and 3 only
- D. 3 only**

21. Which of the following is/are the UNESCO world heritage sites in India?

1. Kaziranga National park.
2. Manas wildlife sanctuary.
3. Great Nicobar Biosphere Reserve
4. Victorian Gothic and Art Deco Ensembles of Mumbai

Select the correct answer using the code given below:

- A. 1 and 4 only
- B. 2 and 3 only
- C. 1, 2 and 4 only**

D. 1, 2, 3 and 4

22. Consider the following statements regarding Langya Virus:

1. It is a zoonotic virus and cannot be transmitted from animals to humans.
2. It is part of the genus Henipavirus, which has a single-stranded RNA genome with a negative orientation.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only**
- C. Both 1 and 2
- D. Neither 1 nor 2

23. Consider the following pairs:

Handloom	State
1. Phulkari	Punjab
2. Daccai	Assam
3. Brocade	Rajasthan
4. Chanderi	Madhya Pradesh

How many pairs given above are correctly matched?

- A. Only one pair
- B. Only two pairs**
- C. Only three pairs
- D. All four pairs

24. Regarding Electromagnetic Field Emissions (EMF), consider the following statements:

1. They are a combination of invisible electric and magnetic fields of force.

2. They are produced by the local build-up of electric charges in the atmosphere associated with thunderstorms.
3. EMF emissions from Mobile towers doesn't have any adverse impact on Environment.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 only
- C. 3 only
- D. 1, 2 and 3**

25. Consider the following statements regarding 'National Mission on Interdisciplinary Cyber-Physical Systems':

1. Ministry of Electronics, Information and Technology (MeitY) is the nodal ministry for its implementation.
2. The Mission aims at the establishment of 15 Technology Innovation Hubs (TIH), six Application Innovation Hubs (AIH) and four Technology Translation Research Parks (TTRP).
3. Its application includes Driverless cars that communicate securely with each other on smart roads.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 only
- C. 2 & 3 only**
- D. 1, 2 & 3

26. Article 244 A of the Indian Constitution deals with which of the following?

- A. Power of the President to make regulations for certain Union territories.
- B. Formation of an autonomous State comprising certain tribal areas in Assam.**
- C. Proclamation of Emergency.
- D. Special Provisions for the State of Maharashtra

27. With reference to Blockchain, consider the following statements:

1. It's a form of centralised computer network.
2. Estonia is the world's blockchain capital.
3. Blockchain is used in cryptocurrency systems.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only**
- C. 3 only
- D. 1, 2 and 3 only

28. Consider the following statements regarding "Liquid Nano Urea":

1. It was Indigenously introduced firstly by the Indian Farmers Fertiliser Cooperative Limited (IFFCO).
2. It can curtail the requirement of conventional urea by at least 50%.

Which of the statements given above is/are not correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

C. 2 and 3 only

D. 1, 2 and 3

29. Consider the following statements regarding “Council of Scientific and Industrial Research (CSIR)”:

1. It is the largest research and development (R&D) organisation in India.

2. The Prime Minister is the Ex-officio President of CSIR.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2



30. Consider the following statements regarding “Facial Recognition Technology (FRT)”:

1. FRT is an algorithm-based technology.

2. Automated Facial Recognition System uses large database of photos to match and identify the person.

3. The captured face stored in a database cannot be integrated with any software.

Which of the statements given above is/are correct.

A. 1 only

B. 1 and 2 only

31. With reference to the Particularly Vulnerable Tribal Groups (PVTGs), consider the following statements:

1. In 1973, the Dhebar Commission set up a separate category for Primitive Tribal Groups (PTGs).

2. These groups have primitive traits, geographical isolation, low literacy, zero to negative population growth rate and backwardness.

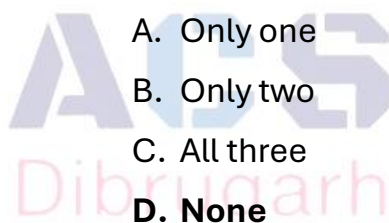
3. Madhya Pradesh has the largest population of PVTGs.

How many of the statements given above are correct?

A. Only one

B. Only two

C. All three

D. None

32. Consider the following statements regarding India's first commercial Space Situational Awareness (SSA) Observatory:

1. It will be set up in the Garhwal region of Uttarakhand.

2. It will be able to monitor satellites and debris in orbits ranging from Low Earth Orbit (LEO) to Geosynchronous Earth Orbit (GEO).

Which of the above statements is/are not correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

33. Regarding the Cyber-attack, consider the following statements:

1. It is a malicious act that seeks to damage data, steal data, or disrupt digital life in general.
2. Malware, Trojan and Phishing are part of Cyber Attack.
3. There is a rise in cyber-attacks in Asia pacific region.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 only
- C. 3 only
- D. 1, 2 and 3 only**

34. Which of the following statements is/are correct?

1. OTT platforms will be governed under the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021.
2. The rules establish a self-regulatory architecture with a Code of Ethics and three-tier grievance redressal mechanism.

Select the correct answer using the code given below:

- A. 1 only
- B. 2 only
- C. Both 1 and 2**
- D. Neither 1 nor 2

35. Consider the following:

Statement-I: Typbar TCV is the world's first clinically proven conjugate Typhoid vaccine.

Statement-II: A phase-3 trial in Malwa Plateau, Madhya Pradesh, an endemic region for typhoid fever, showed that Bharat Biotech's Typhoid conjugate vaccine (TCV), Typbar, has long-term efficacy.

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

- A. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement I
- B. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- C. Statement-I is correct but Statement-II is incorrect**
- D. Statement-I is incorrect but Statement-II is correct

36. Report titled as 'Financing for Sustainable Development Report 2024' was released by:

- A. Greenpeace
- B. United Nations**
- C. Conservation International
- D. World Resources Institute

37. Consider the following statements regarding 'Nova':

1. A strong explosion occurs temporarily on the stellar surface.
2. An increase in brightness by hundreds to millions of times

occurs followed by gradual darkening over weeks or months.

3. It occurs in a binary system consisting of a white dwarf and a main sequence star.

Which of the above statements is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 3 only
- D. 1, 2 and 3**

38. Consider the following statements regarding “Tomato Flu”:

1. There is no specific drug to cure Tomato Flu.
2. It is caused by intestinal viruses and is rare in adults.
3. The treatment for tomato flu is similar to the treatment of chikungunya.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 3 only
- D. 1, 2 and 3**

39. Consider the following statements regarding Indian Energy Exchange:

1. It is a publicly listed company with National Stock Exchange (NSE) and Bombay Stock Exchange (BSE).
2. It is approved and regulated by Central Electricity Regulatory Commission (CERC).

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 statements regarding Hydrogen Fuel Cells (HFC):

1. It converts Hydrogen into kinetic energy.
2. It only emits water vapor and warm air.
3. It takes hours to refill a hydrogen fuel cell vehicle.

Which of the statements given above is/are not correct?

- A. 1 and 3 only**
- B. 2 only
- C. 3 only
- D. 1, 2 and 3

41. Which of the following statements is/are correct?

1. Geostationary satellite orbits are classified as Low Earth Orbits.
2. The orbital period of the satellite in this orbit is the same as the rotation of the earth around its axis.

Select the correct answer using the code given below:

- A. 1 only
- B. 2 only**
- C. Both 1 and 2
- D. Neither 1 nor 2

42. Which of the following reports are released by the International Labour Organisation (ILO)?

1. Global Wage Report
2. World Employment and Social Outlook
3. World of Work Report

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3**

43. Which of the following statements is/are correct?

1. Greenland's iceberg snailfish are able to survive in the chilly waters of the Arctic due to antifreeze proteins in their blood.
2. Snailfish get their shine by converting blue wavelengths of sunlight into green, red or yellow light.

Select the correct answer using the code given below:

- A. 1 only
- B. 2 only
- C. Both 1 and 2**
- D. Neither 1 nor 2

44. Which of the following statements regarding Corbevex is/are correct?

1. India's first indigenously developed Receptor Binding Domain (RBD) protein sub-unit vaccine.

2. It needs to be stored at below zero degrees Celsius.
3. It is based on recombinant protein sub-unit.

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 1 and 3 only**
- C. 1 only
- D. 1, 2 and 3

45. Consider the following statements regarding "Artificial Neural Network":

1. It is a vital subset of machine learning that helps computer scientists in their work on complex tasks.
2. It is designed to simulate the way the human brain analyses and processes information.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2**
- D. Neither 1 nor 2

46. Which of the following is/are the characteristics of Semiconductors?

1. Formed due to ionic bonding
2. Positive temperature coefficient
3. Only four valence electrons in the outermost orbit.

Select the correct answers using the code given below:

- A. 1 and 3 only

B. 2 and 3 only

C. 3 only

D. 1, 2 and 3

D. Neither 1 nor 2

47. With reference to the Open source software, consider the following statements:

1. It is a software that is distributed with its source code.
2. It allows anyone to modify the software to best fit their needs.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

48. Consider the following statements regarding the Defence Research and Development Organisation (DRDO):

1. DRDO is the R&D (Research and Development) wing of the Ministry of Science & Technology.
2. It was formed in 1958 from the amalgamation of the Technical Development Establishment (TDEs) of the Indian Army and the Directorate of Technical Development & Production (DTDP) with the Defence Science Organisation (DSO).

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

49. The term 'Triple Agenda of G20' sometimes appeared in the news, is related to:

A. Regulating Artificial Intelligence

B. Reforming Multilateral Bank

C. Regulating Human Trafficking

D. Reforming Labour Law

50. Consider the following statements:

1. A mutation is a single change in the genetic material of the virus.
2. A variant is the whole sequence of the virus, which may contain one or more mutations.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

51. The launch of which of the following missions can be counted as an achievement of the Indian Space Research Organisation (ISRO)?

1. Rohini

2. Amazonia -1

3. UNITYsat

Select the correct answer using the code given below:

A. 1 and 3 only

B. 2 and 3 only

C. 3 only

D. 1, 2 and 3

2. It was Originated in the wake of the 1973 oil crisis.

52. With reference to the 5G, consider the following statements:

1. The 5G networks will operate in the mm-Wave spectrum.
2. Use of mm-Wave spectrum may result in Out-of band emission.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2**
- D. Neither 1 nor 2

53. Consider the following statements:

1. When meteoroids enter the Earth's atmosphere they are called Asteroids.
2. When a meteoroid enters the Earth's atmosphere and hits the ground, it is called a Meteors.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2**

54. With reference to the Group of Seven (G7), which of the following statements is/are correct?

1. It is an intergovernmental organization of seven countries that are the world's most industrialized and developed economies.

Select the correct answer using the code given below:

- A. 1 only
- B. 2 only
- C. Both 1 and 2**
- D. Neither 1 nor 2

55. With reference to the Rare Earth Metals, consider the following statements:

1. These minerals have unique magnetic, luminescent, and electrochemical properties.
2. They are a set of seventeen metallic elements.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2**
- D. Neither 1 nor 2

56. Consider the following statements:

1. Government has dedicated 207 Harmonized System of Nomenclature (HSN) codes to technical textiles to help in monitoring the data of import and export, in providing financial support and other incentives to manufacturers.
2. Technotex India is a flagship event organized by the Ministry of Textiles for the promotion of technical textile.

3. India is the largest technical textile exporter in the world.

- C. Both 1 and 2
D. Neither 1 nor 2

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 only

C. 2 and 3 only

D. 1, 2 and 3

57. With reference to the 5G, consider the following statements:

1. It uses a Millimetre-wave spectrum.
2. It uses upgraded LTE.
3. It provides speeds up to 20 Gbps.

Which of the above statements are correct?

A. 1 and 3 only

B. 1 and 2 only

C. 2 and 3 only

D. 1, 2 and 3 only

58. Consider the following statements:

1. National Science Day is observed on the day Jagdish Chandra Bose discovered the instrument Crescograph.
2. The Raman Effect is the phenomenon where light gets scattered when passed through a transparent material, leading to changes in wavelength and energy.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

59. With reference to the Chemical Weapons Convention (CWC), consider the following statements:

1. It entered into the force in 1997, and currently has 193 states-parties including India.
2. Israel and North Korea are the only states that have neither signed nor ratified the convention.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

60. Consider the following statements:

1. Amateur Radio (HAM Radio) is a widely enjoyed hobby that uses radio frequencies for non-commercial purposes, fostering technical learning through radio waves.
2. Islands On The Air (IOTA), is a program connecting global radio amateurs with island stations and categorising islands into communication groups since 1964.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

61. Consider the following statements regarding Binary System of Stars:

1. It refers to the pair of stars that are gravitationally bound to each other and orbit around a common centre of mass.
2. An estimated 85% or more of stars are actually part of binary or even multiple-star systems.

Which of the statements given above is/are **not** correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2**

2. Neurons communicate through synapses, where dendrites receive chemical signals, convert them to electrical impulses, and transmit them through axons to other neurons.

3. A neuron is sometimes enveloped by a myelin sheath for faster signal transmission.

How many of the statements given above is/are **not** correct?

- A. Only one
- B. Only two
- C. All three
- D. None**

62. Consider the following statements:

1. Planets are formed when the dust and gas swirling around a young star collide and clump together.
2. Planets could also form near supermassive black holes and are termed blanets.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2**
- D. Neither 1 nor 2

64. With reference to the United Nations Security Council (UNSC), consider the following statements:

1. It was established in 1945 as part of the UN Charter and is composed of 15 member states.
2. It has five permanent members with veto power—China, France, Russia, the United Kingdom, and the United States.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2**
- D. Neither 1 nor 2

63. Consider the following statements:

1. A neuron consists of a cell body containing the nucleus, dendrites for receiving input, and an axon for sending messages.

65. Consider the following statements regarding HbA1c Test:

1. The test provides a 2-3 month average of blood glucose levels by

measuring sugar-coated red blood cells, offering comprehensive long-term control assessment.

2. A level below 5.7% is deemed normal, while a range of 5.7% to 6.4% indicates a pre-diabetic condition.

Which of the statements given above is/are **not** correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2**

66. Consider the following statements regarding Hyperloop Technology:

1. Hyperloop is a transportation concept developed by Google in 2023 that would use pressurised tubes and capsules to connect mobility hubs in large cities.
2. The capsules, called pods, would float at high speeds using contactless levitation and electromagnetic propulsion systems.

Which of the statements given above is/are **not** correct?

- A. 1 only**
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

67. With reference to the Bone Grafting, consider the following statements:

1. Bone grafting involves a surgical technique where transplanted bone

is utilized to repair and reconstruct bones affected by disease or injury.

2. Nano Hydroxyapatite-based Porous Composite Scaffolds are biodegradable and have osteoinductive and osteopromotive properties for bone repairing.

Which of the statements given above is/are **not** correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2**

68. Regarding H5N1 Bird Flu, consider the following statements:

1. California condors have been severely affected.
2. India experienced its first outbreak in the State of Maharashtra and Gujarat in 2015.

Which of the statements given above is/are correct?

- A. 1 Only
- B. 2 Only
- C. Both 1 and 2**
- D. Neither 1 nor 2

69. Which among the following countries are part of the Gulf Cooperation Council (GCC)?

1. Iran
2. Kuwait
3. Oman
4. Yemen

Select the correct answer using the code given below:

- A. 1, 2 and 3 only
- B. 2 and 3 only**
- C. 1 and 4 only
- D. 1, 2, 3 and 4

70. Regarding the Sickle Cell Disease (SCD), consider the following statements:

1. SCD causes White Blood Cells (WBCs) to assume a sickle or crescent shape rather than their normal round shape.
2. India holds the top position globally in terms of the incidence of SCD births.

Which of the above statements is/are **not** correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2**
- D. Neither 1 nor 2

71. Regarding Small Satellite Launch Vehicle, consider the following statements:

1. It is a three-stage launch vehicle equipped with two solid propulsion stages and a liquid propulsion-based Velocity Trimming Module (VTM) serving as the terminal stage.
2. It is capable of launching 500kg satellites in 500km planar orbit from Satish Dhawan Space Centre (SDSC).

Which of the statements given above is/are correct?

- A. 1 Only
- B. 2 Only**
- C. Both 1 and 2
- D. Neither 1 nor 2

72. Consider the following statements with respect to 'Cavum Clouds':

1. Cavum clouds are formed when aircraft pass through mid-level altocumulus clouds containing supercooled liquid water droplets.
2. As the planes disrupt the air around Altocumulus Clouds, the droplets freeze into ice crystals, which eventually become heavy and fall out of the sky, leaving voids in the cloud layer.
3. This phenomenon was captured by the INSAT 3D satellite of the ISRO.

How many of the above statements are **not** correct?

- A. Only one**
- B. Only two
- C. All three
- D. None

73. Consider the following statements:

1. Spiking Neural Networks (SNNs) use continuous numerical values for processing data.
2. Lifelong Machine Learning (LML) model involves continuous learning where AI models accumulate knowledge from previous tasks to

aid future learning and problem-solving.

- C. All three
- D. None

Which of the statements given above is/are **not** correct?

- A. 1 only**
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

74. Consider the following statements about Genome Sequencing:

1. Genome is composed of three nucleotide bases: adenine (A), cytosine (C), and thymine (T).
2. India announced its first complete human genome in 2003.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2**

75. Regarding the Claude chatbots, consider the following statements:

1. Claude is a group of Large Language Models (LLMs).
2. The chatbot is capable of handling text, voice messages, and documents.
3. Its responses are entirely devoid of biases.

How many of the above statements are correct?

- A. Only one
- B. Only two**

76. Regarding the Rare Diseases, consider the following statements:

1. Organisation of Rare Diseases India (ORDI) has suggested that a disease is to be defined as rare if it affects 1 in 10,000 people or less.
2. Rare diseases affect approximately 10% of the global population.
3. India represents one-third of global rare disease cases.

Which of the statements given above is/are **not** correct?

- A. 1 and 2 only**
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

77. With reference to the AUKUS, consider the following statements:

- A. It is a trilateral defence and security partnership between Australia, the United Kingdom and the United States.
- B. Pillar I revolves around the acquisition and development of conventionally armed nuclear-powered submarines for the Royal Australian Navy.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only**
- C. Both 1 and 2

D. Neither 1 nor 2

78. Regarding Obelisks, consider the following statements:

1. Obelisks are novel virus-like entities comprising diverse RNA molecules found in the human body and the global microbiome.
2. They display rod-like structures similar to iconic monuments and have genetic sequences around 1,000 nucleotides long, showing no discernible similarities to known biological agents.

Which of the statements given above is/are correct?

- A. 1 Only
- B. 2 Only
- C. Both 1 and 2**
- D. Neither 1 nor 2



79. With reference to the Shanghai Cooperation Organisation (SCO), which of the following statements is/are correct?

1. The SCO is an intergovernmental organization founded in 2008.
2. The Secretariat of SCO is located in Beijing, China.

Select the correct answer using the code given below:

- A. 1 only
- B. 2 only**
- C. Both 1 and 2
- D. Neither 1 nor 2

80. Consider the following statements with respect to 'Garbhini-GA2':

1. It is based on genetic algorithms which are optimisation techniques inspired by evolution and natural selection principles.
2. It is a flagship programme of the Department of Biotechnology (DBT), Government of India.
3. It is tailored for accurately determining the gestational age (GA) of foetus in first trimester of pregnancy.

How many of the statements given above are correct?

- A. Only one
- B. Only two**
- C. All three
- D. None

81. Regarding Battery Electric Vehicles (BEVs), consider the following statements:

1. They are a type of electric vehicle that runs solely on electric power stored in high-capacity batteries.
2. They have a specially designed Internal Combustion Engine (ICE) that does not produce emissions.
3. They use electric motors to drive the wheels, providing instant torque and smooth acceleration.

How many of the statements given above are correct?

- A. Only One
- B. Only Two**
- C. All Three
- D. None

82. Consider the following statements:

1. Brainware integrates brain organoids with microelectrodes, forming an 'Organoid Neural Network (ONN)' that directly incorporates living brain tissue into the computing process.
2. Brain organoids are 3D tissues that simulate the structure and function of the human brain and are derived from human embryonic stem cells.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2**
- D. Neither 1 nor 2

83. Consider the following countries:

1. Bhutan
2. Sri Lanka
3. Malaysia
4. Nepal
5. Vietnam
6. Thailand

How many from the above countries are part of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)?

- A. Only two
- B. Only three**
- C. Only four
- D. Only five

84. With reference to the E Ink Displays, consider the following statements:

1. E-Ink displays are a type of electronic paper display technology that mimics the appearance of traditional ink on paper.
2. It uses millions of tiny microcapsules filled with positively charged white particles and negatively charged black particles suspended in a clear fluid.
3. It uses a backlight and reflects lights the same as happened in LCD and LED displays.

How many of the above statements are correct?

- A. Only one
- B. Only two**
- C. All three
- D. None

85. Consider the following statements:

Statement-I: GRAPES-3 experiment discovers new feature above 100 TeV but below the cosmic-ray proton "Knee," suggesting a deviation from single power-law spectrum.

Statement-II: Cosmic rays are the universe's most energetic particles, bombarding Earth uniformly from all directions, inducing fast-moving particle showers comprising electrons, photons, muons.

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

- A. Both Statement-I and Statement-II are correct, and Statement-II is the correct explanation for Statement-I.
- B. Both Statement-I and Statement-II are correct, and Statement-II is**

not the correct explanation for Statement-I.

- C. Statement-I is correct, but Statement-II is incorrect.
- D. Statement-I is incorrect, but Statement-II is correct.

1. NISAR aims to revolutionise earth resource observation by providing high-resolution data for extensive areas.
2. NASA and ISRO are jointly developing it as a space-borne synthetic aperture radar, scheduled for launch in 2030.

86. Recently Volt Typhoon, which was seen in the news is:

- A. Cyclone in Northwest Pacific Ocean
- B. Chinese state-sponsored group targeting US critical infrastructure**
- C. First Indigenously built electric car in India
- D. None of the above

Which of the statements given above is/are not correct?

- A. 1 only
- B. 2 only**
- C. Both 1 and 2
- D. Neither 1 nor 2

87. Crystal Maze 2 missile, has been test-launched by which of the following countries?

- A. Russia
- B. India**
- C. France
- D. USA

90. Regarding the CAR-T Cell therapy, consider the following statements:

1. It is a type of immunotherapy that uses a patient's immune system to fight cancer.
2. This therapy has been approved for leukemias and lymphomas.
3. CAR-T therapy offers highly economical treatment.

How many of the above statements are correct?

- A. Only one
- B. Only two**
- C. All three
- D. None of the above

88. Recently, the 'Agreement on the boundary in Historic Waters between the two countries and Related Matters' was in news, is related to:

- A. Sri Lanka**
- B. Maldives
- C. Bangladesh
- D. Pakistan

91. With reference to the Kyasanur Forest Disease (KFD), consider the following statements:

1. It is caused by the Canine Parvovirus.

89. Consider the following statements with respect to 'NISAR Phase II Project':

2. It was first identified in 2007 in a sick monkey from the Kysanur Forest in Africa.
3. No vaccines for this virus are currently available in India.

How many of the above statements are correct?

- A. Only one
- B. Only two
- C. All three
- D. None of the above**

92. With reference to the High-Altitude Pseudo-Satellite (HAPS), consider the following statements:

1. HAPS is a solar-powered UAV which can generate solar energy and remain in the air for months or years.
2. HAPS operates in the troposphere nearly double the heights of commercial airplanes.

Which of the statements given above is/are correct?

- A. 1 only**
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

93. Regarding Lymphatic Filariasis, consider the following statements:

1. It is a Neglected Tropical Disease (NTD) caused by infection with filarial parasites transmitted through dogs.
2. The infection starts in childhood and accumulates through adulthood,

resulting in irreversible chronic disease conditions.

Which of the statements given above is/are correct?

- A. 1 Only
- B. 2 Only**
- C. Both 1 and 2
- D. Neither 1 nor 2

94. Consider the following statements with respect to different types of hydrogen:

1. If the electricity used for splitting water comes from a renewable source like wind or solar, then the hydrogen thus produced is referred to as green hydrogen.
2. Colors attached to hydrogen indicate the source of electricity used to derive the hydrogen molecule, such as, if coal is used, it is referred to as grey hydrogen.

Which of the statements given above is/are not correct?

- A. 1 only
- B. 2 only**
- C. Both 1 and 2
- D. Neither 1 nor 2

95. Consider the following statements:

Statement-I: Since its establishment in 2004, Indian National Young Academy of Science (INAYAS) has been the sole recognized academy for young scientists in India.

Statement-II: CSIR-National Institute of Science Communication and Policy

Research (CSIR-NIScPR) is one of the constituent laboratories of the Council of Scientific & Industrial Research (CSIR) under the Ministry of Science & Technology, Government of India.

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

- A. Both Statement-I and Statement-II are correct, and Statement-II is the correct explanation for Statement-I.
- B. Both Statement-I and Statement-II are correct, and Statement-II is not the correct explanation for Statement-I.
- C. Statement-I is correct, but Statement-II is incorrect.
- D. Statement-I is incorrect, but Statement-II is correct.**

96. Regarding Odysseus spacecraft, consider the following statements:

- 1. The spacecraft is scheduled for a landing on Jupiter in 2024.
- 2. The mission is part of the Artemis campaign.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only**
- C. Both 1 and 2
- D. Neither 1 nor 2

97. Regarding Guinea Worm Disease, consider the following statements:

- 1. It is a debilitating parasitic disease.
- 2. There is no vaccine or medication to treat Guinea worm disease.

- 3. The government of India received Guinea worm disease-free certification status from the WHO in 2024.

How many of the above statements are correct?

- A. Only one
- B. Only two**
- C. All three
- D. None

98. With reference to the National Security Guard (NSG), consider the following statements:

- 1. The NSG was established in the wake of Operation Blue Star of 1984.
- 2. It comes under the control of the Ministry of Defence.

Which of the statements given above is/are correct?

- A. 1 only**
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

99. Consider the following statements:

- 1. Amphipods are a diverse group of malacostracan crustaceans, that share characteristics with crabs, lobsters, and shrimp.
- 2. Amphipods play a crucial role in the marine food chain and serve as important indicators for assessing the impact of climate change and the health of coastal ecosystems.

3. A new species of marine amphipod, named Parhyale Odian was discovered in Chilika Lake.

How many of the statements given above are correct?

- A. Only One
- B. Only Two
- C. All Three**
- D. None

100. Recently, the Indian Embassy has rescued over 200 victims of illegal cyber work scam in Cambodia.

In context of the above statement, which of the following countries shares borders with Cambodia?

- 1. Thailand
- 2. Laos
- 3. Vietnam
- 4. Malaysia



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Select the correct answer using the codes given below.

- A. 1 and 2 only
- B. 1, 2 and 3 only**
- C. 2 and 3 only
- D. 1, 2, 3 and 4
