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Duration : 2 hr

CIVIL SERVICES PRELIMINARY EXAM



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A

Test Booklet Code: 713 Test Booklet No: 734992 Total Ques: 100

**1** D
**Ex.** Appointment and Eligibility:
• AG is appointed by the President on the advice of the government.
• S/he must be a person who is qualified to be appointed a judge of the Supreme Court, i.e. s/he must be a citizen of India and must have been a judge of some high court for five years or an advocate of some high court for ten years or an eminent jurist, in the opinion of the President.
Term of the Office: Not fixed by the Constitution.
Removal: Procedures and grounds for the removal of AG are not stated in the Constitution. S/he holds office during the pleasure of the President.

**2** C
**Ex.**

**3** B
**Ex.**

**4** D
**Ex.**

**5** C
**Ex.**

**6** D
**Ex.**

**7** A
**Ex.**

**8** B
**Ex.**

**9** B
**Ex.**

**10** C
**Ex.**

**11** D
**Ex.**

**12** B
**Ex.**

**13** A
**Ex.**

**14** A
**Ex.**

**15** C
**Ex.**

**16** B
**Ex.** Union external affairs minister S Jaishankar met his German, Brazil and Japanese counterparts for a meeting between the foreign ministers of the Group of Four (G4) countries in October 2022.
It was formed in 2004 with India, Brazil, Germany and Japan as its members.
The group is primarily focused on UNSC reforms, and permanent membership of the body for G4 members, among others.

**17** A
**Ex.**

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**18** D
**Ex.** • Vitamin K is a fat-soluble vitamin that comes in two forms.
• The main type is called phylloquinone, found in green leafy vegetables like collard greens, kale, and spinach.
• Vitamin K helps to make various proteins that are needed for blood clotting and the building of bones.
• Prothrombin is a vitamin K-dependent protein directly involved with blood clotting.
• Osteocalcin is another protein that requires vitamin K to produce healthy bone tissue.

**19** D
**Ex.**

**20** B
**Ex.** Point no. 1, 2, 3 are correct. But Point No. 4 is not correct. the Correct explanation is to submit annually.

**21** D
**Ex.**

**22** C
**Ex.** - The project, being executed by the Border Roads Organisation, includes two tunnels and a link road.
- While Tunnel 1 will be 980 metres long single-tube, Tunnel 2 will be 1,555 metres with one bi-lane tube for traffic and one escape tube for emergencies running alongside.
- The link road between the two tunnels will be 1,200 metres.
- Tunnel 2 will be one of the longest tunnels to have been constructed above an altitude of over 13,000 feet.
- The total length of the project, including the tunnels, the approach and the link roads, will be around 12 km.
- Located in West Kameng district of Arunachal Pradesh, the tunnel project will provide an alternate axis to the Sela pass, which is at 13,700 feet.

**23** B
**Ex.** • Photosynthesis is the process used by plants, algae and some bacteria to turn sunlight into energy.
• The process chemically converts carbon dioxide ($CO_2$) and water into food (sugars) and oxygen.
• The chemical reaction often relies on a pigment called chlorophyll, which gives plants their green color.
• Photosynthesis is also the reason our planet is blanketed in an oxygen-rich atmosphere.
• So light carbon dioxide and carbon are essential for photosynthesis. Option b is correct.

**24** D
**Ex.**

**25** A
**Ex.**

**26** C

**Ex.** - Homogenitus Clouds develops as a consequence of human activity. Examples are aircraft condensation trails (contrails), or clouds resulting from industrial processes, such as cumuliform clouds generated by rising thermals above power station cooling towers. Clouds that are clearly observed to have originated specifically as a consequence of human activity will be given the name of the appropriate genus, followed by the special cloud name "homogenitus". For example, Cumulus cloud formed above industrial plants will be known as Cumulus (and, if appropriate, the species, variety and any supplementary features) followed by the special cloud name homogenitus; for example, Cumulus mediocris homogenitus.

**27** C

**Ex.**

**28** B

**Ex.**

**29** C

**Ex.**

**30** D

**Ex.**

**31** A

**Ex.**

**32** D

**Ex.** - These marine features are formed as' a result of erosional and depositional activity.
- A bank is a flat-topped elevation located in the continental margins.
- The depth of water here is shallow but enough for navigational purposes.
- The Dogger Bank in the North Sea and Grand Bank in the north-western Atlantic, Newfoundland are famous examples.
- The banks are sites of some of the most productive fisheries of the world.

**33** A

**Ex.**

**34** C

**Ex.**

**35** D

**Ex.** - Recently, Indonesian government authorities unveiled the site of the country's new capital, from Jakarta to Borneo.
- The proposed location-near the regional cities of Balikpapan and Samarinda-is an area at "minimal" risk of natural disasters.
- Borneo is a large island in Southeast Asia that is divided among three countries: Malaysia, Indonesia, and Brunei.
- Borneo is the third largest island in the world, after Greenland and New Guinea.

**36** C

**Ex.**

**37** D

**Ex.**

**38** B

**Ex.**

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**39** D

**Ex.** • The digestive system of the human body comprises a group of organs working together to convert food into energy for the body.
• Anatomically, the digestive system is made up of the gastrointestinal tract, along with accessory organs
• These organs include the mouth, pharynx (throat), esophagus, stomach, small intestine, large intestine, rectum, and anus.
• The digestive tract is made up of organs that food and liquids travel through when they are swallowed, digested, absorbed, and leave the body as feces.

**40** C

**Ex.**

**41** B

**Ex.** Point 1, 2, 3 are correctly explained but point No. 4 is no related with Art. 38. It is related with Art. 39 :- that is - certain principles of policy to be followed by the state.

**42** D

**Ex.**

**43** C

**Ex.**

**44** C

**Ex.** • Liver is a major organ found in vertebrates
• Functions of liver include synthesis of proteins, detoxification, and biochemicals essential for growth and digestion.
• It is located below the diaphragm in the right upper quadrant of the abdomen in humans.
• The liver is the only organ in the body of a human being, which possesses the tendency to regenerate itself post destruction.
• The phenomenon by which the liver possesses the tendency to substitute the lost liver tissue is known as liver regeneration.

**45** D

**Ex.** - Whakaari/White Island is currently New Zealand's most active cone volcano.
- It is located in the Bay of Plenty sitting 48 kilometres offshore.
- The cone has been built up by continuous volcanic activity over the past 150,000 years.
- The island covers an area of around 325 hectares and this is only about 30 per cent of the volcanos mass - the rest is under the sea.
- Even so, it is only about half the size of other cone volcanoes like Mount Ruapehu, Tongariro or Taranaki.
- It is a tourist magnet, with its alien landscape and spectacular hydrothermal features.

**46** D

**Ex.**

**47** B

**Ex.**

**48** C

**Ex.**

49 C
Ex. Status: A statutory body established under the provisions of The Competition Act, 2002.
• Established in: 2003.
• Composition: A Chairperson and 6 Members appointed by the Central Government.
• Headquarters: New Delhi.
• Preceding agency: Monopolies and Restrictive Trade Practices Commission.
• Mandate: To implement provisions of The Competition Act, 2002 which -
• prohibits anti-competitive agreements and abuse of dominant position by enterprises
• regulates mergers and acquisition (M&A) which can have an adverse effect on competition within India. Thus, deals beyond a certain threshold are required to get clearance from CCI.

50 C
Ex.

51 C
Ex.

52 D
Ex.

53 C
Ex. - The new 6-Lane tunnel at Khambatki Ghat on Pune-Satara highways (NH-4) is a twin tunnel with 3 lanes each & currently under construction is expected to be completed by 2023.
- The Khambatki Ghat project is a new initiative towards saving time and money while accelerating highway development.
- Two new three-lane twin tunnels have been constructed on this ghat route to reduce the length of the Pune-Satara route and save fuel.
- The new six-lane tunnel at Khambatki Ghat on Pune-Satara Highway (NH-4) is a twin tunnel with three lanes each.
- The construction work of this tunnel is in the final stage.

54 D
Ex. - Recently few States have demanded that "lightning" be declared a "natural disaster" because deaths caused by it surpass any other disaster in India.
- According to present norms, cyclones, droughts, earthquakes, fires, floods, tsunamis, hailstorms, landslides, avalanches, cloudbursts, pest attacks, frosts, and cold waves are considered as disasters that are covered under the State Disaster Response Fund (SDRF), 75% of which is funded by the Centre.

55 D
Ex. - Temperature inversion, is a reversal of the normal behavior of temperature in the troposphere, in which a layer of cool air at the surface is overlain by a layer of warmer air. (Under normal conditions, the temperature usually decreases with height).
- Long nights, so that the outgoing radiation is greater than the incoming radiation.
- Clear skies, which allow the unobstructed escape of radiation.
- Calm and stable air, so that there is no vertical mixing at lower levels.

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56 C
Ex.

57 C
Ex.

58 D
Ex.

59 B
Ex.

60 B
Ex.

61 D
Ex.

62 C
Ex. - The Mediterranean Sea, which is divided by a 400-meter sill into two sub basins, is connected to the Atlanti Ocean via the Straits of Gibraltar, to the Black Sea via the Bosporus Strait, and to the Red Sea via the manmade Suez Canal.
- Atlantic Ocean water enters this marginal sea through the Straits of Gibraltar as a surface flow. This ocean water replaces a fraction of the water that evaporates in the eastern Mediterranean Sea.
- In the Mediterranean Sea evaporation exceeds precipitation and hence salinity increases.

63 C
Ex. - According to a report by CPCB, an increase of 258% to 335% has been observed in the concentration of PM10 in Delhi since 2009.
- But the most prominent pollutant in Delhi and neighbouring areas is PM2.5
- PM2.5 refers to fine particles which penetrate deep into the body and fuel inflammation in the lungs and respiratory tract, leading to risks of cardiovascular and respiratory problems, including a weak immune system.
- Implementation of the Graded Response Action Plan (GRAP). It is a set of curbs triggered in phases as the air quality deteriorates, which is typical of the October-November period.

64 C
Ex.

65 A
Ex.

66 A
Ex.

67 D
Ex.

68 A
Ex.

69 C
Ex.

70 D
Ex. The United Nations observes the first Monday of Octobe as World Habitat Day.
The day came into existence with a resolution by the UN General Assembly in 1985.
World Habitat Day was first celebrated in 1986 in Nairobi, Kenya, with the theme 'Shelter is my right'.

71 C
Ex.

72 B
Ex.

73 C
Ex.

74 C
Ex.

75 B
Ex.

76 D
Ex.

77 D
Ex.

78 D
Ex.

79 A
Ex.

80 B
Ex.

81 C
Ex.

82 B
Ex.

83 D
Ex.

84 C
Ex.

85 B
Ex. • Param Siddhi is a High Performance Computing-Artificial Intelligence (HPC-AI) supercomputer and by far the fastest supercomputer developed in India
• It is developed by Department of Science and Technology (DST), Ministry of Electronics and Information Technology (MeitY) under National Supercomputing Mission (NSM) at Centre for Development of Advanced Computing.
• Param Siddhi ranked 63rd among top 500 most powerful non-distributed computer systems in the world.
• The AI helps research in advanced materials, computational chemistry and astrophysics, health care system, flood forecasting and Covid-19 application through faster simulations, medical imaging and genome sequencing.

86 C
Ex.

87 A
Ex.

88 D
Ex.

89 C
Ex.

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90 D
Ex. - Himalayas are very important not only for security point of view but also for economical reasons.
- Geosynclinical deposits in tertiary rocks are regions of potential coal and oil reserves.
- Coal is found in Kashmir, Copper, lead, zinc, gold, silver, limestone, semi-precious and precious stones occur at some places in the Himalayas.
- But the exploitation of these resources requires advanced technologies which are not yet available.
- Also, disturbing such a fragile environment leads to more pain than gain.

91 C
Ex.

92 C
Ex.

93 C
Ex. - The Great Rift Valley is a massive geological formation that stretches around 6,400 kilometers from northern Syria to central Mozambique in East Africa.
- The valley is home to the Jordan River, which flows through the Jordan Valley and eventually empties into the Dead Sea on the border between Israel and Jordan.
- The Gulf of Aden is an eastward continuation of the Rift, and from there it extends southeastward as part of the mid-oceanic ridge of the Indian Ocean.
- In eastern Africa, the valley divides into the Eastern Rift and the Western Rift. The Western Rift, also known as the Albertine Rift, contains some of the deepest lakes in the world.

94 D
Ex.

95 A
Ex.

96 B
Ex.

97 A
Ex.

98 C
Ex.

99 B
Ex.

100 D
Ex.