

जब तक आपको यह परीक्षण पुस्तिका खोलने को न कहा जाए तब तक न खोलें

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परीक्षण पुस्तिका अनुक्रम

क्रम संख्या

0156338

परीक्षण पुस्तिका सामान्य योग्यता एवं बुद्धिमत्ता

B

समय : दो घण्टे

पूर्णांक : 250

अनुदेश

1. परीक्षा प्रारम्भ होने के तुरन्त बाद, आप इस परीक्षण पुस्तिका की पड़ताल अवश्य कर लें कि इसमें कोई बिना छपा, फटा या छूटा हुआ पृष्ठ अथवा प्रश्नांश, आदि न हो। यदि ऐसा है, तो इसे सही परीक्षण पुस्तिका से बदल लें।
2. कृपया ध्यान रखें कि OMR उत्तर-पत्रक में, उचित स्थान पर रोल नम्बर और परीक्षण पुस्तिका अनुक्रम A, B, C या D को ध्यान से एवं बिना किसी चूक या विसंगति के भरने और कूटबद्ध करने की ज़िम्मेदारी उम्मीदवार की है। किसी भी प्रकार की चूक/विसंगति की स्थिति में उत्तर-पत्रक निरस्त कर दिया जाएगा।
3. इस परीक्षण पुस्तिका पर साथ में दिए गए कोष्ठक में आपको अपना अनुक्रमांक लिखना है। परीक्षण पुस्तिका पर और कुछ न लिखें।
4. इस परीक्षण पुस्तिका में 125 प्रश्नांश (प्रश्न) दिए गए हैं। प्रत्येक प्रश्नांश हिन्दी और अंग्रेज़ी दोनों में छपा है। प्रत्येक प्रश्नांश में चार प्रत्युत्तर (उत्तर) दिए गए हैं। इनमें से एक प्रत्युत्तर को चुन लें, जिसे आप उत्तर-पत्रक पर अंकित करना चाहते हैं। यदि आपको ऐसा लगे कि एक से अधिक प्रत्युत्तर सही हैं, तो उस प्रत्युत्तर को अंकित करें जो आपको सर्वोत्तम लगे। प्रत्येक प्रश्नांश के लिए केवल एक ही प्रत्युत्तर चुनना है।
5. आपको अपने सभी प्रत्युत्तर अलग से दिए गए उत्तर-पत्रक पर ही अंकित करने हैं। उत्तर-पत्रक में दिए गए निर्देश देखें।
6. सभी प्रश्नांशों के अंक समान हैं।
7. इससे पहले कि आप परीक्षण पुस्तिका के विभिन्न प्रश्नांशों के प्रत्युत्तर उत्तर-पत्रक पर अंकित करना शुरू करें, आपको प्रवेश प्रमाण-पत्र के साथ प्रेषित अनुदेशों के अनुसार कुछ विवरण उत्तर-पत्रक में देने हैं।
8. आप अपने सभी प्रत्युत्तरों को उत्तर-पत्रक में भरने के बाद तथा परीक्षा के समापन पर केवल उत्तर-पत्रक अधीक्षक को सौंप दें। आपको अपने साथ परीक्षण पुस्तिका ले जाने की अनुमति है।
9. कच्चे काम के लिए पत्रक परीक्षण पुस्तिका के अंत में संलग्न हैं।
10. ग़लत उत्तरों के लिए दंड :

सभी प्रश्नों में उम्मीदवार द्वारा दिए गए ग़लत उत्तरों के लिए दंड दिया जाएगा।

- (i) प्रत्येक प्रश्न के लिए चार वैकल्पिक उत्तर हैं। उम्मीदवार द्वारा प्रत्येक प्रश्न के लिए दिए गए एक ग़लत उत्तर के लिए प्रश्न हेतु नियत किए गए अंकों का एक-तिहाई दंड के रूप में काटा जाएगा।
- (ii) यदि कोई उम्मीदवार एक से अधिक उत्तर देता है, तो इसे ग़लत उत्तर माना जाएगा, यद्यपि दिए गए उत्तरों में से एक उत्तर सही होता है, फिर भी उस प्रश्न के लिए उपर्युक्तानुसार ही, उसी तरह का दंड दिया जाएगा।
- (iii) यदि उम्मीदवार द्वारा कोई प्रश्न हल नहीं किया जाता है, अर्थात् उम्मीदवार द्वारा उत्तर नहीं दिया जाता है, तो उस प्रश्न के लिए कोई दंड नहीं दिया जाएगा।

जब तक आपको यह परीक्षण पुस्तिका खोलने को न कहा जाए तब तक न खोलें

Note : English version of the instructions is printed on the back cover of this Booklet.

1. नेशनल क्रिटिकल इन्फॉर्मेशन इन्फ्रास्ट्रक्चर प्रोटेक्शन सेंटर द्वारा निम्नलिखित में से किन सेक्टरों को 'महत्वपूर्ण सेक्टर' के रूप में चिह्नित किया गया है ?

1. विद्युत और ऊर्जा
2. उद्योग
3. बैंकिंग और वित्तीय सेवाएं
4. सिंचाई
5. शिक्षा

नीचे दिए गए कूट का प्रयोग कर उत्तर चुनिए :

- (a) 3, 4 और 5
- (b) केवल 1 और 3
- (c) 1, 2 और 4
- (d) 1, 3 और 4

2. निम्नलिखित में से, भारत के किस राष्ट्रपति ने डाकघर (संशोधन) विधेयक, 1986 को संसद के पुनर्विचार के लिए वापस भेजा था ?

- (a) आर. वेंकटरमन
- (b) शंकर दयाल शर्मा
- (c) ज्ञानी जैल सिंह
- (d) के. आर. नारायणन

3. मिलानो कॉर्टिना 2026 शीतकालीन ओलंपिक और पैरालंपिक खेलों के प्रतीक (Emblem) के संबंध में निम्नलिखित कथनों पर विचार कीजिए :

1. प्रतीक का नाम 'फ्यूचुरा (Futura)' है

2. ओलंपिक के इतिहास में पहली बार लोकप्रिय मतदान (वोट) के द्वारा इन खेलों के प्रतीक को चुना गया था

उपर्युक्त में से कौन-सा/कौन-से कथन सही है/हैं ?

- (a) केवल 1
- (b) केवल 2
- (c) 1 और 2 दोनों
- (d) न तो 1, न ही 2

4. भारत की समुद्री पहल, सागर (SAGAR) के संबंध में निम्नलिखित में से कौन-सा कथन सही है ?

- (a) यह QUAD के अधीन संयुक्त नौसेना अभ्यास संचालित करने के लिए एक मंच है
- (b) इसका उद्देश्य हिंद महासागर क्षेत्र के देशों के साथ समुद्री सहयोग को बढ़ावा देना है
- (c) यह हिंद महासागर क्षेत्र से गुजरने वाले व्यापारिक जहाजों को सुरक्षा प्रदान करने के लिए भारत, अमेरिका (USA) और जापान का गठबंधन है

(d) यह संयुक्त राष्ट्र सुरक्षा परिषद द्वारा गठित किए गए समुद्री डकैती पर संपर्क समूह (कांटेक्ट ग्रुप ऑन पाइरेसी) में भारत की भागीदारी को दिया गया नाम है

5. Match List I with List II and select the correct answer using the code given below the Lists :

List I (Climate Conference)	List II (Country)
A. COP-26	1. Egypt (C)
B. COP-27	2. Azerbaijan (D)
C. COP-28	3. United Kingdom (A)
D. COP-29	4. UAE (B)

Code :

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

6. Under which one among the following Articles of the Constitution of India, a member of a Civil Service, whether of the Union or of a State, seeks protection from unlawful dismissal from service ?

- (a) Article 309
- (b) Article 311
- (c) Article 315
- (d) Article 320

7. Which of the following statements are correct with regard to the UN Convention on the Law of the Sea (UNCLOS) ?

1. UNCLOS authorizes the UN Security Council to take a direct action in case of the disputes between States on sovereign rights over Exclusive Economic Zones
2. UNCLOS defines contiguous zones and specifies its functions
3. Both the US and India have ratified UNCLOS
4. ✓ UNCLOS grants certain rights to Landlocked States

Select the answer using the code given below :

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

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

1. The Muddiman Committee recommended the separation of Accounts from Audit as a necessary financial reform
2. Indian Institute of Public Administration was set up on the lines recommended by Dr. Paul H. Appleby

Select the answer using the code given below :

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

9. Which one among the following reports states that the budget is seen, not as a simple balancing of tax receipts against expenditure but as a sophisticated process in which instruments of taxation and expenditure are used to influence the course of the Economy?

- (a) Administrative Reforms Committee Report
- (b) Hoover Commission Report
- (c) Haldane Committee Report
- (d) Plowden Report on Control of Expenditure

10. Which of the following statements are correct about the composition of the G 20?

- 1. All G 7 countries are members of G 20
- 2. All BRICS countries are members of G 20
- 3. All ASEAN countries are members of G 20
- 4. All permanent members of Security Council are members of G 20

Select the answer using the code given below :

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

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

- 1. Some Rights contained in Part-III of the Constitution of India are enforceable against the State only
- 2. Some Rights contained in Part-III of the Constitution of India are enforceable in favor of citizens only

3. Some Rights contained in Part-III of the Constitution of India are enforceable against both, the state and individuals

Select the answer using the code given below :

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

12. Match List I with List II and select the correct answer using the code given below the Lists :

List I (Commission/ Committee)	List II (Suggested Reform in Civil Services Examination)
A. Kothari Commission	1. Inclusion of Medical and Engineering subjects
B. Satish Chandra Committee	2. Entrance Examination for Civil Service after Class XII
C. P. C. Hota Committee	3. Objective methodology for personality assessment
D. Prof. Y. K. Alagh Committee	4. Civil Services Mains exami- nation (Written and Interview)

Code :

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

13. Under which one among the following Articles of the Constitution of India, the seats are reserved for the Scheduled Caste and the Scheduled Tribe in every Municipality ?

- (a) 243-R
- (b) 243-S
- ☒ (c) 243-T
- (d) 243-ZA

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

- 1. The abolition of the Official Secrets Act, 1923 was recommended by the Second Administrative Reforms Commission
- 2. The Right to Information Act was enacted in 2005

Select the answer using the code given below :

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

15. "Mission Shakti" (DRDO) is the name given by India to

- ☒ (a) Inter-Continental Ballistic Missile
- (b) Air-to-Air Missile
- (c) Anti-Satellite Missile
- (d) Nuclear-Powered Attack Submarine

16. Consider the following statements about the costumes and headgear/hairstyle in India during 4th – 7th century AD :

- 1. There was a marked preference for stitched garment as compared to any previous age
- 2. Simple plaits without any floral embellishment dominated the hairstyle of women

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

17. Which of the following statements are correct ?

- 1. The Third Round Table Conference met in London in November 1932 without the participation of Congress
- 2. The discussions in the Third Round Table Conference led to the passing of the Government of India Act, 1935
- 3. The Government of India Act, 1935 did not favor the idea of provincial autonomy
- 4. The Governor was not given any power in the Act of 1935 to take over and run the administration of a province

Select the answer using the code given below :

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

18. Consider the following pairs of texts and their subjects :

1. *Tilakmanjari* : Mathematics
2. *Nighantu* : Medicine
3. *Janakiharan* : Logic

Which of the pairs given above is/are correctly matched ?

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

19. The Junagarh inscription goes on to tell us that during the reign of Rudradaman, in the year 72 of the Saka era, there occurred a terrible storm. What would be the time in CE of the occurrence of that terrible storm ?

- (a) 150 CE
- (b) 181 CE
- (c) 130 CE
- (d) 120 CE

20. Abdur Razzak, the traveler to Vijayanagar, had referred to the presence of a number of flower merchants in Vijayanagar and noted a particular flower that seemed as necessary as food to the people of that part. Which variety of flower was being referred to by Abdur Razzak ?

- (a) Jasmine
- (b) Lotus
- (c) Hibiscus
- (d) Rose

21. In Kautilya's *Arthashastra*, the conquerer king is expected to establish, in the conquered territories, a social order based on the

- (a) *varna* system only
- (b) ~~*dharma*~~, *varna* and *ashrama* systems
- (c) *dharma* only
- (d) *varna* and *ashrama* systems

22. Consider the following eras in early India :

1. Shaka era
2. Kalachuri era
3. Vikrama era
4. Harsha era
5. Gupta era

Which one of the following is the correct chronological order of the above eras starting with the earliest ?

- (a) 1 - 2 - 3 - 4 - 5
- (b) ~~3 - 1 - 5 - 2 - 4~~
- (c) 2 - 3 - 1 - 4 - 5
- (d) 3 - 1 - 2 - 5 - 4

23. What is *Nalayira Divyaprabandham* ?

- (a) Compositions by the Alvars compiled in the form of an anthology
- (b) Hymns composed by Nayanars
- (c) Eulogies composed for Chola kings
- (d) An exposition of the hymns of *Rig Veda* in Malayalam

24. What are *bhuni*, *pachara*, and *dopati* mentioned frequently in the biographies of the Vaishnava reformers of medieval Assam ?

- (a) Vessels of metal used in religious oblation
- (b) Agricultural implements
- (c) Musical instruments used at the time of Bohag Bihu festival
- (d) ☒ Pieces of men's clothes

25. Consider the following statements about the Rowlatt Act of 1919 :

- 1. It was passed by the Imperial Legislative Council
- 2. Khilafat Committee was formed to oppose the Act
- 3. While Gandhiji was arrested, the local leaders were allowed to continue the protest

How many of the above statements is/are NOT correct ?

- (a) ☒ One
- (b) Two
- (c) Three
- (d) None

26. Consider the following statements about *Mahanavami dibba*, a massive platform :

- 1. It is situated on one of the highest points in the city of Vijayanagara
- 2. Virupaksha temple is located on it

Which of the above statements is/are correct ?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

27. Which of the following statements about the Bundela rebellion against Aurangzeb are correct ?

- 1. Shivaji advised Chhatrasal to promote local risings against Aurangzeb
- 2. Chhatrasal levied *chauth* like marathas
- 3. In 1705, Aurangzeb decided to make peace with Chhatrasal and Chhatrasal was granted *mansab* of four-thousand

Select the 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

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28. Consider the following statements about the Dutch trade in Mughal period :

1. The Dutch transported silk goods from Bengal through Hooghly
2. Cloves and nutmegs were collected at Surat by the Dutch and exported to Europe

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

29. Which naval forts were erected by Shivaji ?

1. Suvarnadurg
2. Vijayadurg
3. Sindhudurg
4. Kolaba

Select the answer using the code given below :

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

30. Which of the following statements about the economy of Assam in the medieval period is/are correct ?

1. Ahoms cast excellent matchlocks and made first rate gunpowder and artillery pieces
2. Assam adopted new crafts of brass-casting and making granulated sugar during this period
3. Sarthebari village (in Kamrup) was known for its skill in metal casting

Select the answer using the code given below :

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

31. Which one among the following biotechnologies is applied to manufacture pharmaceutical products such as insulin, antibiotics and vaccines ?

- (a) White Biotechnology
(b) Red Biotechnology
(c) Green Biotechnology
(d) Blue Biotechnology

32. In which organism did Gregor J. Mendel conduct the experiment to explain principles of inheritance ?

- (a) Groundnut
(b) Garden Pea
(c) Four O'clock plant
(d) Fruit fly

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33. In which layer of the plant tissue Guard cells are present ?

- (a) Palisade mesophyll
- (b) Spongy mesophyll
- (c) Epidermis
- (d) Xylem

34. Identify the correct option from the following about the proportion of different gases in Biogas ?

- (a) Methane > Carbon dioxide > Nitrogen
- (b) Methane > Nitrogen > Carbon dioxide
- (c) Methane > Oxygen > Carbon monoxide
- ☒ (d) Nitrogen > Methane > Carbon dioxide

35. Which one of the following is the audible range of hearing for humans ?

- (a) 20 kHz – 200 kHz
- ☒ (b) 20 Hz – 20 kHz
- (c) 20 Hz – 35 kHz
- (d) 20 Hz – 40 kHz

36. In what form excess of glucose is stored in human body ?

- (a) Fructose
- (b) Glycogen
- ☒ (c) Glucose
- (d) Starch

37. Biotechnological research is promoted through the development of "Bio-technology Parks". Which of the following is/are essential to bring technology to market ?

- 1. Development of new product
- 2. Entrepreneurship
- 3. Technology incubation

Select the answer using the code given below :

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

38. Which one of the following is the correct chronology of invention/discovery in the field of Bio-technology ?

- ☒ (a) Discovery of Plasmid, Double Helical structure of DNA, DNA fingerprinting, cloning of Dolly
- (b) Double Helical structure of DNA, Discovery of Plasmid, DNA fingerprinting, cloning of Dolly
- (c) DNA fingerprinting, cloning of Dolly, Double Helical structure of DNA, Discovery of Plasmid
- (d) Double Helical structure of DNA, DNA fingerprinting, Discovery of Plasmid, cloning of Dolly

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39. In an ecosystem why is the number of trophic levels of a food chain usually limited ?

- (a) Lower trophic level has lesser energy than the higher trophic level
- (b) Because of the loss of energy at each trophic level
- (c) Higher trophic level individual can control the lower ones more efficiently
- (d) Limited trophic level makes a food chain less vulnerable to parasites

40. Which one of the following structure is NOT found in prokaryotes ?

- (a) Nuclear envelope
- (b) Cell membrane
- (c) Ribosome
- (d) Cell wall

41. Consider the following statements regarding the rotation of the Earth :

1. Since the Earth rotates by 15° each hour, time zones normally differ by one hour
2. At the International Date Line, the calendar day changes – advancing a day for eastward travel, dropping back a day for westward travel

3. Daylight saving time advances the clock by one hour

4. The Moon rotates and revolves about the Earth in the same direction that the Earth revolves around the Sun

Which of the statements given above is/are correct ?

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

42. Which of the following statements regarding faunal resources of India is/are correct ?

1. High degree of endemism has been noticed in the biodiversity hotspots of India
2. Of the total biosphere reserves in India, the Sundarbans has the largest number of species and Nokrek has the smallest number of species

Select the answer using the codes given below :

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

43. Consider the following characteristics of a type of wind :

1. They occur at upper levels in the atmosphere
2. They are subjected to two forces, a pressure gradient force and the Coriolis force
3. When the forces balance, air moves at right angles to the pressure gradient, parallel to the isobars

Identify the type of wind on the basis of the given characteristics :

- (a) ~~Jet Stream~~
- (b) Geostrophic Wind
- (c) Westerlies
- (d) Easterlies

44. Where does podsolization take place ?

- (a) Regions in high middle latitudes
- (b) Coastal regions in lower latitudes
- (c) Regions with hot and humid climate
- (d) Regions having arid climate

45. Which one of the following statements with reference to the Nebular Hypothesis for the origin of Solar System is correct ?

- (a) The initiation of the nebular hypothesis can be considered as a diffuse, roughly spherical, slowly rotating expanding nebula

(b) As a result of rotation and expansion, a disk is formed with matter concentrated in the centre

(c) Expansion continues with the formation of the proto-Sun and the rings of material are left behind

(d) The material in the rings get condensed and form the planets that revolve in orbits around the Sun

46. If it is 31st December, 2023 in New Zealand, at the same time what will be the date in the Hawaiian Islands and Alaska ?

- (a) Both have 01 January, 2024
- (b) Both have 30 December, 2023
- (c) 31 December, 2023 in Alaska and 01 January, 2024 Hawaiian Islands
- (d) ~~31 December, 2023 in Hawaiian Islands and 01 January, 2024 in Alaska~~

47. Which one of the following statement with reference to hailstones is NOT correct ?

- (a) Their formation usually occurs during the monsoon season
- (b) They are associated with dense cumulonimbus clouds
- (c) ~~Rain that forms in the warmer, upper layer solidifies into tiny ice pellets or hailstones in the lower, subfreezing layer~~
- (d) Hailstones have multiple, concentric layers of ice

48. Match List I with List II and select the correct answer using the code given below the Lists :

List I (Ocean Current)	List II (Location)
A. Kuroshio Current	1. Antarctic Ocean
B. Agulhas Current	2. Pacific Ocean
C. East Wind Drift	3. Atlantic Ocean
D. Antilles Current	4. Indian Ocean

Code :

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

49. With reference to 'Black Tigers', which of the following statements is/are correct ?

1. They are also referred to as Melanistic Tigers
2. In India they are found only in Similipal Tiger Reserve in Odisha

Select the answer using the code given below :

- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

50. Which one among the following statements about the Singareni Collieries Company Limited is correct ?

- (a) Located at Kothagudem in Telengana, this is the first and the oldest coal mining company in India in the private sector
(b) It has now diversified into thermal and solar power generation, explosive manufacturing for blasting in opencast mines and consultancy works
(c) It has been conferred with 'Navratna' status since 2011
(d) It is the single largest coal producing company in the world

51. Which of the following processes is/are part of the Rock Cycle ?

1. Lithification
2. Metamorphism
3. Solidification

Select the answer using the code given below :

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

52. Consider the following statements regarding the temperature of the Earth's surface :

1. The temperature of a surface is determined by net radiation
2. Net radiation produces a radiant energy flow that can heat or cool a surface
3. Net radiation balance is usually positive during the daytime and negative during night time
4. Soil surface loses energy as temperature increases during the daytime

Which of the statements given above are correct ?

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

53. Consider the following statements :

1. Black soil is considered suitable for growing rain-fed crops
2. Black soil can retain moisture for a prolonged period, aiding crops to survive even in dry seasons

With regard to the statements given above which of the following is/are correct ?

- ☒ (a) Both the statements are correct and statement 2 is the correct explanation of statement 1

(b) Both the statements are correct and statement 2 is NOT the correct explanation of statement 1

(c) Statement 1 is correct but statement 2 is false

(d) Statement 1 is false but statement 2 is correct

54. Which one among the following countries is NOT a part of the Arabian Peninsula ?

(a) Kuwait

(b) Oman

☒ (c) Libya

(d) Yemen

55. With reference to 'South Coast of Australia' which of the following statements is/are correct ?

1. It is situated along the Indian Ocean

2. It experiences rain during its winter months of December and January

Select the answer using the code given below :

(a) 1 only

☒ (b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

56. Which one among the following is NOT a non-procedural computer language ?

- (a) LISP
- (b) Python
- (c) Prolog
- (d) ML

57. Consider the following :

1. MPEG
2. P*64
3. Indeo

Which of the above can be used to compress video files ?

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

58. Which one among the following has largest energy per photon ?

- (a) X-ray
- (b) Ultra-violet ray
- (c) Visible-ray
- (d) Infra-red ray

59. In Sun-Earth system, the distance between Lagrange points L2 and L3 is about

- (a) 15 lakh kilometre
- (b) 30 lakh kilometre
- (c) 16 crore kilometre
- (d) 32 crore kilometre

60. Which one of the following statements with regard to greenhouse effect is correct ?

- (a) It can take place inside a glass chamber where no radiation can pass into it or pass back through it
- (b) It can take place inside a glass chamber where long wavelength infrared radiation can pass through into it and short wavelength infrared radiation cannot pass back through it
- (c) It can take place inside a glass chamber where short wavelength infrared radiation can pass through into it and long wavelength infrared radiation cannot pass back through it
- (d) It can take place inside a glass chamber where all infrared radiation can pass into it or pass back through it

61. A canon shoots a ball upwards with an initial speed of 100 m/s. The total time of flight of the ball is 20 s before it hits the ground. The ball loses 70% of its speed after hitting the ground. Which among the following is the correct height that the ball will bounce up after its first bounce ? ($g = 10 \text{ m/s}^2$)

- (a) 100 m
- (b) 70 m
- (c) 50 m
- (d) 45 m

62. Which one of the following statements correctly defines PM1 particles in air ?

- (a) These are suspended particles of diameter more than 10 micron
- (b) These are the particles that are filtered by the nose during respiration
- (c) These are extremely fine particles of diameter less than 1 micron
- (d) These are coarse particles that penetrate directly through the lungs into the bloodstream

63. Which one of the following heat transfer mechanism does NOT require a medium ?

- (a) Conduction
- (b) Convection
- (c) Radiation
- (d) Collision

64. Which one of the following statements about the solstices, an event that occurs when the Sun appears to reach most northerly or southerly, is correct ?

- (a) The winter solstice takes place on June 21 in both the northern and southern hemispheres
- (b) The winter solstice takes place on December 21 in both the northern and southern hemispheres

(c) The summer solstice occurs in northern hemisphere on June 21 and on December 21 in southern hemisphere

(d) The summer solstice occurs in northern hemisphere on December 21 and on June 21 in southern hemisphere

65. Which one among the following does NOT have any linkage with the phenomenon of electromagnetic induction ?

(a) Electric transformer

(b) Induction cooker

(c) Galvanometer

(d) Electron microscope

66. Which one among the following statements about matter is NOT correct ?

(a) On increasing the temperature of solids, the kinetic energy of particles increases

(b) The maximum temperature at which a solid melts to become a liquid at atmospheric pressure is called its melting point

(c) Particles of steam have more energy than water at 100°C

(d) Direct change of gas to solid is called deposition

Which one among the following elements is used in the treatment of cancer?

- (a) Uranium
- (b) Cobalt
- (c) Iodine
- (d) Fluorine

68. Water is a good solvent for dissolving ionic compounds because

- (a) It has a high specific heat
- (b) It has no colour
- (c) It has a high dipole moment
- (d) It has a high boiling point

69. Which among the following is correct with respect to bond formation in an ethyne molecule?

- (a) Carbon-Carbon single bond
- (b) Carbon-Carbon double bond
- (c) Carbon-Carbon triple bond
- (d) Carbon-Hydrogen double bond

70. Which among the following are the main ingredients for manufacturing of glass?

- (a) Silica, sodium carbonate, borax, alumina and cullets
- (b) Iron oxide, lead, sodium bicarbonate, alumina and cullets

(c) Magnesium carbonate, alumina, silica and cullets

(d) Iron oxide, sodium, alumina, silica and cullets

71. Which one among the following statements with respect to the atomic number of an atom is correct?

- (a) The number of neutrons is same as atomic number
- (b) The sum of electrons and neutrons is same as atomic number
- (c) The number of protons is same as atomic number
- (d) The sum of protons and neutrons is same as atomic number

72. Which one among the following is an example of endothermic process?

- (a) Combustion of carbon
- (b) Mixing acid and alkali
- (c) Photosynthesis
- (d) Respiration

73. Which one among the following is used in the manufacture of ultra-violet protective glasses?

- (a) Aluminium oxide
- (b) Tungsten oxide
- (c) Molybdenum oxide
- (d) Cerium oxide

74. Match List I with List II and select the correct answer using the code given below the Lists :

List I (Pigment in paint)	List II (Example)
A. Natural pigment	1. Chalk
B. Synthetic pigment	2. White lead
C. Reactive pigment	3. Red lead
D. Inert pigment	4. Titanium dioxide

Code :

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

75. Match List I with List II and select the correct answer using the code given below the Lists :

List I (Element)	List II (Unpaired electron)
A. Boron	1. Zero
B. Nitrogen	2. Two
C. Oxygen	3. One
D. Neon	4. Three

Code :

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

76. The remainder, when $1 + (1 \times 2) + (1 \times 2 \times 3) + \dots + (1 \times 2 \times 3 \times \dots \times 500)$ is divided by 8, is

(a) 1

(b) 2

(c) 3

(d) 4

77. The angle (in degrees) made by a sector having area one-sixth of the area of a semicircle is

(a) 15°

(b) 30°

(c) 45°

(d) 60°

78. Which one of the following is the average of first five multiples of each of the numbers from 11, 12, 13, ..., 20 ?

(a) 40.5

(b) 42.5

(c) 44.5

(d) 46.5

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

1. The average of four numbers 10, 15, 20 and 25 is 17.5
2. If a , b and c are three different natural numbers such that $a + b + c = abc$, then the average of a , b and c is 3

Select the answer using the code given below :

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

80. The ratio of present ages (in years) of X to Y is equal to the ratio of present ages (in years) of Y to Z . If the present age of Y is 15 years, then which of the following can be the sum of the ages (in years) of X , Y and Z ?

- (a) 35
- (b) 40
- (c) 49
- (d) 55

81. If $x + \frac{1}{x} = 2$, then which one of the following is the value of $x^{32} + \frac{1}{x^{32}}$?

- (a) -1
- (b) 0
- (c) 1
- (d) 2

82. A shopkeeper sold a product at 30% loss. Had his selling price been ₹.150 more, he would have made a profit of 10%. What was the cost price ?

- (a) ₹375
- (b) ₹400
- (c) ₹425
- (d) ₹450

83. A , B and C can finish a work in 20, 25 and 30 days, respectively. They start working together but B quits after working for 3 days. In how many days from the start shall the work be completed ?

- (a) $9\frac{8}{15}$ days
- (b) $10\frac{1}{15}$ days
- (c) $10\frac{14}{25}$ days
- (d) $11\frac{1}{10}$ days

84. Two taps A and B can fill a tank with water in 20 minutes and 15 minutes, respectively. A third tap C can empty the full tank in 6 minutes. After the taps A and B fill the tank for 5 minutes, the tap C is opened to empty while A and B continue to fill it. In how many minutes after the start shall the tank get empty ?

- (a) $10\frac{1}{3}$ minutes
- (b) $10\frac{2}{5}$ minutes
- (c) $10\frac{4}{5}$ minutes
- (d) $11\frac{2}{3}$ minutes

85. A and B start at the same time to reach the same destination. B travelled at $\frac{5}{7}$ of A 's speed and reached the destination 1 hour 20 minutes after A . What was the time taken by B to reach the destination?
- (a) 4 hours 40 minutes
(b) 4 hours 55 minutes
(c) 5 hours 5 minutes
(d) 5 hours 15 minutes
86. There was a hike in petrol price by 12%. By how much percentage should a person decrease his petrol consumption such that there is no change in his expenditure on petrol?
- (a) 8.6%
(b) 9.8%
(c) 10.7%
(d) 12%
87. If $19a + 19b + 19c = 437$, then what is the mean of a , b and c ?
- (a) 6.33
(b) 7.66
(c) 9.33
(d) 11.55
88. Out of the six digits 1, 2, 3, 4, 5 and 6; how many two digit numbers can be formed without repetition of digits?
- (a) 6
(b) 15
(c) 30
(d) 40
89. A train travelling at a speed of 60 km/hr crosses a platform in 20 seconds. The same train crosses a person who is walking at a speed of 6 km/hr in the same direction as that of the train in 12 seconds. What is the length of the train and that of the platform, respectively?
- (a) 160 m and 153.33 m
(b) 170 m and 166.66 m
(c) 180 m and 153.33 m
(d) 180 m and 170 m
90. In a partnership firm, A invests $\frac{1}{6}$ th of the total investment for $\frac{1}{6}$ th of the tenure. B invests $\frac{1}{3}$ rd of the total investment for $\frac{1}{3}$ rd of the tenure while C invests the remaining part for the full duration. Out of total profit of ₹46,00,000, what shall be C 's share?
- (a) ₹30,00,000
(b) ₹32,00,000
(c) ₹34,00,000
(d) ₹36,00,000

91. The sum of the ages of A and B (in years) is 22. The product of their ages two years back was 77. Which one of the following is the value of the difference of their current ages?

(a) 2

(b) 3

(c) 4

(d) 5

92. A shopkeeper sells two items, A and B . Item B 's cost price is twice as that of item A . The shopkeeper sells item A at 10% profit and item B at 20% profit. Which one of the following is the value of net profit?

(a) 15%

(b) 13.33%

(c) 18%

(d) 16.66%

93. Out of a class of 100 students, 25 play at least cricket and football, 15 play at least cricket and hockey, 12 play at least football and hockey and 10 play all the three sports. The number of students playing cricket, football and hockey are 50, 37 and 22, respectively. The number of students who do NOT play any of the three sports is

(a) 33

(b) 23

(c) 27

(d) 30

94. A group of five people consisting of a couple are to be seated on a round table for a meeting. What is the total number of ways in which the seating arrangement can be made so that the couple do NOT sit next to each other?

(a) 24

(b) 18

(c) 12

(d) 6

$$\frac{5!}{5} = 4! = 24$$

95. A fair coin is tossed three times and the outcomes are noted. What is the probability of getting exactly two heads?

(a) $\frac{2}{3}$

(b) $\frac{1}{2}$

(c) $\frac{5}{8}$

(d) $\frac{3}{8}$

96. Which of the following statements with regard to the outcomes of the talks between the Prime Minister of India and the President of UAE held in February, 2024 is/are correct ?

1. Both countries signed an agreement on inter-linking of domestic debit/credit cards
2. An MoU was signed on cooperation in digital infrastructure projects
3. Both countries agreed that a Bilateral Investment Treaty shall be signed in the next meeting at the ministerial level

Select the answer using the code given below :

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

97. Which of the following is NOT one of the pillars of India's 'Foreign Trade Policy-2023' ?

- (a) Enlarging MFN (Most Favored Nations)
- (b) Export promotion through collaboration
- (c) Ease of doing business
- (d) Emerging areas - streamlining SCOMET policy

98. Which of the following statements about 'Vibrant Village Programme' of the Government of India is/are correct ?

1. It aims at comprehensive development of the identified villages
2. Fairs, festivals, sports meet etc. are organized under this programme

Select the answer using the code given below :

- (a) 1 only
- (b) 2 only
- (c) ☒ Both 1 and 2
- (d) Neither 1 nor 2

99. Which of the following countries chaired the 43rd ASEAN SUMMIT ?

- (a) Thailand
- (b) ☒ Philippines
- (c) Indonesia
- (d) Cambodia

100. Which one among the following Indian PSUs has been declared as the winner at the Brandon Hall Group's Excellence in Technology Award-2023 ?

- (a) NTPC
- (b) BHEL
- (c) Balmer Lawrie
- (d) HPCL

101. Which of the following two organizations are parts of TIWB (Tax Inspectors Without Borders) ?
- United Nations Development Programme (UNDP) and Association of Southeast Asian Nations (ASEAN)
 - Organization for Economic Cooperation and Development (OECD) and ASEAN
 - UNDP and Organization for Economic Cooperation and Development (OECD)
 - International Labour Organization (ILO) and ASEAN
102. Which of the following countries does NOT share boundary with Ukraine ?
- Romania
 - Moldova
 - Poland
 - Lithuania
103. JAYWAN is the domestic Debit Card of which of the following countries ?
- UAE
 - Egypt
 - Saudi Arabia
 - ~~Nepal~~
104. Who, amongst the following, has won International Emmy Award-2023 for 'Best Actor' ?
- Jim Sarbh
 - ~~Shefali Shah~~
 - Vir Das
 - Martin Freeman
105. Which of the following statements about CBAM (Carbon Border Adjustment Mechanisms) is/are correct ?
- These are an emerging set of trade policy tools to allow movement of carbon-intensive economic activity from a jurisdiction having less stringent climate policy to a jurisdiction having stringent climate policy
 - These are meant to increase the environmental effectiveness of climate policies
- Select the answer using the code given below :
- 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
106. Which of the following statements about the Nobel Peace Prize for 2023 is/are correct ?
- The 2023 Nobel Peace Prize was awarded to Narges Mohammadi
 - Narges Mohammadi was awarded the prize for her struggle to bring peace in Afghanistan and Iran
- Select the answer using the code given below :
- 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2

107. Which one among the following statements with regard to the United Nations Climate Change Conference (COP28) is NOT correct ?

(a) The 'Global Stocktake' is the central outcome of COP28

☒ (b) It recognized the need to limit global warming to 1.5°C

(c) It directed the developing countries to lead the transition away from fossil fuel

(d) It emphasized accelerated phase-down of coal-power

108. Which of the following statements with regard to the Anoop Barenwal v. Union of India (2023) case is/are correct ?

1. The case was heard by a Constitutional Bench

2. According to the judgment, the grounds for removal of Election Commissioners shall be the same as the Chief Justice of India

Select the answer using the code given below :

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

109. The National Council of Science Museums (NCSM), which is developing Science Centres/Museums/Innovation Hubs in India, works under

(a) the Ministry of Science and Technology

(b) the Ministry of Culture

(c) the Ministry of Education

(d) the Ministry of Earth Sciences

110. Which one among the following cities was included as the 'City of Music' in the year 2023 in the UNESCO's Creative Cities Network ?

☒ (a) Kozhikode

(b) Chennai

(c) Varanasi

(d) Gwalior

111. Consider the following statements :

1. The 15th Finance Commission used fiscal effort as a criterion for horizontal devolution unlike the 14th Finance Commission

2. Both the 14th and the 15th Finance Commission used pre-2011 demographic variables as a criteria for horizontal devolution

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

112. Which of the following does NOT show an improvement in rural areas from the National Family Health Survey 4 to National Family Health Survey 5?

- (a) ☒ Infant mortality rate
- (b) ☐ Obesity in women
- (c) ☐ Anaemia in children
- (d) ☐ Total fertility rate

113. Consider the following statements:

1. Burden of a tax on a commodity is independent of who (buyer or seller) it is explicitly imposed upon
2. Burden of a tax on a commodity depends on the slope of the demand and supply curves

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

114. In recent years, which one among the following is the source of demand in the Indian economy in descending order?

- (a) Private Consumption, Government Consumption, Net Exports, Gross Fixed Capital Formation
- (b) Government Consumption, Private Consumption, Net Exports, Gross Fixed Capital Formation

(c) Private Consumption, Gross Fixed Capital Formation, Government Consumption, Net Exports

(d) Government Consumption, Private Consumption, Gross Fixed Capital Formation, Net Exports

115. What is the percentage weightage assigned to Forest and Ecology in the devolution formula given by the Fifteenth Finance Commission of India for sharing of Union tax revenue with the States?

- (a) ☐ 10%
- (b) ☒ 15%
- (c) ☐ 7.5%
- (d) ☐ 2.5%

116. Consider the following statements regarding instruments of Monetary Policy:

1. The Central Bank can increase the money supply by increasing the bank rate
2. The Central Bank can increase the money supply by purchasing securities from the public
3. The Central Bank can decrease the money supply by increasing the cash reserve ratio

Which of the statements given above is/are correct?

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

117. Which of the following statements with regard to National Logistics Policy (NLP) is NOT correct ?

- (a) ~~NLP~~ was launched in 2022
- (b) NLP would improve the competitiveness of Indian goods
- (c) NLP would enhance economic growth and increase employment opportunities
- (d) NLP would provide an opportunity for deleveraging balance sheets and providing fiscal space for investment in new infrastructure assets

118. Consider the following statements regarding Public Goods and Externalities :

1. Non-rivalry and non-excludability are two characteristics of Public Goods
2. Market can provide the optimal amount of a good in the presence of externalities

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

119. Population of the year 2011 was first introduced in the tax devolution formula for sharing Union tax revenue with the States by

- (a) Thirteenth Finance Commission
- (b) Fifteenth Finance Commission
- (c) Fourteenth Finance Commission
- (d) ~~Twelfth~~ Finance Commission

120. Which of the following statements is NOT correct for Pradhan Mantri Mudra Yojana (PMMY) ?

- (a) It was launched in 2015
- (b) It grants loans of up to ₹15 lakhs for income generating manufacturing, trading and services sectors
- (c) ~~Under this scheme only the term loan requirements can be met and not the working capital requirements~~
- (d) There is no insistence on collateral for the sanction of loan

121. What were the main reforms undertaken under the New Economic Policy of the early 1990s ?

1. Trade liberalization
2. Public Sector Disinvestment
3. Poverty Alleviation
4. Rapid industrialization

Select the answer using the code given below :

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

122. Consider the following statements :

1. National Monetisation Pipeline estimates that for the period 2022-2025, the top three sectors in terms of monetization potential are roads, railways, and oil and gas pipelines
2. Under the National Monetisation Pipeline, the instruments to be used for asset monetization include Public-Private Partnership concessions and Infrastructure Investment Trusts

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

123. Retail core inflation is calculated excluding which of the following ?

1. Food and beverages
2. Fuel and light
3. Transport and communication
4. Clothing and Education

Select the answer using the code given below :

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

(c) 1, 2, 3 and 4

(d) 3 and 4 only

124. Which of the following is a part of the capital receipt of the Government of India ?

1. Disinvestment receipts
2. Interest receipts
3. Small savings
4. Net market borrowing

Select the answer using the code given below :

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

125. Arrange the following sources of revenue of the Central Government in ascending manner in terms of percentage contribution to the total revenues of the Central Government in 2023-24

- (a) Union Excise Duty, Custom, Corporation Tax, GST
- (b) Custom, Union Excise Duty, GST, Corporation Tax
- (c) Custom, Union Excise Duty, Corporation Tax, GST
- (d) Custom, GST, Union Excise Duty, Corporation Tax