

**Bihar Police  
SI**

**Previous Year Paper  
Mains 24 April 2022  
Shift 1**

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## 100 Questions

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**Que. 1** The apparent flattening of the sun at sunset and sunrise is due to the phenomenon of :

1. Refraction
2. Reflection
3. Diffraction
4. Polarization

Correct Option - 1

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**Que. 2** During World War I which country joined the Central Powers in 1915 against Britain?

1. France
2. Bulgaria
3. America
4. Germany

Correct Option - 2

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**Que. 3** Tehri Dam is situated at the confluence of rivers :

1. Bhagirathi and Bhilangna
2. Bhagirathi and Alaknanda
3. Alaknanda and Vanganga
4. Banas and Khari

Correct Option - 1

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**Que. 4** On increasing the temperature of a semiconductor, its resistivity :

1. Increases
2. Decreases
3. Remains constant
4. First increases, then decreases

Correct Option - 2

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**Que. 5** If in a code language BRANCH is written as EPDLFF then how will MASTER be written in that code language?

1. PCVVHT
2. PDVWHU
3. PXVQHO
4. PYVRHP

Correct Option - 4

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**Que. 6** All the faces of a 5 cm side cube is coloured and cut into pieces of small 1-1 cm cubes. How many cubes are there which have two planes coloured ?

1. 8
2. 24
3. 27

4. 36

Correct Option - 4

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**Que. 7** Which of the following number is the smallest ?

1.  $\frac{7}{11}$
2.  $\frac{3}{4}$
3.  $\frac{5}{7}$
4.  $\frac{4}{5}$

Correct Option - 1

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**Que. 8** Who was made the ruler of Mysore after the death of Tipu Sultan in 1799 A.D. ?

1. Basalat Khan
2. Pratap Singh I
3. Krishnaraja III
4. Nandraj

Correct Option - 3

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**Que. 9** The chemical name of quartz is -

1. Sodium Silicate
2. Sodium Oxide
3. Sodium Chloride
4. Sodium Phosphate

Correct Option - 1

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**Que. 10** Which schedule determines the number of members to be elected to the Rajya Sabha from each state?

1. First
2. Fourth
3. Fifth
4. Tenth

Correct Option - 2

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**Que. 11** The total number of factors of 540 is-

1. 24
2. 30
3. 48
4. 54

Correct Option - 1

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**Que. 12** In which year did the Jallianwala Bagh incident take place ?

1. 1908
2. 1909
3. 1919

4. 1935

Correct Option - 3

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**Que. 13** When did Bangladesh become an independent nation ?

1. 1970
2. 1972
3. 1975
4. 1971

Correct Option - 4

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**Que. 14** Which one of the following does not contain silver ?

1. Horn silver
2. Ruby silver
3. German silver
4. Lunar caustic

Correct Option - 3

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**Que. 15** Which one of the following enzymes is associated with digestion of starch in human body ?

1. Pepsin
2. Lipase
3. Amylase
4. Insulin

Correct Option - 3

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**Que. 16** Raj bought a shirt and saved Rs. 20 when a discount of 25% was given. What was the price of the shirt before the discount?

1. Rs. 75
2. Rs. 80
3. Rs. 90
4. Rs. 100

Correct Option - 2

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**Que. 17** Match the following

(1)	$\frac{\text{Side opposite to angle } \theta}{\text{Hypotenuse}}$	(A)	$\tan \theta$
(2)	$\frac{\text{Side adjacent to angle } \theta}{\text{Hypotenuse}}$	(B)	$\sin \theta$
(3)	$\frac{\text{Side opposite to angle } \theta}{\text{Side adjacent to angle } \theta}$	(C)	$\cos \theta$
		(D)	$\sec \theta$

1. (1) - (B), (2) - (D), (3) - (A)
2. (1) - (C), (2) - (B) (3) - (D)
3. (1) - (B), (2) - (C), (3) - (A)
4. (1) - (C), (2) - (B), (3) - (A)

Correct Option - 3

**Que. 18** Which of the following is a semi dwarf high yielding variety of wheat in our country ?

1. Vidya
2. Jaya
3. Champa
4. Lekha

Correct Option - 1

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**Que. 19** Integral Coach Factory is located at

1. Bangaluru
2. Kochi
3. Perambore
4. Mangaluru

Correct Option - 3

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**Que. 20** Which among the following Prime Ministers did not serve as a Chief Minister of a state ?

1. Charan Singh
2. P. V. Narshimha Rao
3. H. D. Deve Gowda
4. Chandra Shekhar

Correct Option - 4

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**Que. 21** Mixture of chloroxylenol and terpineol acts as -

1. Antiseptic
2. Antipyretic
3. Antibiotic
4. Analgesics

Correct Option - 1

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**Que. 22** The ratio of the father's age to the son's age is 3 : 1. The product of their ages is 147. The ratio of their ages after 5 year will be-

1. 13 : 6
2. 12 : 5
3. 14 : 6
4. 3 : 2

Correct Option - 1

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**Que. 23** Which bacterium converts milk into curd

1. Lactic acid bacteria
2. Acetic acid bacteria
3. Butyric acid bacteria
4. Citric acid bacteria

Correct Option - 1

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**Que. 24** Which of the following is a Genetically Modified Crop Plant?

1. Green Wheat
2. Yellow Mustard
3. Cherry Tomato
4. Golden Rice

Correct Option - 4

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**Que. 25** Samir said, "Sarika is the wife of the grandson of my mother". How Sarika is related to Samir ?

1. Daughter-in-law
2. Sister
3. Mother
4. Daughter

Correct Option - 1

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**Que. 26** In nuclear reactors, graphite is used as a/an-

1. Fuel
2. Lubricant
3. Moderator
4. Insulator

Correct Option - 3

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**Que. 27** The headquarter of Central Railway division is -

1. New Delhi
2. Kolkata
3. Mumbai CST
4. Jaipur

Correct Option - 3

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**Que. 28** What does iron deficiency lead to?

1. Beri-beri
2. Scurvy
3. Anaemia
4. Diabetes

Correct Option - 3

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**Que. 29** The Equator does not pass through which one of the following countries ?

1. Brazil
2. Somalia
3. India
4. Kenya

Correct Option - 3

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**Que. 30** The Bhakra Nangal dam is built on which river ?

1. Ravi
2. Sutlej

3. Chenab
4. Jhelum

Correct Option - 2

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**Que. 31** Jog waterfall is situated on

1. Mahanadi river
2. Narmada river
3. Tapi river
4. Sharavati river

Correct Option - 4

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**Que. 32** Jahanara's biography of Sheikh Muinuddin Chisti is-

1. Munis al Arwah
2. Tasawwuf
3. Kashf-ul-Mahjub
4. Qalandar

Correct Option - 1

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**Que. 33** When did Mahatma Gandhi withdraw the Non-cooperation Movement?

1. February 1922
2. March 1921
3. February 1921
4. March 1922

Correct Option - 1

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**Que. 34** Namdapha National Park is situated in-

1. Arunachal Pradesh
2. Mizoram
3. Manipur
4. Sikkim

Correct Option - 1

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**Que. 35** Which of the following acids is used for an etching glass ?

1.  $H_2SO_4$
2.  $HNO_3$
3.  $HCl$
4.  $HF$

Correct Option - 4

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**Que. 36** Which Constitutional Amendment Act made it obligatory for the President to give his assent to Constitutional Amendment Bill ?

1. 24<sup>th</sup>
2. 42<sup>nd</sup>
3. 44<sup>th</sup>

4. 48<sup>th</sup>

Correct Option - 1

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**Que. 37** Son river springs from -

1. Chhotanagpur plateau
2. Amarkantak
3. Janapao hills
4. Gurla Mandhata Peak

Correct Option - 2

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**Que. 38** An error of 2% in excess is made while measuring the side of a square. The percentage of error in the calculated area of the square is -

1. 2%
2. 4%
3. 4.4%
4. 4.04%

Correct Option - 4

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**Que. 39** Puga Valley is located in -

1. Ladakh
2. Sikkim
3. Arunachal Pradesh
4. Himachal Pradesh

Correct Option - 1

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**Que. 40** Which Janpad became the most powerful Mahajanpada between the Sixth and Fourth centuries BC ?

1. Koshala
2. Kashi
3. Panchala
4. Magadha

Correct Option - 4

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**Que. 41** 'Amlah' was the officer of \_\_\_\_\_ in Bengal.

1. Diwan
2. Jotedar
3. Kotwal
4. Zamindar

Correct Option - 4

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**Que. 42** Murrah is a breed of -

1. Cows
2. Buffaloes
3. Camels



4. Donkeys

Correct Option - 2

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**Que. 43** How many members were there in the Cabinet Mission which came to India in 1946 ?

1. 2
2. 3
3. 4
4. 5

Correct Option - 2

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**Que. 44** Which of the following was **not** a classification of land under Akbar ?

1. Polaj
2. Parauti
3. Banjar
4. Zariba

Correct Option - 4

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**Que. 45** Who was the 23<sup>rd</sup> Tirthankar of Jain religion ?

1. Rishabhdev
2. Neminath
3. Parshwanath
4. Mahaveer Swami

Correct Option - 3

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**Que. 46** Border Roads Organization (BRO) was established in -

1. 1950
2. 1960
3. 1970
4. 1948

Correct Option - 2

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**Que. 47** Ankleshwar is located in -

1. Madhya Pradesh
2. Gujarat
3. Assam
4. Rajasthan

Correct Option - 2

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**Que. 48** The last ruler of Awadh state was:

1. Wazid Ali Shah
2. Bahadur Shah
3. Masood Ali Shah
4. Nizam Shah

Correct Option - 1

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**Que. 49** The kinetic energy of a particle moving with velocity 'v' is 'K'. If the velocity is reduced to  $\frac{1}{3}$ rd of its initial value. Then kinetic energy becomes :

1. 9K
2.  $\frac{K}{9}$
3. 3K
4.  $\frac{K}{3}$

Correct Option - 2

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**Que. 50** The construction of steel plants at Bhilai, Durgapur and Rourkela took place in which five year plan?

1. First
2. Second
3. Third
4. Fourth

Correct Option - 2

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**Que. 51** Which of the following metals respond only to UV light to cause electron emission from its surface ?

1. Sodium
2. Potassium
3. Zinc
4. Caesium

Correct Option - 3

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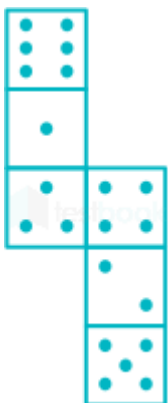
**Que. 52** A vehicle starts from point P and run 10 km towards north direction. Turns to its right and run 15 km. It then turns to right again and runs another 10 km to reach point Q. After taking the second turn, in which direction will the vehicle be run ?

1. East
2. West
3. North
4. South

Correct Option - 4

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**Que. 53** How many dots lie opposite to the face having three dots, when the given figure is folded to form a cube?



1. 5
2. 4
3. 2
4. 6

Correct Option - 4

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**Que. 54** Considering the identities, choose the correct option

- (1)  $\sin^2\theta + \cos^2\theta = 1$   
(2)  $\tan^2\theta + \sec^2\theta = 1$   
(3)  $\operatorname{cosec}^2\theta - \cot^2\theta = 1$
1. Only (1) and (2) are correct
  2. Only (1) and (3) are correct
  3. Only (2) and (3) are correct
  4. All (1), (2) and 3 are correct

Correct Option - 2

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**Que. 55** 'World Economic Outlook' is published by which one of the following organizations?

1. World Bank
2. World Trade Organization
3. International Monetary Fund
4. United Nations Development Programme

Correct Option - 3

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**Que. 56** An orchid growing as an epiphyte on a tree is an example of which interaction?

1. Mutualism
2. Commensalism
3. Amensalism
4. Parasitism

Correct Option - 2

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**Que. 57** What were the forest dwellers known as in ancient India ?

1. Mandasor
2. Malecchas
3. Nishadas
4. Panikers

Correct Option - 3

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**Que. 58** Debsa Pass is situated in which of the following states of India ?

1. Uttarakhand
2. Sikkim
3. Himachal Pradesh
4. Arunachal Pradesh

Correct Option - 3

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**Que. 59** The pollen grains of which of the following plants causes allergy in humans ?

1. Wheat
2. Parthenium
3. Rose
4. Jasmine

Correct Option - 2

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**Que. 60** Which one of the following is not a part of Xylem Tissue ?

1. Tracheids
2. Vessels
3. Sieve Tubes
4. Fibers

Correct Option - 3

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**Que. 61** Which of the following region in India represents a Biodiversity Hotspot?

1. Western Himalayas
2. Eastern Ghats
3. Central Plateau
4. Western Ghats

Correct Option - 4

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**Que. 62** Caprolactam is used for the manufacture of -

1. Nylon-6
2. Nylon-6, 10
3. Nylon-2-Nylon-6
4. Melamine

Correct Option - 1

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**Que. 63** Swaythiling Cup is associated with -

1. Rowing
2. Horse Racing
3. Golf
4. Table Tennis

Correct Option - 4

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**Que. 64** The excavation of Hastinapur took place between\_\_\_\_\_.

1. 1947-48 A.D.
2. 1950-52 A.D.
3. 1953-54 A.D.
4. 1955-56 A.D.

Correct Option - 2

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**Que. 65** By using which one of the following lens can the Myopia in human eye be corrected?

1. Convex lens

2. Concave lens
3. Cylindrical lens
4. Bifocal lens

Correct Option - 2

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**Que. 66** Vishal takes 15 seconds to stand up from the ground and 11 seconds to sit on ground. He has to continue this process for sometimes. Within 98 seconds, how many times must he have stood up, while initially he was sitting on the ground?

1. 3 times
2. 4 times
3. 5 times
4. 6 times

Correct Option - 2

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**Que. 67** Which of the following items have not been found from the Harappan graves ?

1. Pottery
2. Ornaments
3. Cotton clothes
4. Copper mirror

Correct Option - 3

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**Que. 68** Which of the following ranges is not the part of Western Ghats ?

1. Anai Mudi
2. Palani
3. Cardamom
4. Kamet

Correct Option - 4

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**Que. 69** In which year the central government merged Railway Budget into the General Budget ?

1. 2016
2. 2019
3. 2018
4. 2017

Correct Option - 4

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**Que. 70** Which suburban township was founded by Krishana Dev Raya near Vijaynagara after his mother's name ?

1. Hampi
2. Nagal
3. Berar
4. Nagalapuram

Correct Option - 4

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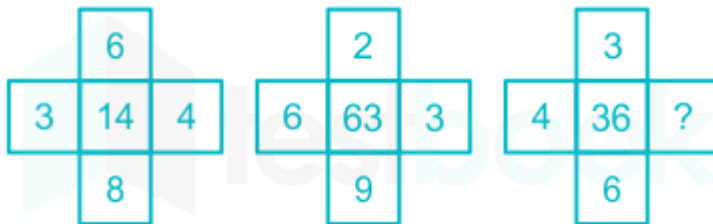
**Que. 71** A gas reacts with CaO but not with NaHCO<sub>3</sub>. The gas is-

1. CO<sub>2</sub>

2. Cl<sub>2</sub>
3. N<sub>2</sub>
4. O<sub>2</sub>

Correct Option - 1

**Que. 72** Find the missing number -



1. 6
2. 8
3. 9
4. 12

Correct Option - 2

**Que. 73** In a certain code, BRAIN is written as \* % ÷ # x and TIER is written as \$ # + % then how is TRAIN written in that code?

1. \$ ÷ % x #
2. \$ ÷ % + #
3. \$ % ÷ × #
4. \$ % ÷ # ×

Correct Option - 4

**Que. 74** The procedure for removing the Comptroller and Auditor General of India from his post is similar to -

1. Advocate General of State
2. Attorney General of India
3. Judges of the Supreme Court
4. Speaker of Lok Sabha

Correct Option - 3

**Que. 75** Term 'Sericulture' is associated with -

1. Lac
2. Forest
3. Minerals
4. Silk

Correct Option - 4

**Que. 76** Which of the following is the world's most noxious aquatic weed?

1. Elchhornia
2. Pistia
3. Azolla
4. Salvinia

Correct Option - 1

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**Que. 77** Which one of the following countries is not a member of SAARC ?

1. Bhutan
2. Afghanistan
3. Iran
4. Maldives

Correct Option - 3

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**Que. 78** During the reign of which Mughal emperor was Chahar Taslim and Zaminbos introduced in the Mughal Court ?

1. Akbar
2. Jahangir
3. Shah Jahan
4. Aurangzeb

Correct Option - 3

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**Que. 79** Which language was used to preach Buddhism ?

1. Pali
2. Prakrit
3. Apabhhransh
4. Sanskrit

Correct Option - 1

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**Que. 80** What fraction of a day is 14 hours ?

1.  $\frac{2}{3}$
2.  $\frac{7}{12}$
3.  $\frac{14}{20}$
4.  $\frac{5}{12}$

Correct Option - 2

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**Que. 81** Paramagnetic substances are:

1. Weakly repelled to a magnet.
2. Strongly repelled to a magnet.
3. Strongly attracted to a magnet.
4. Weakly attracted to a magnet.

Correct Option - 4

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**Que. 82** On top of which Mauryan Pillar is the statue of large elephant installed?

1. Sarnath Pillar
2. Lauriya Nandangarh Pilla
3. Sankisa Pillar
4. Rampurva Pillar

Correct Option - 3

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**Que. 83** Who is the author of 'Silent Spring', a supporting book in spreading awareness about the environment protection?

1. Charles Darwin
2. Rachel Carson
3. Edward Wilson
4. Ralph Emerson

Correct Option - 2

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**Que. 84** The remainder when  $7^7$  is divided by 4 is -

1. 1
2. 2
3. 3
4. 0

Correct Option - 3

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**Que. 85** Tilaiya Dam has been constructed on river \_\_\_\_\_.

1. Barakar
2. Konar
3. Chambal
4. Banas

Correct Option - 1

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**Que. 86** Which Act ended the trade monopoly of East India Company in India?

1. Regulating Act of 1777 A.D.
2. Pitts India Act of 1784 A.D.
3. Charter Act of 1813 A.D.
4. Charter Act of 1833 A.D.

Correct Option - 3

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**Que. 87** What should come next term in the following number series?

718532694, 18532694, 1853269, 853269, ?

1. 53269
2. 85326
3. 5326
4. 18532

Correct Option - 2

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**Que. 88** Koderma is known for the mining of \_\_\_\_\_.

1. Limestone
2. Marble
3. Mica
4. Copper



Correct Option - 3

Que. 89

	List I		List II
	<b>Constitutional Amendments</b>		<b>Provisions</b>
(a)	101	(i)	Removed the provision of reserved seats for Anglo Indian community in Lok Sabha.
(b)	102	(ii)	A maximum 10% reservation for economically weaker section
(c)	103	(iii)	GST was introduced
(d)	104	(iv)	Constitutional status to National Commission for Backward Class

Select the correct code:

1. (a) - (i), (b) - (iii), (c) - (ii), (d) - (iv)
2. (a) - (iii), (b) - (iv), (c) - (ii), (d) - (i)
3. (a) - (i), (b) - (iv), (c) - (iii), (d) - (ii)
4. (a) - (ii), (b) - (iii), (c) - (i), (d) - (iv)

Correct Option - 2

Que. 90 Which of the following statements is incorrect for alternating current?

1. It can be transmitted over long distances.
2. Its production is cheaper.
3. It has a constant value.
4. Its voltage can be easily changed.

Correct Option - 3

Que. 91 A shopkeeper has a sale of Rs. 6,435, Rs. 6,855, Rs. 7,230, Rs. 6,927 and Rs. 6,562 for five consecutive months. How much sale (in Rs.) must it make in the sixth month so that it gets an average sale of Rs. 6,500 ?

1. 4,890
2. 4,900
3. 4,991
4. 5,004

Correct Option - 3

Que. 92 Who is the author of Mahatma Gandhi's biography ?

1. D. G. Tendulkar
2. Krishna Pillai
3. J. M. Sengupta
4. C. R. Das

Correct Option - 1

**Que. 93** Regur Soils are also known as -

1. Black soils
2. Red soils
3. Alluvial soils
4. Laterite soils

Correct Option - 1

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**Que. 94** Nameri Tiger Reserve is situated in which one of the following state of India ?

1. Assam
2. Odisha
3. Karnataka
4. Chhattishgarh

Correct Option - 1

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**Que. 95** Arrange the following words in a logical order.

1. Hospital
  2. Treatment
  3. Admission
  4. Disease
  5. Diagnosis
1. 4, 1, 3, 5, 2
  2. 4, 1, 3, 2, 5
  3. 1, 3, 4, 5, 2
  4. 4, 1, 5, 3, 2

Correct Option - 1

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**Que. 96** The largest fresh water lake in India

1. Dal
2. Wular
3. Nainital
4. Bhimtal

Correct Option - 2

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**Que. 97** If a soft stemmed plant is cut horizontally near the base of its stem with a sharp blade on early morning of a humid day, drops of solution ooze through cut stem. This is due to -

1. guttation
2. bleeding
3. Transpiration pull
4. root pressure

Correct Option - 4

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**Que. 98** During the sultanate period Diwan-i-arz was the department of \_\_\_\_\_.

1. revenue
2. military
3. administration

4. law

Correct Option - 2

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**Que. 99** The Pitti Island Bird Sanctuary is located in -

1. Andman
2. Nicobar
3. Coromandel coast region
4. Lakshdweep

Correct Option - 4

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**Que. 100** The leader of the opposition party in the Lok Sabha should at least have \_\_\_\_\_ seats of the total strength of the house.

1.  $\frac{1}{4}$
2.  $\frac{1}{6}$
3.  $\frac{1}{8}$
4.  $\frac{1}{10}$

Correct Option - 4