

HIGH SCHOOL LEVEL 2023

SOCIAL SCIENCE

1. Who was the military commander of Marathas during the third battle of Panipat?
Ans. Sadashivrao Bhau
2. During the Indus Valley Civilization, where was the port?
Ans. Lothal, Gujarat
3. Who was the leader of the Bolsheviks during the Russian Revolution of 1917?
 - a. Vladimir Lenin
 - b. Joseph Stalin
 - c. Leon Trotsky
 - d. Mikhail GorbachevAns. Vladimir Lenin
4. Which of the following ocean currents has a significant impact on the climate of the west coast of South America?
 - a. Gulf Stream
 - b. Humboldt Current
 - c. Labrador Current
 - d. Kuroshio CurrentAns. Humboldt Current
5. What is the concept of the “Overton window” in political theory?
 - a. Political spectrum
 - b. Public opinion range
 - c. Media influence
 - d. Policy acceptability boundariesAns. Policy acceptability boundaries
6. In game theory, what is a “Nash equilibrium”?
 - a. A situation where everyone loses
 - b. A stable state where no player has an incentive to change strategy
 - c. The point of maximum utility

d. A situation of perfect competition

Ans. A stable state where no player has an incentive to change strategy

7. The Greenwich Mean Time (GMT) is measured from which location?

- a. Paris
- b. New York
- c. London
- d. Tokyo

Ans. London

8. Which of the following is a landform created by glacial erosion?

- a. Moraine
- b. Drumlin
- c. Meander
- d. Delta

Ans. Drumlin

9. The treaty of Versailles, which ended World War 1, was signed in which year?

- a. 1918
- b. 1919
- c. 1920
- d. 1921

Ans. 1919

10. Who was the architect of Persepolis, the ceremonial capital of the Achaemenid Empire?

- a. Darius 1
- b. Cyrus the Great
- c. Xerxes 1
- d. Artaxerxes 1

Ans. Darius 1

11. What is the term for a government system where power is concentrated in the hands of one individual or a small group?

Ans. Autocracy

12. Who is considered the father of modern political science?

Ans. Machiavelli

13. What is the term for the process by which citizens grant authority to their government through voting?

- a. Representation
- b. Suffrage
- c. Ratification
- d. Mandate

Ans. Suffrage

14. In international relations, what does “UNSC” stand for?

Ans. United Nations Security Council

15. According to the law of demand, what is the relationship between price and quantity demanded?

Ans. Inversely proportional

16. Which economic concept is defined as the maximum quantity of a good that can be produced of a good that can be produced with given resources and technology?

- a. Opportunity cost
- b. Marginal utility
- c. Production possibility frontier
- d. Demand curve

Ans. Production possibility frontier

17. What was the policy of Portuguese governor Francisco de Almeida ?

Ans. Blue Water Policy (Indian Ocean)

18. Where did the Dutch establish their first factory in India?

Ans. Masulipatnam, Andhra Pradesh

19. Who was the Wazir of Mughal Court between 1722-1724AD?

Ans. Nizam-ul-Mulk Asaf Jah

20. Who won the “ Third Carnatic War” (1756-1763)?

Ans. The English (British)

SCIENCE

1. Which of the following is not the mathematical expressions of Ohm's law?

- a. $V=IR$
- b. $P=RI^2$ (square of I)
- c. $R=V/I$
- d. None of this

Ans. None of this

2. Which of the following is the phenomena of Photoelectric effect?

- a. The change in frequency of a wave due to Doppler effect
- b. The reflection of light from a smooth surface and bending of light waves around obstacles
- c. The emission of electrons from a metal surface when exposed to light
- d. All of the above

Ans. All of the above

3. What is the common name for Ethanoic acid?

- a. Acetic acid
- b. Formic acid
- c. Citric acid
- d. Butanoic acid

Ans. Acetic acid

4. What is the oxidation state of oxygen in hydrogen peroxide(H_2O_2)?

- a. +1
- b. -1
- c. 0
- d. -2

Ans. -1

5. Which law states that the total pressure exerted by a mixture of gases is equal to the sum of the partial pressures of individual gases?

- a. Boyle's law
- b. Charle's law
- c. Dalton's law
- d. Avogadro's law

Ans. Dalton's Law

6. Which organelle is responsible for cellular respiration in eukaryotic cells?

- a. Golgi apparatus
- b. Mitochondria
- c. Endoplasmic reticulum
- d. Nucleus

Ans. Mitochondria

7. What is the function of haemoglobin in human blood?

- a. Transport of oxygen
- b. Clotting of blood
- c. Digestion of nutrients
- d. Immune response

Ans. Transport of oxygen

8. Which of the following is the function of circulatory system?

- a. Filtration of blood
- b. Transportation of oxygen
- c. Digestion of food
- d. Production of hormones

Ans. Transportation of oxygen

9. What is the role of DNA polymerase in DNA replication?

- a. Unzips the DNA double helix
- b. Synthesis new DNA strands
- c. Repairs damaged DNA
- d. Transcribes RNA from DNA

Ans. Synthesis new DNA strands

10. In the process of photosynthesis, where did the light – dependent reaction take place?

- a. Chloroplast stroma
- b. Chloroplast thylakoid membrane
- c. Mitochondria
- d. Nucleus

Ans. Chloroplast thylakoid membrane

11. In electromagnetic waves, which type of wave has the shortest wavelength?

Ans. X-rays

12. What is the law of conservation of energy?

Ans. Energy cannot be created or destroyed, only converted from one form to another

13. According to Newton's second law of motion, the force acting on an object is equal to

Ans. The product of its mass and acceleration

14. What is the SI unit of electric charge?

Ans. Coulomb

15. What is the pH of a solution with a hydrogen ion concentration of $1 \times 10^{-9} \text{M}$?

Ans. 9

16. Which subatomic particle has a mass of approximately 1 atomic mass unit?

Ans. Proton

17. In the periodic table, which group do noble gases belong to?

Ans. Group 18

18. What is the function of the nucleus in a cell?

Ans. Controlling cell activities

19. Which organelle is responsible for photosynthesis in plant cells?

Ans. Chloroplast

20. What is the speed of light in vacuum?

Ans. 300,000 km/s

REASONING AND NUMERICAL ABILITY

1. If all cats can jump, and Fluffy is a cat, what can you conclude?
 - a. Fluffy can jump
 - b. Fluffy cannot jump
 - c. Some cats can jump
 - d. Dogs can jump

Ans. Fluffy can jump

2. If A=1, B=2, C=3, and so on, what is the value of the word CAT?
 - a. 24
 - b. 29
 - c. 18
 - d. 20

Ans. 29(C=3, A=1, T=20)

3. Complete the series: 2, 5, 10, 17,?
 - a. 24
 - b. 26
 - c. 28
 - d. 32

Ans. 24(add consecutive prime numbers)

4. If SQUARE is coded as XSQZVG, how is TRIANGLE coded?
 - a. QXSZVGZ
 - b. QXSZVZG
 - c. QSZXVZG
 - d. QSZXVGZ

Ans. QSZXVGZ

5. Arrange the following words in alphabetical order: Elephant, Dog, Apple, Banana, Cat
 - a. Apple, Banana, Cat, Dog, Elephant
 - b. Banana, Apple, Cat, Dog, Elephant
 - c. Apple, Banana, Cat, Elephant, Dog
 - d. Banana, Apple, Cat, Elephant, Dog

Ans. Banana, Apple, Cat, Dog, Elephant

6. What is the value of $\lim_{x \rightarrow 0} \frac{\sin x}{x}$?

- a. 1
- b. 0
- c. $\frac{\pi}{2}$
- d. $\frac{1}{\pi}$

Ans. 1

7. What is the solution to the quadratic equation $x^2 - 4x + 3 = 0$?

- a. $x=1, 3$
- b. $x=1, -3$
- c. $x=3, -1$
- d. $x=-1, -3$

Ans. $x=1, 3$

8. If $y = 2x^3 - 5x^2 + 3x - 1$, what is the derivative of y with respect to x ?

- a. $6x^2 - 10x + 3$
- b. $6x^2 - 10x - 3$
- c. $2x^3 - 5x^2 + 3x - 1$
- d. $6x^2 + 10x + 3$

Ans. $6x^2 - 10x + 3$

9. What is the solution to the system of equations $3x - 2y = 7$ and $4x + y = 5$?

- a. $x=2, y=-3$
- b. $x=-1, y=2$
- c. $x=1, y=2$
- d. $x=-2, y=3$

Ans. $x = -1, y = 2$

10. If $\tan x = \frac{3}{4}$, what is $\sin x$?

- a. $\frac{3}{5}$
- b. $\frac{4}{5}$
- c. $\frac{1}{5}$
- d. $\frac{5}{4}$

Ans. $\frac{3}{5}$

11. In statistics, what does the standard deviation measure?
Ans. Dispersion or spread
12. In calculus, what does the definite integral represent geometrically?
Ans. Area under a curve
13. In linear algebra, what is a determinant?
Ans. A matrix property
14. What does the term “function” mean in mathematics?
Ans. A relation between two variables
15. In probability, what does the term “complement” refer to?
Ans. The event that does not occur
16. If CAT is coded as 3120, how is DOG coded?
Ans. 425
17. If all flowers are plants and some plants fade quickly, can it be concluded that some flowers fade quickly?
Ans. Yes
18. What comes next in the series: 2, 5, 10, 17,?
Ans. 26
19. If 3:5 is the ratio of the length to the breadth of a rectangle, and the perimeter is 32cm, what is the length of the rectangle?
Ans. 12cm
20. If the pattern is 2,5,10,17, what comes next?
Ans. 24

CURRENT AFFAIRS

1. Which Indian airline in December 2023 achieved the historic milestone of becoming the first in the country to carry 100 million passengers in a single calendar year?
- Spice Jet
 - Vistara
 - Air India
 - Indigo
- Ans. Indigo

2. Saurauia Punduana plant, a critically endangered species, has been recorded for the first time in which Indian state?

- a. Goa
- b. Manipur
- c. West Bengal
- d. Karnataka

Ans. Manipur

3. PM JANMAN scheme, which was launched recently, is associated with which category of people?

- a. MSME Owners
- b. PVTGs
- c. Farmers
- d. NRIs

Ans. PVTGs

4. Which institution launched the Periodic Labour Force Survey(PLFS)?

- a. NITI Aayog
- b. ILO
- c. NSSO
- d. DPIIT

Ans. NSSO

5. Which country reached an agreement with India and the Paris Club group of creditors on a debt treatment plan?

- a. Afghanistan
- b. Israel
- c. Sri Lanka
- d. Syria

Ans. Sri Lanka

6. Angadvir Singh Bajwa and Ganemat Sekhon, who were seen in the news, is associated with which sports?

- a. Shooting
- b. Cricket
- c. Football
- d. Chess

Ans. Shooting

7. Subansiri Lower Hydroelectric Project(SLHEP), which is the biggest hydroelectric project undertaken in India so far is in which state?

- a. Meghalaya
- b. Sikkim
- c. Uttarakhand
- d. Arunachal Pradesh

Ans . Arunachal Pradesh

8. As per the report by the Environment ministry and UNDP, India has phased out which ozone depleting chemical?

- a. HCFC 141b
- b. CC13F
- c. Halon 1211
- d. CFC-112

Ans. HCFC 141b

9. Who won the Nobel Prize in Chemistry in 2023?

- a. Mounji G. Bawendi
- b. Louis E. Brus
- c. Alexei I. Ekimov
- d. All of them

Ans. All of them

10. When did Afghanistan had recent Earthquake?

- a. Oct.6 2023
- b. Oct. 7 2023
- c. Oct.8 2023
- d. Oct. 9. 2023

Ans. Oct. 7 2023

11. Name of the Cyclone in the Bay of Bengal in Dec 3, 2023?

Ans. Michaung

12. Which technology has been introduced by Indian Railways to prevent accidents caused by elephants on railways tracks?

Ans. Gajraj Suraksha

13. Where is the COP-28 Summit being organized?

Ans. Dubai

14. Where was the India International Trade Fair Organised?
Ans. New Delhi
15. Where did P.M. Modi inaugurate the 10,000th Jan Aushadhi Kendra?
Ans. AIIMS, Deoghar
16. In which city will the Expo 2030 World Fair be organized?
Ans. Riyadh
17. The Union Cabinet has extended the 'Garib Kalyan Food Programme' for how many years?
Ans. 5 years
18. India's first 'Telecom Center of Excellence' will be launched in which state?
Ans. Uttar Pradesh
19. When will the 'Maryada Purushotam Radgupati Sri Ram Mandir' in Ayodhya be inaugurated?
Ans. 22 January
20. Where is the 40th Coast Guard Commanders Conference being held?
Ans. New Delhi

SPORTS & MISCELLANEOUS

1. Which state won the title of Senior Men's National Hockey Championship?
a. Haryana
b. Punjab
c. Manipur
d. Mumbai
Ans. Punjab
2. Who among the following has won the title of 75th Inter State – Inter Zonal Badminton Championship 2023 in men's category?
a. AAI
b. Indian Army
c. Gujarat
d. Assam
Ans. AAI

3. Which of the following countries has won the title of Under 19 Asia Cup 2023 held in Dubai?

- a. India
- b. Afghanistan
- c. Bangladesh
- d. Pakistan

Ans. Bangladesh

4. Who has secured the first position in the recently held Khelo India Para Games?

- a. Odisha
- b. Haryana
- c. Gujarat
- d. Maharashtra

Ans. Haryana

5. Who among the following has won the Thomas Cup 2023 title?

- a. Indonesia
- b. Brazil
- c. Japan
- d. India

Ans. India

6. Which racing driver has won the Hungarian Grand Prix 2023 title?

- a. Max Verstappen
- b. Sergio Perez
- c. Lewis Hamilton
- d. David Random

Ans. Max Verstappen

7. Who among the following has recently won the title of Vijay Hazare Trophy 2023?

- a. Uttar Pradesh
- b. Haryana
- c. Rajasthan
- d. Madhya Pradesh

Ans. Haryana

8. Which edition of Women's Premier League (WPL) was played in the year 2023?

- a. 1st
- b. 2nd
- c. 3rd
- d. 4th

Ans. 1st

9. Where was the Women's Premier League(WPL) 2023 organised?

- a. Gujara
- b. Karnataka
- c. Maharashtra
- d. Uttar Pradesh

Ans. Maharashtra

10. Which edition of IPL was organized in 2023?

- a. 15th
- b. 16th
- c. 17th
- d. 18th

Ans. 16th

11. Who has won the Indian Premier League (IPL) 2023 title?

Ans. Chennai Superking

12. Who was given the Player of the Series award in the 2023 ODI Cricket World Cup?

Ans. Virat Kohli

13. Who was awarded the Player of the Match award in the 2023 ODI Cricket World Cup Final?

Ans. Travis Head

14. Which state has organized the 'Khelo India University Games 2023'?

Ans. Uttar Pradesh

15. Which edition of 'Khelo India University Games 2023' is organized this year?

Ans. 3rd

16. In which of the following countries will the 20th Asian Games be organized?

Ans. Japan

17. In which country were the Summer Paralympics 2021 organised?

Ans. Japan

18. What is the mascot of Tokyo Paralympics 2021?

Ans. Somaiti

19. The 23rd Football World Cup will not be organized in which of the following countries?

Ans. Argentina

20. Where is the headquarters of 'Khelo India'?

Ans. New Delhi

ENTERTAINMENT

1. Who has won the 'Best actor' award at the International Indian Film Academy Awards 2023 (IIFA 2023)?

- a. Ranbir Kapoor
- b. Ajay Devgan
- c. Hrithik Roshan
- d. R. Madhavan

Ans. Hrithik Roshan

2. Who has won the 'Best Actress' award at the International Indian Film Academy Awards 2023 (IIFA 2023)?

- a. Alia Bhatt
- b. Kriti Sanon
- c. Anushka Sharma
- d. Kiara Advani

Ans. Alia Bhatt

3. Where is the IIFA Awards ceremony 2023 held?

- a. Manila (Philippines)
- b. Abu Dhabi (UAE)
- c. New Delhi (India)
- d. Hanoi (Vietnam)

Ans. Abu Dhabi (UAE)

4. Which edition of 'IIFA awards ceremony' is held in 2023?
- a. 20th
 - b. 25th
 - c. 24th
 - d. 23rd

Ans. 23rd

5. Who got the title 'Best Screenplay' in IIFA 2023?
- a. Bhramastra
 - b. Gangubai Kathiawadi
 - c. Pathaan
 - d. Fukrey 3

Ans. Gangubai Kathiawadi

6. Who got the title 'Best Lyrics' in IIFA 2023?
- a. Arijit Singh
 - b. Pritam
 - c. Amaal Malik
 - d. Amitabh Bhattacharya

Ans. Amitabh Bhattacharya

7. Who got the title 'Best Cinematography' in IIFA 2023?
- a. Bhramastra
 - b. Gangubai Kathiawadi
 - c. Pathaan
 - d. Fukrey 3

Ans. Gangubai Kathiawadi

8. Who got the title 'Best Music Direction' in IIFA 2023?

- a. Arijit Singh
- b. B. Praak
- c. Pritam
- d. Amaal Malik

Ans. Pritam

9. Who got the title 'Best Playback Singer(Male)' in IIFA 2023?

- a. B Praak
- b. Arijit Singh
- c. Amaal Malik
- d. Atif Aslam

Ans. Arijit Singh

10. Who got the title 'Best Playback Singer(Female)' in IIFA 2023?

- a. Neha Kakkar
- b. Shreya Ghoshal
- c. Sunidhi Chauhan
- d. Tulsi Kumar

Ans. Shreya Ghoshal

11. Who got the title 'Best Debut Actress' in IIFA 2023?

Ans. Khushali Kumar

12. Who got the outstanding achievement in Regional Cinema?

Ans. Riteish Deshmukh

13. Who got the title 'Best Original Story' in IIFA 2023?

Ans. Paevez Shaikh and Jasmeet Reen for (Darling)

14. Who got the title 'best adapted story' in IIFA 2023?

Ans. Amil Keen Khan and Abhishek Pathak for(Drishyam 2)

15. Who got the outstanding achievement in Indian Cinema?

Ans. Kamal Haasan

16. Who got the outstanding achievement for fashion in cinema?

Ans. Manish Malhotra

17. Who was the best supporting actor in IIFA 2023?

Ans. Anil Kapoor

18. Who was the best supporting actress in IIFA 2023?

Ans. Mouni Roy

19. Who was the best director in IIFA 2023?

Ans. R Madhavan

20. Which was the best film in the IIFA 2023?

Ans. Drishyam 2