# <u>CENTRE FOR EDUCATIONAL DEVELOPMENT & RESEARCH,</u> <u>PUNE, MAHARASHTRA</u>

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## Section A: General Knowledge

- 1. Who is the author of "Harry Potter" series?
  - a) J.K. Rowling
  - b) J.R.R. Tolkien
  - c) George R.R. Martin
  - d) C.S. Lewis
- OPMILIN & RESEARCH PUNK 2. Which planet is known as the Red Planet?
  - a) Venus
  - b) Mars
  - c) Jupiter
  - d) Saturn
- 3. What is the capital of Canada?
  - a) Toronto
  - b) Vancouver
  - c) Ottawa
  - d) Montreal
- 4. Who painted the Mona Lisa?
  - a) Vincent van Gogh
  - b) Pablo Picasso
  - c) Leonardo da Vinci
  - d) Michelangelo
- 5. Which is the largest ocean on Earth?
  - a) Atlantic Ocean
  - b) Indian Ocean
  - c) Arctic Ocean
  - d) Pacific Ocean
- 6. The Great Wall of China was built primarily to protect against invasions from which group?
  - a) Mongols
  - b) Huns
  - c) Persians
  - d) Romans
- 7. What is the hardest natural substance on Earth?
- a) Gold
- b) Iron
  - c) Diamond
  - d) Platinum
- 8. Who is the current Secretary-General of the United Nations (as of 2024)?
  - a) Kofi Annan
  - b) Ban Ki-moon
  - c) António Guterres
  - d) Boutros Boutros-Ghali
- 9. In which year did the Titanic sink?
  - a) 1910
  - b) 1912

- c) 1914
- d) 1916
- 10. What is the currency of Japan?
  - a) Yuan
  - b) Won
  - c) Yen
  - d) Ringgit
- 11. Which country is the largest by land area?
  - a) Canada
  - b) United States
  - c) Russia
  - d) China
- 12. The Eiffel Tower is located in which city?
  - a) Berlin
  - b) Paris
  - c) Rome
  - d) London
- .ea? phtshachuluk philippink 13. What is the smallest country in the world by land area?
  - a) Monaco
  - b) Vatican City
  - c) San Marino
  - d) Liechtenstein
- 14. Who wrote "To Kill a Mockingbird"?
  - a) Harper Lee
  - b) Mark Twain
  - c) Ernest Hemingway
  - d) John Steinbeck
- 15. The "Sphinx" is located in which country?
  - a) Greece
  - b) Egypt
  - c) Iraq
  - d) Turkey
- 16. Which element has the chemical symbol 'O'?
  - a) Gold
  - b) Oxygen
  - c) Osmium
  - d) Oganesson
- 17. What is the capital of Australia?
  - a) Sydney
- b) Melbourne
- c) Canberra
  - d) Brisbane
- 18. Who was the first man to walk on the moon?
  - a) Buzz Aldrin
  - b) Neil Armstrong
  - c) Michael Collins
  - d) Yuri Gagarin
- 19. What is the largest mammal in the world?
  - a) Elephant
  - b) Blue Whale

c) Hippopotamus d) Giraffe 20. Who invented the telephone? a) Alexander Graham Bell b) Thomas Edison c) Nikola Tesla d) Michael Faraday 21. What is the chemical formula for water? OPMILIN & RESERRCH PUNK a) H2O b) CO2 c) NaCl d) O2 22. What is the largest desert in the world? a) Sahara b) Arabian c) Gobi d) Antarctic 23. The currency "Euro" is used in which continent? a) Africa b) Asia c) Europe d) South America 24. Who wrote "Pride and Prejudice"? a) Jane Austen b) Charles Dickens c) William Shakespeare d) Emily Brontë 25. What is the longest river in the world? a) Nile b) Amazon c) Yangtze d) Mississippi 26. What is the largest island in the world? a) Greenland b) New Guinea c) Borneo d) Madagascar 27. Who discovered penicillin? a) Alexander Fleming b) Louis Pasteur c) Marie Curie d) Edward Jenner 28. Which planet is known for its rings? a) Neptune b) Jupiter c) Saturn d) Uranus 29. Who was the first President of the United States? a) Thomas Jefferson b) John Adams

- c) George Washington
- d) James Madison
- 30. In which year was the United Nations established?
  - a) 1945
  - b) 1950
  - c) 1948
  - d) 1939

# PMHH & RESEARCH, WHE Section B: Science and Technology

- 1. What does DNA stand for?
  - a) Deoxyribonucleic Acid
  - b) Deoxyribonuclear Acid
  - c) Deoxyribonuclease Acid
  - d) Deoxyribonitric Acid
- 2. What is the primary function of the mitochondria?
  - a) Photosynthesis
  - b) Energy production
  - c) Protein synthesis
  - d) Cellular division
- 3. Who developed the theory of relativity?
  - a) Isaac Newton
  - b) Albert Einstein
  - c) Niels Bohr
  - d) Galileo Galilei
- 4. What is the speed of light in a vacuum? a) 3.000 km/s b) 300,000 km/s

  - c) 30,000 km/s d) 300 km/s
- 5. What element is used in the filament of light bulbs?
  - a) Iron
  - b) Tungsten
  - c) Copper
  - d) Silver
- 6. What does "HTTP" stand for in a web address?
- a) HyperText Transfer Protocol
  - **b**) HyperText Transmission Protocol
  - c) HyperText Transfer Process
  - d) HyperText Transport Protocol
- 7. Who is known as the father of modern physics?
  - a) Isaac Newton
  - b) Albert Einstein
  - c) James Clerk Maxwell
  - d) Michael Faraday
- 8. What device is used to measure atmospheric pressure?
  - a) Thermometer
  - b) Barometer

- c) Altimeter
- d) Hygrometer
- 9. What is the chemical symbol for Gold?
  - a) Au
  - b) Ag
  - c) Pb
  - d) Fe
- 10. Who is the founder of Microsoft?
  - a) Steve Jobs
  - b) Bill Gates
  - c) Mark Zuckerberg
  - d) Elon Musk
- 11. What is the unit of electrical resistance?
  - a) Ampere
  - b) Volt
  - c) Ohm
  - d) Watt
- 12. What is the basic unit of life?
  - a) Atom
  - b) Molecule
  - c) Cell
  - d) Tissue
- 13. What is the most abundant gas in the Earth's atmosphere?

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- a) Oxygen
- b) Carbon Dioxide
- c) Nitrogen
- d) Argon
- 14. What is the main source of energy for the Earth's climate?
  - a) Moon
  - b) Wind
  - c) Sun
  - d) Ocean
- 15. What is the process by which plants make their food?
  - a) Respiration
  - b) Photosynthesis
  - c) Digestion
  - d) Fermentation
- 16. Who invented the light bulb?
  - a) Alexander Graham Bell
  - b) Thomas Edison
    - c) Nikola Tesla
    - d) Michael Faraday
- 17. What is the SI unit of force?
  - a) Newton
  - b) Joule
  - c) Watt
  - d) Pascal
- 18. Which planet is known as the "Morning Star"?
  - a) Venus
  - b) Mars

- c) Mercury
- d) Jupiter
- 19. What is the chemical symbol for Sodium?
  - a) Na
  - b) So
  - c) Sd
  - d) S
- 20. What technology is used to make phone calls over the Internet?
  - a) Bluetooth
  - b) VoIP
  - c) 4G
  - d) Wi-Fi
- 21. What is the process of cell division in somatic cells called?
  - a) Mitosis
  - b) Meiosis
  - c) Binary Fission
  - d) Fertilization
- 5LARCH, PUNK 22. What is the name of the first artificial satellite sent into space?
  - a) Apollo 11
  - b) Sputnik 1
  - c) Voyager 1
  - d) Hubble Space Telescope
- 23. What type of energy is stored in a battery?
  - a) Kinetic Energy
  - b) Potential Energy
  - c) Chemical Energy
  - d) Thermal Energy
- 24. Who is known for his work on the laws of motion?
  - a) Isaac Newton
  - b) Galileo Galilei
  - c) Johannes Kepler
  - d) Albert Einstein
- 25. What is the primary component of natural gas?
  - a) Ethane
  - b) Propane
  - c) Methane
  - d) Butane
- 26. What part of the atom has a positive charge?
  - a) Neutron
  - b) Electron
  - c) Proton
  - d) Nucleus
- 27. What is the term for a substance that speeds up a chemical reaction without being consumed?
  - a) Catalyst
  - b) Solvent
  - c) Reactant
  - d) Inhibitor
- 28. What is the primary function of white blood cells?
  - a) Oxygen Transport

- b) Blood Clotting
- c) Immune Defense
- d) Nutrient Transport
- 29. What is the force that attracts objects towards the center of the Earth?
  - a) Magnetism
  - b) Electromagnetism
  - c) Gravity
  - d) Friction
- 30. What is the name of the phenomenon where light bends as it passes through different Section C: Indian and World HELL ime Minister of India (as of 2024) mediums?
  - a) Reflection
  - b) Refraction
  - c) Diffraction
  - d) Absorption

- Who is the current Prime Minister of India (as of 2024)?
  a) Manmohan Singh

  - b) Narendra Modi
  - c) Rahul Gandhi
  - d) Amit Shah
- 2. What is the national currency of India
  - a) Rupee
  - b) Dollar
  - c) Euro
  - d) Yen
- 3. Who was the first President of India?
  - a) Dr. Rajendra Prasad
  - b) Dr. Sarvepalli Radhakrishnan
  - c) Jawaharlal Nehru
  - d) S. Radhakrishnan
- 4. In which year did India gain independence?
  - a) 1942
  - b) 1947
  - c) 1950
  - d) 1952
- Which is the largest state by area in India?
  - a) Maharashtra
  - b) Uttar Pradesh
  - c) Rajasthan
  - d) Madhya Pradesh
- 6. The Taj Mahal is located in which Indian city?
  - a) Delhi
  - b) Mumbai
  - c) Agra
  - d) Jaipur

- 7. Who is known as the "Father of the Nation" in India?
  - a) Jawaharlal Nehru
  - b) Subhas Chandra Bose
  - c) Mahatma Gandhi
  - d) Bhagat Singh
- 8. What is the official language of India?
  - a) Hindi
  - b) English
  - c) Both Hindi and English
  - d) Bengali
- 9. What is the capital city of India?
  - a) Mumbai
  - b) Bangalore
  - c) Delhi
  - d) Kolkata
- T & RESEARCH, WIE 10. Who is the author of the book "The Discovery of India"?
  - a) Jawaharlal Nehru
  - b) Mahatma Gandhi
  - c) S. Radhakrishnan
  - d) Rabindranath Tagore
- 11. Which Indian state is famous for its tea plantations?
  - a) Assam
  - b) Kerala
  - c) Punjab
  - d) West Bengal
- 12. Who was the first woman Prime Minister of India?
  - a) Indira Gandhi
  - b) Pratibha Patil
  - c) Sonia Gandhi
  - d) Mamata Banerjee
- 13. What is the highest civilian award in India?
  - a) Bharat Ratna
  - b) Padma Bhushan
  - c) Padma Shri
  - d) Jnanpith Award
- 14. The Indian national flag has how many stripes?
  - a) 2

Who was the first Indian to win a Nobel Prize?

- a) C.V. Raman
- b) Rabindranath Tagore
- c) Amartya Sen
- d) Venkatraman Ramakrishnan
- 16. Which Indian river is known as the "Ganges of the South"?
  - a) Godavari
  - b) Yamuna
  - c) Brahmaputra
  - d) Kaveri

- 17. Who wrote the national anthem of India, "Jana Gana Mana"?
  - a) Rabindranath Tagore
  - b) Bankim Chandra Chattopadhyay
  - c) Kavi Pradeep
  - d) Lata Mangeshkar
- 18. In which year was the Indian Constitution adopted?
  - a) 1949
  - b) 1950
  - c) 1952
  - d) 1947
- 19. What is the national sport of India?
  - a) Hockey
  - b) Cricket
  - c) Football
  - d) Kabaddi
- 20. Who was the last Governor-General of India?
  - a) Lord Mountbatten
  - b) Rajagopalachari
  - c) Lord Wavell
  - d) Lord Reading
- 21. Which Indian city is known as the "Silicon Valley of India"?

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- a) Chennai
- b) Hyderabad
- c) Bangalore
- d) Pune
- 22. Who was the founder of the Indian National Congress?
  - a) Allan Octavian Hume
  - b) Jawaharlal Nehru
  - c) Mahatma Gandhi
  - d) Subhas Chandra Bose
- 23. What is the name of the Indian Parliament's upper house?
  - a) Lok Sabha
  - b) Rajya Sabha
  - c) Vidhan Sabha
  - d) Raj Sabha
- 24. Who was the leader of the Khilafat Movement in India? a) Mahatma Gandhi
  - b) Muhammad Ali Jinnah
  - c) Shaukat Ali
  - d) Syed Ahmed Khan
- 25. Which Indian state is known for its backwaters and houseboats?
  - a) Tamil Nadu
  - b) Karnataka
  - c) Kerala
  - d) Andhra Pradesh
- 26. Who was the Chief Architect of the Indian Constitution?
  - a) B.R. Ambedkar
  - b) Jawaharlal Nehru
  - c) Sardar Patel
  - d) Rajendra Prasad

27. In which Indian state is the city of Varanasi located?

- a) Uttar Pradesh
- b) Bihar
- c) Madhya Pradesh
- d) Rajasthan
- 28. Which Indian festival is known as the "Festival of Lights"?
  - a) Diwali
  - b) Holi
  - c) Eid
  - d) Pongal
- RESERRCH, PUNK 29. The Indian Premier League (IPL) is related to which sport? a) Football
  - b) Basketball
  - c) Cricket
  - d) Hockey
- 30. Who is the first Indian astronaut to travel to space?
  - a) Rakesh Sharma
  - b) Kalpana Chawla
  - c) Sunita Williams
  - d) Vikram Sarabhai

**Section D: World Sports** 

- 1. Which country won the FIFA World Cup in 2018?
  - a) Germany
  - b) Brazil
  - c) France
  - d) Argentina
- 2. Who holds the record for the most home runs in Major League Baseball (as of 2024)? a) Babe Ruth
  - b) Hank Aaron
  - c) Barry Bonds
  - d) Alex Rodriguez
- 3. In which sport would you perform a slam dunk?
- a) Football
- b) Basketball

c) Tennis

- d) Volleyball
- 4. Who won the most recent Wimbledon Women's Singles title (as of 2024)? a) Serena Williams
  - b) Naomi Osaka
  - c) Ashleigh Barty
  - d) Emma Raducanu
- 5. Which country is known for hosting the Tour de France?
  - a) Spain
  - b) Italy

- c) France
- d) Belgium
- 6. Who is known as the "King of Clay" in tennis?
  - a) Roger Federer
  - b) Rafael Nadal
  - c) Novak Djokovic
  - d) Andy Murray
- 7. In which sport is the term "hole-in-one" used?
  - a) Golf
  - b) Cricket
  - c) Baseball
  - d) Tennis
- 8. Who won the gold medal in Men's 100m at the Tokyo 2020 Olympics?a) Usain Bolt
  - b) Justin Gatlin
  - c) Christian Coleman
  - d) Marcell Jacobs
- 9. What is the maximum score in a single game of ten-pin bowling?
  - a) 200
  - b) 250
  - c) 300
  - d) 350
- 10. In which country did the 2022 FIFA World Cup take place?
  - a) Qatar
  - b) Russia
  - c) Brazil
  - d) South Africa
- 11. Who is the all-time top scorer in the UEFA Champions League?
  - a) Lionel Messi
  - b) Cristiano Ronaldo
  - c) Raúl
  - d) Robert Lewandowski
- 12. Which sport is known as the "king of sports"?
  - a) Basketball
  - b) Cricke
  - c) Football
  - d) Rugby
- 13. What is the term for a score of three goals in a single game of ice hockey?
  - a) Hat-trick
- b) Triple
  - c) Goal-scoring
  - d) Triple-play
- 14. Which country has won the most Olympic gold medals in Summer Games history? a) United States
  - b) China
  - c) Russia
  - d) Germany
- 15. Who is the most decorated Olympian of all time (as of 2024)?
  - a) Michael Phelps
  - b) Usain Bolt

- c) Larisa Latynina
- d) Carl Lewis
- 16. In which sport would you find the term "bullseye"?
  - a) Archery
  - b) Darts
  - c) Shooting
  - d) Tennis
- 17. Who won the NBA MVP award in 2023?
  - a) Giannis Antetokounmpo
  - b) Stephen Curry
  - c) Nikola Jokić
  - d) LeBron James
- MEN 8 RESEARCH, WHE 18. Which country is known for the sport of sumo wrestling?
  - a) China
  - b) Japan
  - c) Korea
  - d) Thailand
- 19. What is the length of an Olympic swimming pool?
  - a) 25 meters
  - b) 50 meters
  - c) 75 meters
  - d) 100 meters
- 20. Who won the 2023 Rugby World Cup?
  - a) New Zealand
  - b) England
  - c) South Africa
  - d) Australia
- 21. In which sport do athletes compete in the Decathlon?
  - a) Track and Field
  - b) Swimming
  - c) Cycling
  - d) Rowing
- 22. Who is the all-time leading goal scorer in the English Premier League?
  - a) Thierry Henry
  - b) Alan Shearer
  - c) Wayne Rooney
  - d) Sergio Agüero
- 23. What sport is associated with the term "offside"?
  - a) Basketball
- b) Ice Hockey
- c) Football
  - d) Baseball
- 24. Which country is known for the sport of curling?
  - a) Sweden
  - b) Canada
  - c) Norway
  - d) Finland
- 25. Who holds the record for the most Grand Slam titles in tennis (as of 2024)?
  - a) Serena Williams
  - b) Rafael Nadal

- c) Roger Federer
- d) Novak Djokovic
- 26. What is the name of the annual cricket tournament held in India?
  - a) ICC World Cup
  - b) IPL
  - c) Ashes
  - d) Champions Trophy
- 27. Who is the famous swimmer known as the "Flying Fish"?
  - a) Mark Spitz
  - b) Michael Phelps
  - c) Ian Thorpe
  - d) Ryan Lochte
- 28. In which sport is the term "ace" used?
  - a) Tennis
  - b) Baseball
  - c) Golf
  - d) Soccer
- 29. What is the name of the championship tournament for American football?

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- a) Super Bowl
- b) World Series
- c) Stanley Cup
- d) UEFA Champions League
- 30. Which country has won the most Rugby World Cup titles?
  - a) New Zealand
  - b) South Africa
  - c) Australia
  - d) England

# **Section E: Current Affairs**

- 1. Who is the President of the United States (as of 2024)?
  - a) Joe Biden
  - b) Donald Trump
  - c) Kamala Harris
  - d) Bernie Sanders
- What is the name of the global initiative to combat climate change?
  a) Paris Agreement
  - b) Kyoto Protocol
  - c) Montreal Protocol
  - d) Geneva Convention
- 3. Which company recently became the first to reach a \$3 trillion market capitalization? a) Microsoft
  - b) Apple
  - c) Amazon
  - d) Alphabet
- 4. In which country did the 2024 Summer Olympics take place?
  - a) Paris
  - b) Tokyo
  - c) Los Angeles
  - d) Brisbane

- 5. Who is the Prime Minister of the United Kingdom (as of 2024)?
  - a) Boris Johnson
  - b) Rishi Sunak
  - c) Liz Truss
  - d) Theresa May
- 6. What is the name of the current UN Secretary-General? a) Ban Ki-moon
  - b) António Guterres
  - c) Kofi Annan
  - d) Boutros Boutros-Ghali
- 7. Which country recently became the first to officially recognize Bitcoin as legal FSFARCH, tender?
  - a) El Salvador
  - b) Japan
  - c) United States
  - d) Switzerland
- 8. Who won the Nobel Peace Prize in 2023?
  - a) Greta Thunberg
  - b) Malala Yousafzai
  - c) Abiy Ahmed
  - d) Ales Bialiatski
- 9. Which company launched the Artemis I mission to the Moon?
  - a) SpaceX
  - b) NASA
  - c) Blue Origin
  - d) Roscosmos
- 10. What is the name of the COVID-19 vaccine developed by Pfizer?
  - a) Covaxin
  - b) Comirnaty
  - c) Sputnik V
  - d) Moderna
- 11. What was the major international event held in Glasgow in 2021 focused on climate change?
  - a) COP26
  - b) G7 Summit
  - c) World Economic Forum
  - d) UN Climate Summit
- 12. What is the primary purpose of the International Space Station (ISS)?
  - a) Space Tourism
  - b) Earth Observation
  - c) Scientific Research
    - d) Military Operations
- 13. Which African country recently held a general election in 2024?
  - a) Nigeria
  - b) Kenya
  - c) South Africa
  - d) Ghana
- 14. What is the primary goal of the global initiative called "The Great Reset"?
  - a) Economic Recovery
  - b) Climate Action

- c) Global Health
- d) Technological Innovation
- 15. What major sporting event is scheduled to take place in Los Angeles in 2028?
  - a) Winter Olympics
  - b) Summer Olympics
  - c) FIFA World Cup
  - d) Rugby World Cup
- 16. Which country recently experienced a significant political crisis involving its president and military?
  - a) Myanmar
  - b) Venezuela
  - c) Brazil
  - d) Iran
- 17. What is the name of the initiative launched by the World Health Organization to combat the spread of malaria?
  - a) Global Fund
  - b) Roll Back Malaria
  - c) Malaria No More
  - d) World Malaria Day
- 18. Who became the CEO of Twitter in 2024?
  - a) Parag Agrawal
  - b) Elon Musk
  - c) Jack Dorsey
  - d) Linda Yaccarino
- 19. What is the primary goal of the United Nations Sustainable Development Goals (SDGs)?
  - a) Eradicate Poverty
  - b) Promote Global Trade
  - c) Enhance Military Cooperation
  - d) Expand Space Exploration
- 20. Which European country recently held a referendum on joining NATO?
  - a) Sweden
  - b) Finland
  - c) Denmark
  - d) Austria
- 21. What is the name of the international treaty aimed at protecting the world's oceans?a) Paris Agreement
  - b) Law of the Sea
  - c) Marine Biodiversity Treaty
- d) Oceanic Protection Pact
- 22. What is the name of the global health organization focused on combating infectious diseases and promoting health equity?
  - a) World Health Organization
  - b) International Red Cross
  - c) Médecins Sans Frontières
  - d) Global Fund
- 23. Who is the current Chancellor of Germany (as of 2024)?
  - a) Angela Merkel
  - b) Olaf Scholz

- c) Armin Laschet
- d) Friedrich Merz
- 24. Which country recently hosted the BRICS summit in 2024?
  - a) Brazil
  - b) China
  - c) India
  - d) South Africa
- 25. What is the name of the recent trade agreement between the United States and several Asian countries?
  - a) TPP
  - b) RCEP
  - c) AUKUS
  - d) IPEF
- 26. What major tech company launched a new mixed-reality headset in 2024?
  - a) Apple
  - b) Microsoft
  - c) Google
  - d) Meta
- 27. What is the primary focus of the global initiative known as 'One Health"?
  - a) Climate Change
  - b) Health and Wellbeing
  - c) Biodiversity
  - d) Sustainable Agriculture
- 28. Who is the current President of Brazil (as of 2024)?
  - a) Jair Bolsonaro
  - b) Luiz Inácio Lula da Silva
  - c) Fernando Haddad
  - d) Ciro Gomes
- 29. What was the name of the volcanic eruption in Hawaii in 2024?
  - a) Kilauea
  - b) Mauna Loa
  - c) Mount St. Helens
  - d) Mount Vesuvius
- 30. What is the primary aim of the global campaign "End Plastic Pollution"?a) Reduce Carbon Emissions
  - b) Promote Recycling
  - c) Combat Ocean Acidification
  - d) Eliminate Single-Use Plastics

# Section F: Quantitative Aptitude and Logical Reasoning

- 5
- 1. What is the next number in the sequence: 2, 6, 12, 20, ?
  - a) 30
  - b) 28
  - c) 24
  - d) 36
- 2. If 5 workers can complete a job in 10 days, how many days will it take for 10 workers to complete the same job?
  - a) 5 days
  - b) 10 days

c) 20 days

- d) 2 days
- 3. What is the value of  $8 \times (3+5) \div 4$ ?
  - a) 16
  - b) 18
  - c) 20
  - d) 32
- 4. A book originally costs \$60. It is on sale with a 25% discount. What is the sale price? a) \$45
  - b) \$50
  - c) \$40
  - d) \$55
- 5. In a class of 40 students, 25% are girls. How many boys are there in the class? RESEARC a) 10
  - b) 15
  - c) 20
  - d) 30
- 6. What is the square root of 144?
  - a) 10
  - b) 12
  - c) 14
  - d) 16
- 7. If a triangle has sides of lengths 5 cm, 12 cm, and 13 cm, what type of triangle is it? a) Equilateral
  - b) Isosceles
  - c) Right-angled
  - d) Scalene
- What is the sum of these five numbers? 8. The average of five numbers is 18. a) 72
  - b) 90
  - c) 96

d) 100

- 9. A train travels at a speed of 60 km/h. How far will it travel in 2.5 hours? a) 120 km
  - b) 150 km
  - c) 180 km
  - d) 200 km
- 10. If the ratio of A to B is 3:4 and B to C is 5:6, what is the ratio of A to C? a) 1:2
- b) 3:5
- c) 15:24
- d) 9:10
- 11. If a shopkeeper buys 8 pens for \$24, what is the cost of 15 pens?
  - a) \$36
  - b) \$45
  - c) \$50
  - d) \$60
- 12. What is 25% of 200?
  - a) 25
  - b) 50

- c) 75
- d) 100
- 13. A rectangle has a length of 8 cm and a width of 5 cm. What is its area?
  - a) 40 cm<sup>2</sup>
  - b) 45 cm<sup>2</sup>
  - c) 50 cm<sup>2</sup>
  - d) 55 cm<sup>2</sup>
- 14. If x + 5 = 12, what is the value of x?
  - a) 5
  - b) 7
  - c) 12
  - d) 17
- 15. In a bag, there are 5 red balls, 3 green balls, and 2 blue balls. What is the probability of picking a green ball?
  - a) 1/2
  - b) 3/10
  - c) 1/5
  - d) 1/3
- 16. A number is increased by 20% and then decreased by 20%. What is the net change in percentage?
  - a) 4% decrease
  - b) 4% increase
  - c) No change
  - d) 8% decrease
- 17. If the price of a shirt is \$80 and it is marked down by 15%, what is the new price? a) \$68
  - b) \$70
  - c) \$72
  - d) \$76
- 18. Solve for y: 3y 7 = 2y + 1
  - a) 2
  - b) 7
  - c) 12
  - d) 14
- 19. What is the smallest prime number greater than 10?
  - a) 11
  - b) 13
  - C) 1/

20. A car depreciates at a rate of 10% per year. If its value is \$20,000 today, what will its value be after 1 year?

- a) \$18,000
- b) \$16,000
- c) \$15,000
- d) \$14,000
- 21. What is the median of the following numbers: 3, 8, 12, 15, 20?
  - a) 8
  - b) 12
  - c) 15
  - d) 20

22. If 6 men can complete a project in 20 days, how many days will it take for 3 men to complete the same project?

a) 30 days

b) 40 days

c) 60 days

- d) 80 days
- 23. A shop sells a shirt for \$60 after a discount of 25%. What was the original price of the shirt?

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- a) \$75
- b) \$80
- c) \$85
- d) \$90
- 24. What is the value of 7! (7 factorial)?
  - a) 5040
  - b) 7200
  - c) 3430
  - d) 2520
- 25. A sequence starts with 3 and each subsequent number is double the previous number. What is the 4th term?
  - a) 24
  - b) 21
  - c) 18
  - d) 12
- 26. If the perimeter of a square is 32 cm, what is the length of each side?
  - a) 6 cm
  - b) 8 cm
  - c) 10 cm
  - d) 12 cm
- 27. How many degrees are in the sum of the interior angles of a pentagon?
  - a) 360

b) 540

c) 720

d) 900

- 28. A group of students is to be divided into 5 equal groups. If there are 40 students, how many students will be in each group?
  - a) 5 b) 6
  - c) 8
  - a) 10

29. What is the value of 15% of 250?

- a) 35
- b) 37.5
- c) 40

d) 45

30. A train travels 300 km in 4 hours. What is its average speed?

- a) 60 km/h
- b) 70 km/h
- c) 75 km/h
- d) 80 km/h