Wada Nirmiti Education Society's
GURUKUL GLOBAL SCHOOL
WORKSHEET

SUB: **LESSON:** **STD: VIII**

NAME: _____ ROLL No: _____ DATE:

Multiple Choice Questions

1. What population threshold is required for a settlement to be classified as urban in India?

(a) 220 (b) 2,500 (c) 5,000 (d) 50,000

2. What mathematical formula do demographers use to calculate the population density of a region?

(a) Total land area / Total population (b) Total population / Area of the region (in sq. km)
(c) Total birth rate / Total death rate (d) Total urban workforce / Total land area

3. Which industrial township in Jharkhand developed from the small village of Sakchi due to its proximity to rich iron ore deposits?

(a) Bokaro (b) Ranchi (c) Jamshedpur (d) Dhanbad

4. Which premier institution established in 1875 helped Mumbai transition into the financial capital of India?

(a) Reserve Bank of India (b) Bombay Stock Exchange
(c) State Bank of India (d) Industrial Finance Corporation

5. Which city earned the global title 'Silicon Valley of India' due to its high concentration of software firms, startups, and research institutions?

(a) Hyderabad (b) Bengaluru (c) Chennai (d) Pune

6. The famous annual Durga Puja festival of which Indian metropolis was inscribed on UNESCO's Representative List of Intangible Cultural Heritage of Humanity in 2021?

(a) Varanasi (b) Kolkata (c) Mumbai (d) Jaipur

7. Who was appointed as the chief architect and urban planner by Maharaja Sawai Jai Singh II in 1727 to design the grid-patterned city of Jaipur?

(a) Sir Edwin Lutyens (b) Le Corbusier
(c) Vidyadhar Bhattacharya (d) Charles Correa

8. In urban environmental monitoring, what numerical index is used to measure and report daily air quality parameters like PM2.5 and PM10?

(a) Human Development Index (HDI) (b) Air Quality Index (AQI)
(c) Environmental Performance Index (EPI) (d) Carbon Footprint Indicator (CFI)

9. Which modern urban planning concept adopted by Singapore links residential housing for senior citizens with healthcare, childcare, and green spaces in compact areas?

(a) Suburban Sprawl (b) Intergenerational Living / Blue Zone planning

(c) Industrial Zoning (d) Gated Communities

10. Which major urban redevelopment project in Gujarat transformed an urban riverbank into a two-level promenade blending ecology with public utilities?

(a) Yamuna Riverfront, Delhi (b) Sabarmati Riverfront, Ahmedabad

(c) Hooghly Riverfront, Kolkata (d) Musi Riverfront, Hyderabad

Short Answer Questions

1. Explain the historical transformation of Sakchi village into the modern industrial city of Jamshedpur.

Answer: Sakchi was selected as the site for Asia's first steel plant (Tata Steel) due to its strategic proximity to rich iron ore deposits and water resources. Modern infrastructure, including wide tree-lined roads, housing, and hospitals, was systematically constructed for workers before steel production began. In 1919, the planned township was renamed Jamshedpur, attracting secondary industries and migrant labor to become Jharkhand's largest industrial center.

2. Describe the factors that contributed to Bengaluru becoming a major global Information Technology (IT) hub.

Answer: Bengaluru grew into the 'Silicon Valley of India' due to a dense concentration of specialized software firms, technology startups, and premier educational and research institutions. The close synergy between academic research and industries fostered innovation in advanced technologies like Artificial Intelligence. Specialized industrial clusters and a skilled workforce further cemented its position as a global technology hub.

3. Discuss the key architectural features and planning principles behind the design of Jaipur as the 'Pink City'.

Answer: Designed by chief architect Vidyadhar Bhattacharya in 1727 under Maharaja Sawai Jai Singh II, Jaipur was planned using a traditional grid pattern divided into rectangular blocks (chowkris). It featured wide streets, nine public squares, an outer 20-foot protective wall with seven gates, stepwells, and shaded market porches. The mandatory use of local pink sandstone for major street facades gave the city a uniform visual identity.

Long Answer Questions

1. Analyze the process of urbanization, highlighting how rural settlements gradually transition into metropolitan cities.

Answer:

Urbanization represents a progressive shift of population and economic focus from rural to urban areas:

• Rural Origins: Initial human settlements center primarily around primary agriculture and farm-related occupations with lower population densities.

• Early Urbanization: A structural economic shift occurs toward secondary (manufacturing) and tertiary (services, trade, transport) sectors, giving rise to small trading towns.

• Infrastructure & Job Creation: Expansion of factories, corporate offices, financial institutions, entertainment centers, and educational facilities attracts migrants seeking diverse employment.

• Metropolitan Expansion: Towns expand into sprawling metropolitan regions featuring high-rise commercial buildings, shopping malls, mass rapid transport systems (metros), and complex civic networks.

• Socio-Cultural Integration: Concentrated urban populations foster cultural diversity, innovation, and vibrant commercial ecosystems, making cities drivers of national economic growth.

2. Examine the major environmental, social, and infrastructural challenges faced by rapidly growing Indian cities.

Answer:

Unplanned population influx and rapid expansion create severe pressure on urban resources and living conditions:

• Air Pollution & Microclimates: Industrial emissions and vehicle density result in hazardous Air Quality Index (AQI) levels exceeding safe limits, alongside urban 'heat island' effects.

• Water Scarcity & Encroachments: Over-extraction of groundwater, loss of natural drainage channels, and encroachment on lakes lead to severe summer water shortages and monsoon urban flooding.

• Growth of Urban Slums: Inadequate affordable housing forces low-income migrant workers into overcrowded informal settlements with restricted access to clean water, sanitation, and electricity.

• Traffic Congestion & Solid Waste: Surging private vehicle ownership leads to prolonged traffic delays, while massive municipal solid waste generation strains waste management systems.

• Socio-Economic Inequalities: Economic disparities and high population density often contribute to higher urban crime rates, necessitating enhanced public safety and policing infrastructure.

3. Evaluate the innovative urban planning strategies adopted by modern cities like Singapore to achieve sustainable and inclusive growth.

Answer:

Singapore provides a global benchmark for managing high population density while preserving high living standards:

• Dynamic Master Planning: Implements flexible long-term land-use Concept Plans looking 40 years ahead, updated every 5 years to adapt to changing civic needs.

• Integrated Mass Transit: Connects Mass Rapid Transit (MRT) rail, zero-emission buses, cycling tracks, and pedestrian park connectors to minimize private car usage.

• Mixed-Use & Vertical Development: Combines commercial, residential, and recreational spaces in close proximity, utilizing high-rise structures with vertical gardens and rooftop greenery to create a 'Garden City'.

• Intergenerational Living & Inclusivity: Integrates senior citizen housing directly with healthcare centers, childcare facilities, and public parks to foster social cohesion and high life expectancy (Blue Zone concept).

• Eco-Friendly Technologies: Incorporates sustainable building designs, water recycling, and climate-resilient urban infrastructure to maintain ecological balance.