

CAT 2015 VARC Slot 2 Question Paper

Time Allowed :3 Hours

Maximum Marks :300

Total questions :100

General Instructions

Read the following instructions very carefully and strictly follow them:

1. **Duration of Section:** 40 Minutes
2. **Total Number of Questions:** 22 Questions (as per latest pattern, may vary slightly)
3. **Section Covered:** Quantitative Aptitude (QA)
4. **Type of Questions:**
 - Multiple Choice Questions (MCQs)
 - Type In The Answer (TITA) Questions – No options given, answer to be typed in
5. **Marking Scheme:**
 - +3 marks for each correct answer
 - -1 mark for each incorrect MCQ
 - No negative marking for TITA questions
6. **Syllabus Coverage:** Arithmetic, Algebra, Geometry, Number System, Modern Math, and Mensuration
7. **Skills Tested:** Numerical ability, analytical thinking, and problem-solving

Reading Comprehension

Passage 1: The Rise of Artificial Intelligence

Artificial Intelligence (AI) has transformed industries by automating tasks and enhancing decision-making. From healthcare diagnostics to autonomous vehicles, AI's applications are vast. However, its rise raises ethical concerns, such as job displacement and privacy invasion. Studies suggest AI could automate 30% of current jobs by 2030, creating economic challenges. Additionally, AI systems often rely on vast datasets, raising concerns about data security. Proponents argue that AI boosts efficiency and innovation, but critics warn of unchecked development leading to societal risks. Balancing progress with regulation is crucial.

1. What is the primary concern raised by critics of AI development in the passage?

- (a) Lack of innovation
 - (b) Societal risks from unchecked development
 - (c) High implementation costs
 - (d) Limited applications
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2. According to the passage, what percentage of jobs could AI automate by 2030?

- (a) 20%
 - (b) 25%
 - (c) 30%
 - (d) 35%
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3. What is the tone of the passage regarding AI's impact?

- (a) Entirely optimistic
 - (b) Completely pessimistic
 - (c) Balanced
 - (d) Indifferent
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4. What does the passage suggest is crucial for AI's development?

- (a) Rapid expansion
 - (b) Balancing progress with regulation
 - (c) Eliminating ethical concerns
 - (d) Increasing data usage
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Passage 2: Urbanization and Sustainability

Urbanization has accelerated globally, with over 50% of the world's population now living in cities. This shift drives economic growth but strains resources like water and energy. Cities contribute 70% of global carbon emissions, necessitating sustainable urban planning. Green buildings and public transport reduce environmental impact, but challenges like slum growth and waste management persist. Effective policies can mitigate these issues, ensuring cities remain livable while supporting economic progress.

5. What is a major environmental impact of urbanization mentioned in the passage?

- (a) Reduced energy consumption
 - (b) 70% of global carbon emissions
 - (c) Decreased slum growth
 - (d) Improved waste management
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6. What does the passage suggest to make cities more livable?

- (a) Increasing urbanization rates
 - (b) Implementing effective policies
 - (c) Expanding slum areas
 - (d) Reducing public transport
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7. Which of the following is NOT a challenge of urbanization mentioned in the passage?

- (a) Slum growth
 - (b) Waste management
 - (c) Economic growth
 - (d) Resource strain
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8. What percentage of the world's population lives in cities, according to the passage?

- (a) 40%
 - (b) 50%
 - (c) 60%
 - (d) Over 50%
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Passage 3: The Gig Economy

The gig economy, characterized by short-term, flexible jobs, has grown with platforms like Uber and Freelancer. It offers workers freedom but lacks job security and benefits. Studies show gig workers earn 20% less on average than traditional employees. Companies benefit from reduced costs, but critics argue this model exploits workers. Policymakers face the challenge of regulating this sector to protect workers while preserving its flexibility. **9.** What

is a key advantage of the gig economy for workers, according to the passage?

- (a) Job security
 - (b) Higher earnings
 - (c) Freedom
 - (d) Employee benefits
-

10. How much less do gig workers earn compared to traditional employees?

- (a) 10%
 - (b) 15%
 - (c) 20%
 - (d) 25%
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11. What challenge do policymakers face in the gig economy?

- (a) Reducing company costs
 - (b) Regulating to protect workers while preserving flexibility
 - (c) Increasing gig worker earnings
 - (d) Eliminating short-term jobs
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12. What is a criticism of the gig economy mentioned in the passage?

- (a) It reduces worker freedom
 - (b) It exploits workers
 - (c) It increases job security
 - (d) It raises company costs
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Verbal Ability

13. Choose the word most similar in meaning to “mitigate” as used in Passage 2.

- (a) Aggravate
 - (b) Alleviate
 - (c) Intensify
 - (d) Complicate
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14. What is the antonym of “vast” as used in Passage 1?

- (a) Large
 - (b) Small
 - (c) Extensive
 - (d) Broad
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15. Fill in the blank with the most appropriate word:

“The rise of AI has concerns about data privacy.”

- (a) Alleviated
 - (b) Mitigated
 - (c) Exacerbated
 - (d) Resolved
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16. Identify the grammatically incorrect sentence:

- (a) AI has transformed industries by automating tasks.
- (b) Many companies is adopting AI for efficiency.
- (c) Workers are concerned about job displacement.
- (d) Policymakers are addressing ethical issues in AI.

17. Arrange the following sentences to form a coherent paragraph:

1. Urbanization drives economic growth by concentrating resources.
2. However, it also leads to environmental challenges like pollution.
3. Sustainable urban planning can address these issues.
4. Cities must adopt green technologies to remain livable.

- (a) 1, 2, 3, 4
 - (b) 2, 1, 3, 4
 - (c) 1, 3, 2, 4
 - (d) 4, 1, 2, 3
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18. Which sentence is the odd one out?

- (a) AI enhances decision-making in industries.
 - (b) It automates repetitive tasks efficiently.
 - (c) It raises concerns about data privacy.
 - (d) It improves productivity in healthcare.
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19. Complete the sentence with the most appropriate word:

“The gig economy offers flexibility but often lacks job”

- (a) Security
 - (b) Growth
 - (c) Opportunities
 - (d) Freedom
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20. Choose the most logical inference from Passage 1:

- (a) AI will eliminate all jobs by 2030
 - (b) Regulation can address AI’s ethical concerns
 - (c) AI has no practical applications
 - (d) Data security is not a concern for AI
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