SAMPLE QUESTIONS

RRU COMMON ENTRANCE TEST (RCET) : UG LEVEL

SER	SECTION	NO OF ACTUAL QUESTIONS	MARKS PER QUESTION	MAX MARKS	SAMPLE QUESTIONS PROVIDED IN THIS PAPER
1	Reading Comprehension, Vocabulary, Verbal Ability etc	25	1	25	15
2	Domain Specific Subject	50	1	50	20
3	General - Numerical Ability, Logical reasoning, Current Affairs, National Security and Policing	25	1	25	10
		100		100	

Time allotted : 120 minutes

SECTION 1 : COMPREHENSION AND VOCABULARY

Passage 1 : ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) has emerged as one of the most transformative technologies of the 21st century, with the potential to revolutionize various aspects of human life. However, the rapid advancement of AI has sparked debates regarding its ethical implications and potential consequences for society. While proponents argue that AI offers numerous benefits and opportunities, others express concerns about its impact on employment, privacy, and even humanity itself.

On the one hand, AI has the potential to enhance productivity and efficiency across various industries. By automating repetitive tasks and performing complex calculations at speeds far beyond human capacity, AI technologies can streamline processes and optimize resource allocation. In fields such as healthcare, AI-powered systems can assist doctors in diagnosing diseases, analysing medical images, and even developing personalized treatment plans, thereby improving patient outcomes and saving lives.

Furthermore, AI has the potential to drive innovation and unlock new opportunities for economic growth. From self-driving cars and virtual assistants to predictive analytics and recommendation systems, AI applications are reshaping industries and creating new markets. Moreover, AI-driven technologies have the potential to address some of humanity's most pressing challenges, from climate change and resource scarcity to healthcare disparities and poverty alleviation.

However, despite its potential benefits, AI also raises significant ethical and societal concerns. One of the most pressing issues is the impact of AI on employment and the workforce. As AI technologies automate tasks previously performed by humans, there are fears of job displacement and widening economic inequality. Moreover, there are concerns about the misuse of AI for surveillance, manipulation, and control, raising questions about privacy, autonomy, and democratic governance.

Additionally, there are existential concerns about the potential consequences of AI surpassing human intelligence. While some envision a future where AI enhances human capabilities and augments our collective intelligence, others warn of the risks posed by superintelligent AI systems that could outsmart and potentially threaten humanity. Issues such as algorithmic bias, lack of accountability, and the concentration of power in the hands of a few tech giants further exacerbate these concerns.

Finally, the debate over whether AI is a blessing or a curse is multifaceted and complex. While AI offers immense potential to improve human lives and tackle global challenges, it also presents significant risks and ethical dilemmas that must be addressed. As AI continues to evolve and shape the future of society, it is essential to strike a balance between innovation and responsibility, ensuring that AI serves the collective interests of humanity.

1. What is one potential benefit of Artificial Intelligence (AI)?
   (a)   Increased unemployment rates
   (b)   Streamlining processes and enhancing efficiency
   (c)   Decreased economic growth
   (d)   Reduction in innovation

2. In which field can AI-powered systems assist doctors?
   (a)   Agriculture
   (b)   Healthcare
   (c)   Construction
   (d)   Transportation

3. What is one of the main concerns regarding AI and employment?
   (a)   Widening economic inequality
   (b)   Reduction in job opportunities
   (c)   Increase in workforce productivity
   (d)   Decrease in AI development

4. What is an existential concern associated with AI?
   (a)   Lack of innovation
   (b)   Superintelligent AI threatening humanity
   (c)   AI promoting democratic governance
   (d)   AI reducing economic inequality

5. What is essential for addressing the ethical and societal concerns related to AI?
   (a)   Ignoring potential risks
   (b)   Striking a balance between innovation and responsibility
   (c)   Concentrating power in the hands of tech giants
   (d)   Promoting algorithmic bias

Passage 2 : CHINA'S DEBT TRAP DIPLOMACY

China's debt trap diplomacy refers to a strategy employed by China wherein it extends loans to developing countries, often those with weak economies or in need of infrastructural development, with the aim of gaining strategic advantages and influence. While presenting itself as a generous partner offering financial assistance for development projects, China's motives behind these loans have come under scrutiny, with concerns raised about the long-term consequences for the borrowing countries.

One of the primary criticisms of China's debt trap diplomacy is the level of debt burden it imposes on recipient countries. These loans are often accompanied by high interest rates and strict repayment terms, leading to a situation where the borrowing countries find themselves heavily indebted to China. In some cases, the terms of the loans are perceived as unfavourable, with allegations of debt-trap diplomacy being used to gain leverage over the borrowing countries' strategic assets or natural resources.

Moreover, there are concerns about the transparency and accountability surrounding China's lending practices. Unlike loans from international financial institutions such as the World Bank or the International Monetary Fund, which adhere to stringent transparency standards and governance mechanisms, China's loans often lack transparency, leading to questions about the true motives behind its lending activities.

Furthermore, China's debt trap diplomacy has geopolitical implications. By extending loans to strategically important regions, such as ports or critical infrastructure projects, China seeks to expand its influence and presence on the global stage. This has raised concerns among other major powers about China's growing assertiveness and its impact on regional stability.

In response to these concerns, there have been calls for greater scrutiny of China's lending practices and increased transparency regarding the terms of its loans. Some countries have sought to diversify their sources of funding and reduce their dependency on Chinese loans by seeking assistance from other international partners or implementing stricter regulations on foreign investments.

Many analysts believe that while China's debt trap diplomacy may offer short-term benefits in terms of financing development projects, its long-term consequences for the borrowing countries and the broader geopolitical landscape are subject to debate. As China continues to assert its influence through economic means, it is essential for the international community to closely monitor and evaluate the implications of its lending practices.

Multiple Choice Questions : Passage 2

6.   What is the primary criticism of China's debt trap diplomacy?
        (a)   It offers low-interest loans to developing countries.
        (b)   It imposes high debt burdens on borrowing countries.
        (c)   It promotes transparency and accountability.
        (d)   It reduces China's influence on the global stage.

7.   Why are there concerns about the transparency of China's lending practices?
        (a)   Loans from China adhere to stringent transparency standards.
        (b)   China's loans often lack transparency and accountability.
        (c)   China's loans are closely monitored by international institutions.
        (d)   China's loans promote accountability in borrowing countries.

8.   What are the geopolitical implications of China's debt trap diplomacy?
        (a)   It reduces China's influence on the global stage.
        (b)   It promotes regional stability.
        (c)   It seeks to expand China's influence and presence.
        (d)   It decreases China's assertiveness in international affairs.

9.   How have some countries responded to China's debt trap diplomacy?
        (a)   By increasing their dependency on Chinese loans.

(b)   By seeking assistance from other international partners.
(c)   By reducing scrutiny of China's lending practices.
(d)   By promoting transparency in their own lending practices.

10.   Why is it essential for the international community to monitor China's lending practices?
(a)   To reduce borrowing countries' debt burdens.
(b)   To increase China's influence on the global stage.
(c)   To evaluate the implications of China's lending practices.
(d)   To promote transparency and accountability in international finance.

Vocabulary Questions

11.   The politician's inflammatory statement sparked_____and outrage among the public.
a)   controversy
b)   bon-homie
c)   harmony
d)   tranquility

12.   Despite his concerted efforts, he could not _____ the project from failure.
a)   salvage
b)   recycle
c)   torpedo
d)   enliven

13.   The aroma of freshly baked bread _____ through the bakery, enticing customers inside.
a)   flooded
b)   wafted
c)   fumed
d)   deluged

14.   His fastidious nature often led to_____ with colleagues who found him overly critical.
a)   amiability
b)   conflicts
c)   closeness
d)   war

15.   The candidate's _____ behavior during the interview raised doubts about his suitability for the position.
a)   gentle
b)   mercurial
c)   uncertain
d)   steadfast

1. What does RAM stand for?
   A) Random Access Memory
   B) Read-Only Memory
   C) Remote Access Module
   D) Random Application Module

2. Which programming language is used for developing Android applications?
   A) Java
   B) C#
   C) Python
   D) Swift

3. What is the value of 'x' in the equation $3x + 5 = 32$?
   a) 5
   b) 7
   c) 9
   d) 25

4. If the radius of a circle is 7 cm, what is its circumference?
   a) 12π cm
   b) 14π cm
   c) 17π cm
   d) 28π cm

5. What is the SI unit of electric current?
   a) Ampere
   b) Volt
   c) Ohm
   d) Joule

6. What is the chemical symbol for Gold?
   a) Gd
   b) Au
   c) Gl
   d) Al

7. Which of the following is not a Noble gas?
   a) Xenon
   b) Oxygen
   c) Helium
   d) Krypton

8. What is the chemical name for salt?
   a) Sodium chloride

b)   Sodium bicarbonate
c)   Calcium carbonate
d)   Sodium hydroxide

9.   What does GNP stand for?
        a)   Gross National Product
        b)   Grand National Profit
        c)   General National Product
        d)   Gross Natural Product

10.   Which of the following nutrients is known as the building block of the body?
        a)   Carbohydrates
        b)   Proteins
        c)   Vitamins
        d)   Minerals

11.   What does ROI stand for in business?
        a)   Return on Investment
        b)   Revenue on Investment
        c)   Rate of Interest
        d)   Revenue on Income

12.   Which of the following is a source of Vitamin C?
        a)   Rice
        b)   Strawberries
        c)   Wheat
        d)   Red meat

13.   Which of the following is NOT a method of food preservation?
        a)   Chilling
        b)   Salting
        c)   Canning
        d)   Frying

14.   What is the square root of 6561?
        a)   93
        b)   91
        c)   90
        d)   81

15.   Which of the following is NOT a component of the balance sheet?
        a)   Assets
        b)   Liabilities
        c)   Revenue
        d)   Equity

16.   If $\sin(x) = 0.75$ and $\cos(x) = 0.45$, what is the value of $\tan(x)$?
        a)   0.667

b)   1.667
c)   0.866
d)   1.866

17.   If a pizza is divided into 8 equal slices and 5 slices are eaten, what fraction of the pizza is left?
a)   1/8
b)   3/8
c)   5/8
d)   7/8
18.   What is the square root of 1225?
a)   25
b)   35
c)   45
d)   55
19.   What is the value of 6! (factorial)?
a)   620
b)   660
c)   720
d)   760
20.   Which of the following states does NOT share a border with Nepal?
a)   Bihar
b)   Uttar Pradesh
c)   Sikkim
d)   Jharkhand

1.   If NOVEL is coded as LMQCJ, then how is REEL coded?

A)   PCCJ
B)   TGGO
C)   SFFM
D)   JCCP

2.   Complete the series: 12, 18, 26, 36, 48, ?

A)   66
B)   52
C)   62
D)   58

3.   If all engineers are professionals and some professionals are wealthy, which of the following statements must be true?

A)   All engineers are wealthy.
B)   All wealthy individuals are engineers.
C)   Some engineers are wealthy.
D)   Some wealthy individuals are engineers.

4.   In a geometric sequence, if the first term is 7 and the common ratio is 2, what is the fourth term?

A)   10
B)   42
C)   56
D)   72

5.   In a class of 80 students, 30% are girls. If 75% of the girls scored above 90% in a test, how many girls scored above 90%?

A)   12
B)   6
C)   16
D)   18

6.   What is the sum of the first 7 terms of the arithmetic sequence where the first term is 6 and the common difference is 4?

A)   116
B)   126
C)   146
D)   156

7. Human : Arms : Birds :_____
   A) Feathers
   B) Arms
   C) Talons
   D) Plumes

8. From a certain point, Jitesh walks 300 m towards the south. Then, he turns to his right & starts walking straight for another 150 m. Then, again turning to his left he walks for 100 m. He then turns to his left & walks for 150 m. How far is he from the starting point?
   A) 300 m
   B) 400 m
   C) 450 m
   D) 600 m

9. Which Indian state is famous for the dance form called Kuchipudi?
   A) Tamil Nadu
   B) Andhra Pradesh
   C) Karnataka
   D) Odisha

10. Who is the current Prime Minsiter of France?
   A) Mario Dragi
   B) Giorgia Meloni
   C) Silvio Berlusconi
   D) Guiseppe Conte