



**ARMY BURN HALL COLLEGE FOR BOYS**  
**Entry Test Model Paper – Class JC**

**SUBJECT: ENGLISH**

**Time: 30 Minutes**

**Maximum Marks: 25**

**ATTEMPT ALL QUESTIONS**

**Q. 1 Do as directed. [5]**

- a. Today, many western nations look for ways to improve their own economies.  
(The underlined word is a / an \_\_\_\_\_)
- b. "Keep your eyes peeled" means:  
(i) rub your eyes                      (ii) stay alert
- c. You and I \_\_\_\_\_ best friends.  
(i) am                                      (ii) are
- d. The correct spelling is:  
(i) Indagnation                      (ii) Indignation
- e. People who smoke stand greater chance of getting cancer than those who abstain.  
(The underlined word is a / an \_\_\_\_\_)

**Q. 2 Tag questions. [3]**

- a. You love to make friends.
- b. It is a boring movie.
- c. They were thinking of throwing a party.

**Q. 3 Make sentences of the following words: [3]**

- a. Harmony                      b. Meticulous                      c. Craving

**Q. 4 Do as directed. [5]**

- i. Please bring me the \_\_\_\_\_ ice cream you have. (add adjective)
- ii. James is easily \_\_\_\_\_ best player in the team. (complete the sentence)
- iii. John and (I / me) are in the same class. (choose correct pronoun)
- iv. We have had \_\_\_\_\_ dinner? Have they had \_\_\_\_\_? (add pronoun)
- v. \_\_\_\_\_ tea we walked \_\_\_\_\_ town to go \_\_\_\_\_ cinema. (into, to, after)

**Q. 5 What are the three qualities of descriptive writing? [3]**

**Q. 6 Write down the summary of the following passage. [6]**

**New York October 2003** - Anthony Yates went to a medical center in New York at the weekend. He asked for treatment for bites on his arms, hands and face, which he said had been caused by his dog. The doctors did not believe his story and called the police who went to the man's small flat on the fifth floor of a property in the Harlem district of New York.

Neighbours told the police officers that he was keeping wild animals inside. The police officers listened to this warning and made a small hole in the front door so that they could see through it into the flat.

They were amazed to see a massive tiger inside the hall. In order to capture the tiger without endangering anyone's life, a police officer abseiled down of the said building and stopped outside the window of Mr. Yates' flat. The huge tiger charged at the window and the police officer shot the animal twice with a tranquillizer gun. It was then safe for the police officers to enter the flat where another surprise awaited them. A five-foot long Cayman, a kind alligator, was behind a sofa in another room. The police officers removed the 80-kilogram tiger on a stretcher and both the tiger and Cayman were taken to a wildlife reserve in Cleveland, Ohio.



# ARMY BURN HALL COLLEGE FOR BOYS

## Entry Test Model Paper – Class JC

### SUBJECT: MATHEMATICS

Time: 30 Minutes

Maximum Marks: 20

#### ATTEMPT ALL QUESTIONS

**Q. 1** Encircle the correct option.

[5]

- i. If 4 kg of biscuits cost Rs.1000. Find the cost of 12 kg biscuits?  
A. Rs.1200      B. Rs.12000      C. Rs.2000      D. Rs.3000
- ii.  $x^2 \times \frac{1}{x^4} \times x^3 = ?$   
A. 1      B.  $x$       C.  $\frac{1}{x}$       D. 0
- iii.  $\sin x^0 = \frac{1}{2}, x^0 = ?$   
A.  $\cos\left(\frac{1}{2}\right)$       B.  $\tan\left(\frac{1}{2}\right)$       C.  $\sin^{-1}\left(\frac{1}{2}\right)$       D. 0
- iv. Volume of cone = ?  
A.  $2\pi r^2$       B.  $\frac{1}{3}\pi r h$       C.  $\pi r^2 h$       D.  $\frac{1}{3}\pi r^2 h$
- v. If  $p$  and  $q$  are whole numbers such that  $p \times q = 11$ , find the value of  $p + q$ .  
A. 11      B. 12      C. 13      D. 14

**Q. 2** 150 liters of water are poured into a cylindrical drum of diameter 48 cm. Find the depth of water in the drum. [3]

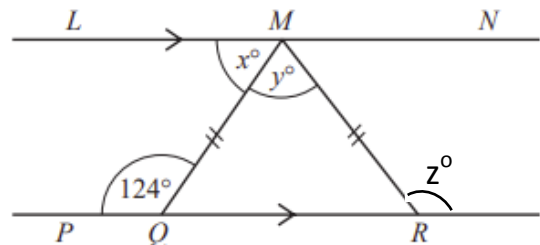
**Q. 3** It is given that  $p = 4 \times 10^5$  and  $q = 8 \times 10^6$ . Expressing your answers in standard [3]

form, find (i)  $\frac{p}{q}$  (ii)  $\sqrt[3]{q}$

**Q. 4** Factorize completely: [3]

(i)  $15a^2 + 12a^3$  (b)  $1 - 16b^2$  (c)  $6cx - 3cy - 2dx + dy$

**Q. 5** In the diagram, LMN is parallel to PQR. Angle PQM =  $124^\circ$  and  $MQ = MR$ . Find  $x^\circ, y^\circ$  and  $z^\circ$  [3]



**Q. 6** Consider the sequence 60, 67, 74, 81, 88, .... [3]

- (i) Write down the next two terms of the sequence.  
(ii) Find in terms of  $n$ , a formula for the  $n^{\text{th}}$  term of the sequence.  
(iii) Hence, find the  $15^{\text{th}}$  term.



**ARMY BURN HALL COLLEGE FOR BOYS**

**Entry Test Model Paper – Class JC**

**SUBJECT: GENERAL SCIENCE**

**Time: 30 Minutes**

**Maximum Marks: 25**

**ATTEMPT ALL QUESTIONS**

**Q. 1 Encircle the correct option.**

**[5]**

- i. Instrument used to measure length up to accuracy of 0.1 cm is:  
A. meter rule                      B. measuring tape  
C. vernier caliper                D. none of these
- ii. S.I unit of amount of substance is:  
A. ampere                      B. kilometer                      C. mole                      D. intensity
- iii. Which molecules all contain one or more double covalent bonds?  
A. chlorine, nitrogen and methane                      B. oxygen, hydrogen chloride and ethene  
C. chlorine, oxygen and ethene                      D. oxygen, carbon dioxide and ethene
- iv. Which of the following is a mixture?  
A. sea water                      B. table salt                      C. ammonia                      D. sulphuric acid
- v. An organism comprised of many cells is called?  
A. Multicellular                      B. Zygote                      C. Gamete                      D. Organ

**(OR)**

A software that monitors the inbound and outbound transmission is known as:

- A. Antivirus                      B. Firewall                      C. AD blocker                      D. Add remover

**Q. 2** What is meant by moment of a force? How can it be measured? Write down its formula and SI unit. **[4]**

**Q. 3** A body of mass 50 kg is raised to a height of 3 m. what is its potential energy? **[4]**

**Q. 4** Differentiate between Exothermic and Endothermic reaction? Give two examples of each. **[4]**

**Q. 5** Define Alloys? Write down the three examples with their composition and uses. **[4]**

**Q. 6** Define active transport and diffusion. Explain it with the help of examples. **[4]**

**OR**

Sana wants to send some important files to her office colleague. Which transmission is most suitable to send important files to the friend working in the next room? Defend your answer.