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## General Knowledge 0.4 For Pin Number 6

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### Abstract

This work presents 38 number of cards from different disciplines focused on english, physics and mathematics subject. The jester cards are extraneous, Provocative, Brusque, Momentum, Fraction Addition Formula and Equation of a circle.

## 1 መግቢያ

አሁን ባለንበት ዘመን የአንባቢያን ማህበረሰብ እየቀነሰ መምጣት አሳሳቢ ደረጃ ላይ ደርሷል። በብዙ ምክኒያት ሰዎች ቁጭ ብለው ማንበብ የተውበት ጊዜ ነው። ለምሳሌ ጠቃሚ ያልሆነ ሶሻል ሚዲያ ላይና በአልባሌ ቦታዎች ጊዜን ማጥፋት ከብዙዎቹ ትንሾቹ ምክኒያቶች ናቸው። በ2017 ዓ.ም ዳኛቸው ለዚህ የሚሆን መፍትሄ ብሎ ያቀረበው 0 ወይም 1 ጨዋታ በሚል ርዕስ የተዘጋጀ ትልቅ አክሲዮን ማህበር አለ። ይህ አክሲዮን ማህበር ከላይ የተጠቀሰውን ችግር በሚከተሉት መልኩ መፍታት ይቻላል ብሎ ያምናል። በዚህ ፅሁፍ ውስጥ የተካተተው መፍትሄ አሳማኝ ሆኖ አግኝተነዋል (ለበለጠ መረጃ የ 0 ወይም 1 መመስረቻ ፅሁፍን ይመልከቱ)። በዚህ አክሲዮን ማህበር የቀረበውን መፍትሄ ባጭሩ እንደሚከተለው አስቀምጥነዋል።

- (1) ማንበብን ወይም ጥናትን መዝናኛና ገንዘብ ማግኛ እንዲሁም ደግሞ ሽልማት የሚያስገኝ ማድረግ። ከማጥኛ ወይም እዲስ እውቀትን ከማግኛ ዘዴዎች ውስጥ አንደኛው ነገሮችን በተመሳሳይቸው በማዛመድ

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ማወቅ ነው። ለምሳሌ የአንድ እንግሊዝኛ ቃል ብዙ ተመሳሳይ ቃላቶች አሉት። እነሱን በማዛመድ ለመሸምደድ መሞከር ጥሩ ከሚባሉት ዘዴወች ውስጥ አንዱ ነው። ግን ደግሞ ይሄን ልምምዶች አይረሱ ለማድረግ በጨዋታ መልክ ሆኖ በቡድን እየተዛናኑና እየተወያዩ ሲሆን ተመራጭ ያደርገዋል። ካርድ በማዘጋጀት የእንግሊዝኛ ቃላቶችን ማጥናት በሚል ዙሪያ የተጠኑ ሳይንሳዊ ጥናቶች አሉ (ለምሳሌ፣ እነዚህን ይመልከቱ፣ [1, 2, 3, 7, 9, 10, 11, 12, 13, 15])

- (2) ነገሮችን በአይነት አይነታቸው እያዛመዱ ማወቅ ያመራምራል፣ ጠያቂ ያደርጋል፣ ከጓደኛ ጋር ያከራክራል፣ ማመሳከሪያ መፅሃፍ ፍለጋ እስከመሄድ ድረስ ያደርሳል። እናም በዚህ መልክ ሲሆን ያን ነገር ለመርሳት ብዙ ጊዜ ይጨርሳል።
- (3) ማዛመዱን ደግሞ ከጓደኛ ጋር ሆነው እየተዛናኑ በጨዋታ መልክ ካደረጉትና እውቀትንና ማወቅን ለማበረታት ደግሞ ለአሸናፊው ጉርሻ በመስጠት ከሆነ ጨዋታውም ተወዳጅ ይሆናል ማለት ነው።
- (4) ከላይ ከ1-3 የተጠቀሱትን መፍትሔወች ለማከናወን የተለያዩ አይነት አዝናኝ ጨዋታወችን ማዘጋጀት።

በዚህ ወረቀት ውስጥ፣ ለ 0 ወይም 1 ጨዋታ የሚሆን ካርድን አዘጋጅተናል። ያዘጋጀነው ካርድ ለጠቅላላ እውቀት 0.4 የሚሆን ሲሆን ከዚህ በፊት ያልተዘጋጁ ካርዶችን የሚያስገቡ ነው። ያዘጋጀነውን የካርዶችን መረጃ ባጭሩ እንደሚከተለው ገልፀናለን። የመርፌ ብዛት=6 እና  $k=4$  ሲሆኑ። ስለዚህ  $n=8*4+6=38$  ይሆናል። ስለዚህ አጫዋች ካርዶችን ጨምሮ ባጠቃላይ 38 ካርዶች አሉ። ተጫዋች ካርዶች፣  $38 - 6 = 32$  ካርዶች ይሆናሉ፤ 32 ደግሞ የ 8 ብዜት ነው (ለበለጠ መረጃ የዜሮ ወይም አንድ መመስረቻ ፅሁፍን ይመልከቱ)። አጫዋች ካርዶች የሚከተሉት ናቸው፤ extraneous፣ Provocative፣ Brusque፣ Momentum፣ Fraction Addition Formula እና Equation of a circle ናቸው።

## 2 አጫዋች ካርዶች (Jester Cards)

**Definition 2.1** (Extraneous). *Something that is not essential or relevant to the matter at hand. (see, [4]).*

*Example:* In solving the equation , the solutions are valid, but if we square both sides of an equation like and get , the solution would be extraneous.

**Definition 2.2** (Provocative). *Causing a strong reaction, often in a deliberate way; intended to stimulate thought, debate, or controversy. (see, [5]).*

*Example:* A provocative article questioning the validity of established scientific theories may spark debate in the academic community.

**Definition 2.3** (Brusque). *Abrupt, blunt, or curt in manner or speech, often perceived as rude. (see, [8]).*

*Example:* When asked about the project’s progress, his brusque reply was, “It’s done. Stop asking.”

**Definition 2.4** (Momentum). *In physics, momentum is the product of an object’s mass and velocity, given by . More generally, it refers to the force or energy gained by a moving object or idea. (see, [6]).*

*Example:* A moving car of mass 1 kg traveling at 3 m/s has a momentum of 3kg(m/s).

**Definition 2.5** (Fraction Addition Formula). *The sum of two fractions  $\frac{a}{b}$ ,  $\frac{c}{d}$  (where  $b, d \neq 0$ ) is given by:*

$$\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}.$$

Example:

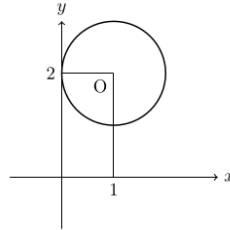
$$\frac{1}{2} + \frac{3}{4} = \frac{(1 \times 4) + (3 \times 2)}{2 \times 4} = \frac{4 + 6}{8} = \frac{10}{8} = \frac{5}{4}.$$

**Definition 2.6** (Equation of a circle). *The equation  $(x - h)^2 + (y - k)^2 = r$  represents a circle centred at  $(h, k)$  with radius  $r$  (see, [14]).*

Example: The equation  $(x - 1)^2 + (y - 2)^2 = 1$  represents a circle centred at  $(1, 2)$  with radius 1.

### 3 ተጫዋች ካርዶች ከነገላጫዎቻቸው (Player Cards with their Jester)

1. extraneous=irrelevant=unrelated=unconnected=inapplicable=peripheral=immaterial.
2. provocative=annoying=irritating=goading=vexing=galling=exasperating.
3. brusque=curt=abrupt=blunt=short=sharp=terse=brisk=crisp=clipped=monosyllabic=indelicate=tactless=offhand=snappish=peremptory.
4. momentum=(mass)x(velocity)=the force required to bring the object to a stop in a unit length of time.
5.  $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$ ,  $b, d \neq 0$ .
6.  $(x - 1)^2 + (y - 2)^2 = 1$ =unit circle centered at  $(1, 2)$ =See Figure 1 below.



**Figure 1:** Circle centered at the  $(1, 2)$  with radius 1.

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