

Batch 373  
Ibadat Ullah  
Part II

SECTION-II  
"QUESTION-NO-06"  
(A)

Let the three digit number is 'ABC'  
we know

ABC, when added.

$$A+B+C = 15 \quad (\text{given}) \rightarrow (1)$$

$$B+C = 12 \quad (\text{given}) \rightarrow (2)$$

$$B-A = 2 \quad (\text{given}) \rightarrow (3)$$

Solution.

Using above equations.

Put (2) in (1).

$$A + 12 = 15$$

$$A = 15 - 12 = 3$$

$$\boxed{A = 3} \rightarrow (4)$$

put (4) in (3).

$$B - 3 = 2$$

$$B = 2 + 3 = 5$$

$$\boxed{B = 5} \rightarrow (5)$$

From (4) & (5) it is clear that  $C = 7$ .

So the number is 357

QNO-06

(B)

Data:Given:

No. of slices = 18

Three pizzas

Ratio of slices 2:3:4,

Ratio of 18 slices 4:6:8

weight per slice = 40 g.

Solution

$$\begin{aligned} \text{total weight} &= 18 \times 40 \text{ g} \\ &= 720 \text{ g (total pizza)} \end{aligned}$$

price of first pizza = 320.

price of 2nd pizza = 480

price of 3rd pizza = 640.

$$320 : 480 : 640$$

$$2 : 3 : 4$$

Given(C)

Diameter of circle = 6 cm

Required

Circumference &amp; Area.



Solution:

$$\text{Circumference} = C = \pi d$$

$$C = 3.14 \times 6$$

$$\boxed{C = 18.84}$$

$$\begin{array}{r} 3.14 \\ \times 6 \\ \hline 18.84 \end{array}$$

$$\text{Area} = \pi r^2 = \pi \left(\frac{d}{2}\right)^2 = 3.14 \times 3^2$$

$$A = 3.14 \times 9$$

$$\text{Area} = A = \boxed{28.26}$$

$$\begin{array}{r} 1.3 \\ 3.14 \\ \times 9 \\ \hline 28.26 \end{array}$$

(D)

$$\text{(i) } 13, 24, 46, 90, 178, \underline{354}$$

$$\begin{array}{r} 1.1 \\ 178 \\ \times 2 \\ \hline 356 \end{array}$$

~~13~~ Double the no. & subtract 2

$$\text{(ii) } 5, 6, 9, 14, 21, \underline{30}$$

$$\begin{array}{r} 356 \\ \times 2 \\ \hline 712 \end{array}$$

Odd no. is added

to each, 1, 3, 5, 7, 9

(QUESTION - NO - OR)

(A)

Given:

Width of room = 60% of length

length of room = l = 15 ft

Then width,  $W = 60\%$  of 15

$$W = \frac{60}{100} \times 15 = \frac{90}{10} = 9$$

$$W = 9 \text{ ft}$$

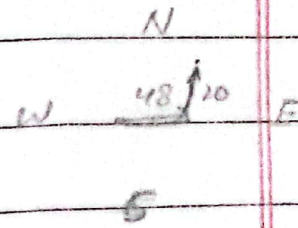
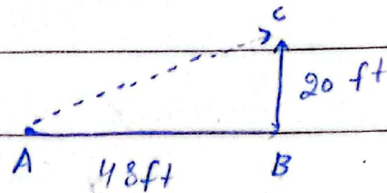


(B)

let the starting point is A

2nd point is B

3rd end point C.



The straight distance covered by her from A to C forms a right angled triangle with unknown Hypotenuse.

we know:

$$H^2 = B^2 + P^2$$

$$H^2 = 48^2 + 20^2$$

$$H^2 = 2304 + 400 = 2704$$

taking square root on b/s.

$$\sqrt{H^2} = \sqrt{2704}$$

$$H = 52$$

If she would have run straight she would run  $\boxed{52}$  ft.

Date: \_\_\_\_\_

Day: \_\_\_\_\_

(C)

Data

No. of Students = 40

Average Marks = 52.15

Number decreased by =  $85 - 49 = 36$

Sol:

Let's divide the remaining marks

by No. of students =  $36 \div 40$

$$= 0.9 \text{ --- (1)}$$

Add (1) to Average marks -

New Average Marks =  $A_n = 52.15 + 0.9$

$$A_n = 53.05$$

Average marks of the class ←

(D)

Probability =  $\frac{\text{No. of people who like chicken pizza}}{\text{Total No. of people}}$

$$p = \frac{25}{37+25+3}$$

$$p = \frac{25}{65} = 0.38$$

probability that a person like chicken pizza is 0.38



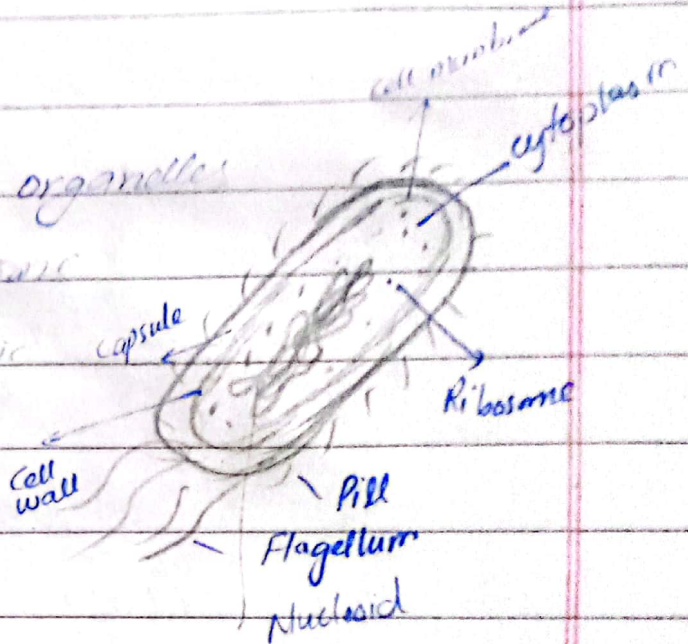
# SECTION - I.

## QUESTION - NO. 05

(A)

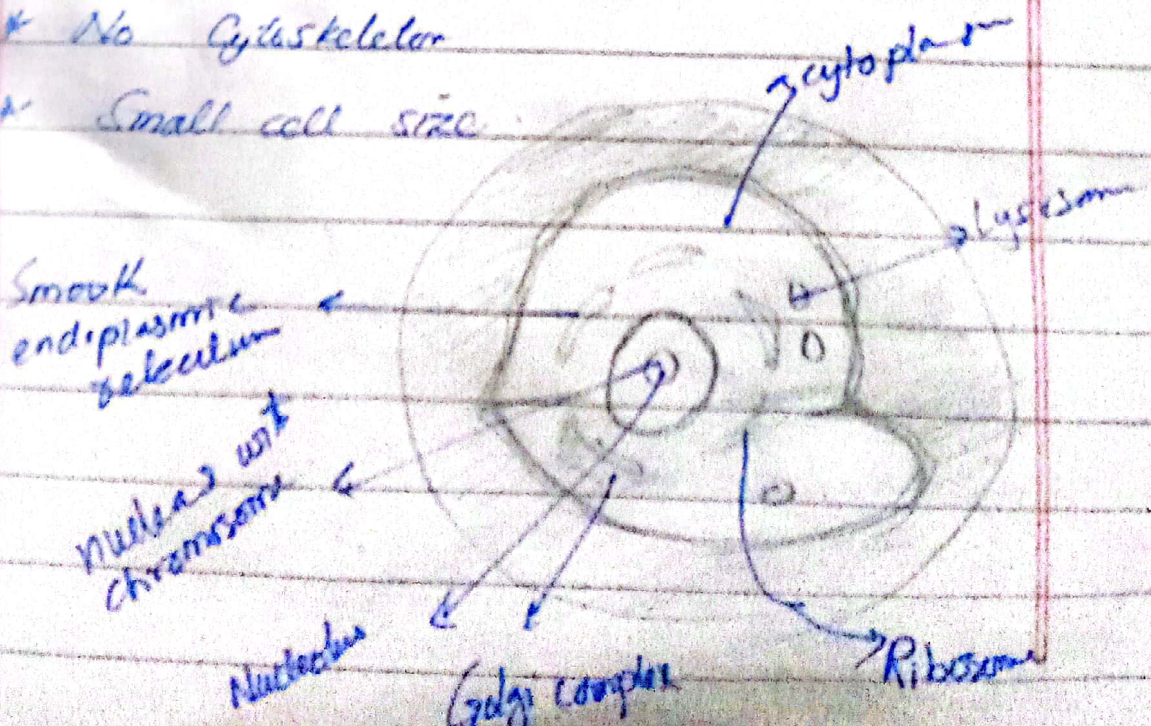
### Eukaryotic Cells

- \* True nucleus
- \* Membrane bound organelles
- \* Linear chromosomes
- \* Mitotic & Meiotic
- \* Cytoskeleton
- \* Large cell size



### Prokaryotic Cell:

- \* No true nucleus
- \* No membrane bound organelles.
- \* Circular chromosomes
- \* Binary Fission
- \* No Cytoskeleton
- \* Small cell size





## (B) Global Warming:

Global Warming refers to the long term rise in global surface temperature of the earth due to the increasing levels of greenhouse gases in the atmosphere. The gases such as carbon dioxide ( $\text{CO}_2$ ), methane ( $\text{CH}_4$ ) and water vapour ( $\text{H}_2\text{O}$ ) trap heat from the sun, leading to a warming effect on the planet.

Global warming is a major aspect of climate change which also includes changes in precipitation patterns, sea level rise and shift in weather extremes.

## Kyoto Protocol:

The Kyoto protocol is an international treaty that aims to reduce greenhouse gas emissions and mitigate global warming.



Adopted in 1997 in Kyoto Japan  
the protocol sets binding emission  
targets for developed countries  
which are required to reduce  
their emission by an average of  
5% below 1990 levels during  
the 2008-2012 commitment period.

### Key Aspects:

- ① Emission Reduction Targets.
- ② Flexibility Mechanisms.
- ③ Compliance and reporting.

### Limitations:

- ① Lack of participation from developing countries e.g. China, India etc.

## (C) GIS [Geographic information system]

A computer based tool that allows  
user to capture, store, analyze and  
display geographically referenced  
data.

GIS integrates spatial data (maps)  
with descriptive data (database)



to provide a powerful tool for decision making and problem solving

### Components:

- ① Hardware
- ② Software
- ③ Data
- ④ people
- ⑤ Methods

### Types: of GIS Data:

- ① Spatial data
- ② Attribute Data
- ③ Raster Data
- ④ Vector Data

### GIS Applications.

- ① Urban planning.
- ② Environmental Management
- ③ Emergency Response
- ④ Transportation planning.
- ⑤ Business & Marketing.

### Advantages:

- ① Improved decision Making.
- ② Increased efficiency.
- ③ Enhanced visualization.
- ④ Better resource Allocation.



(10)

(11)

## Antioxidants:

Substances that help protect cells from damage caused by free radicals, which are unstable molecules that can damage cells and contribute to aging and diseases.

Antioxidants work by neutralizing or mopping up free radicals thereby preventing them from causing harm.

### examples

- ① Vitamin E & C
- ② Beta-carotene
- ③ Selenium
- ④ Polyphenols
- ⑤ Flavonoids.

### Health Benefits:

- ① Reducing Risk of chronic diseases
- ② Protection against cell damage
- ③ Improving cognitive function
- ④ Supporting immune function.