


**OSSC CGL 2022-23**

**E-BOOK- PDF**

**7,000 MCQ**

**EXPLANATION**

**All Important Questions & Answers**



[Click Here](#)

Tech of World

HOME VIDEOS PLAYLISTS COMMUNITY

ଆମ Channel ରେ ଦେଖନ୍ତୁ Video  
ASO ଓଡ଼ିଶା ପୋଷ୍ଟାଲ CT ଓ B.Ed  
ଓଡ଼ିଶା ପୋଲିସ SSC GD Railway

**Tech of World**

SUBSCRIBE

315K subscribers • 928 videos

Hello ସାଙ୍ଗ ମାନେ !! ଆମେ ଏହି Channel ରେ ମୁକ୍ତ ପ୍ରକାରର Educational Video  
Free ରେ ଯୋଗାଇ ଦେଇ ଦେଉଛୁ ଯଦି କିଛି ଏହି "Tech Of World" Channel ରୁ ...

**+2 କିମ୍ବା +3 ପଢ଼ିବା ପରେ  
କେମିତି ଜଣେ ଶିକ୍ଷକ  
ହେଇପାରିବେ ?  
CT ଓ B.Ed ପରେ କଣ ?**

How To Become A Teacher After +2 Or +3 In  
Odisha ? How To Get A Teacher Job In Odisha ?

Tech of World · 176K views · 3 years ago

Home Shorts Subscriptions Library

[Click Here](#)

Tech Of World- (Odisha Exam CT)

Uninstall Open

Your Review

sujit kumar naik  
★★★★★ 6/29/21

Edit your review

Developer contact

About this app

Tech Of World (Odisha Exam) Provides Mock Test & E-Books For Different Exams

Education

3.8 ★ 422 reviews 422 reviews Rated for 3+ 50K+ Downloads

TECH OF WORLD Mock Test

[Click Here](#)

Tech Of World  
4.1K subscribers

ASO English 2022 By...  
8.7 MB PDF

ASO General Knowledge 2022...  
4.9 MB PDF

ASO Math 2022 By Techofworld.In.pdf  
4.6 MB PDF

ASO Odia Language 2022 By...  
2.9 MB PDF

ASO Reasoning 2022 By...  
4.6 MB PDF

3 comments

Broadcast

[Click Here](#)

Roll No: Techofworld.In  
Registration No: Techofworld.In  
Name: Techofworld.In  
Exam Date: 09-Feb-2022  
Exam Time: 14:00-15:30  
Post Name: Paper - II

Registered Photo



Exa

**Mathematics - Mathematics****Question No.1**

A, B, C together started a business. A invested Rs.6200 for 5 months B invested Rs.7200 for 4 months and C Rs.8200 for 3 months. If they get a total profit of Rs.12660. Find the share of B. (In Rs.)

- (A)  4220  
(B)  4320 (Correct Answer) (Chosen option)  
(C)  4420  
(D)  4520

**Question No.2**

If  $12a=13b$  and  $9b=12c$ , find a:b:c.

- (A)  14:12:9  
(B)  15:14:9  
(C)  16:12:9  
(D)  13:12:9 (Correct Answer) (Chosen option)

**Question No.3**

If the mean of numbers 50, 64, 100, 126 and X is 81, what is the mean of 70, 84, 120, 146 and x?

- (A)  101  
(B)  99  
(C)  103  
(D)  97 (Correct Answer) (Chosen option)

**Question No.4**

Find the mode.

63, 71, 55, 63, 59, 67, 59, 67, 64, 63

- (A)  67  
(B)  63 (Correct Answer) (Chosen option)  
(C)  65  
(D)  61

## Question No.5

Marks: 1.00

Bookmark 

Find the value of  $a^2+b^2$ , given  $(a+b)^2 = 3844$  and  $ab=960$ .

- (A)  2124  
(B)  1824  
(C)  2024  
(D)  1924 (Correct Answer) (Chosen option)

## Question No.6

Marks: 1.00

Bookmark 

A sum of money at simple interest amounts to Rs.6090 in 3 years and Rs.6720 in 4 years. Find the sum.(in Rs)

- (A)  4400  
(B)  4300  
(C)  4200 (Correct Answer)  
(D)  4100

## Question No.7

Marks: 1.00

Bookmark 

Find the smallest square number that is divisible by each of the numbers 8, 15 and 16.

- (A)  3800  
(B)  3500  
(C)  3600 (Correct Answer) (Chosen option)  
(D)  3700

## Question No.8

Marks: 1.00

Bookmark 

An article is bought for Rs.25000 and sold at a loss of 15%. Find its selling price.(in Rs)

- (A)  23250  
(B)  21250 (Correct Answer) (Chosen option)  
(C)  22250  
(D)  20250

## Question No.9

Marks: 1.00

Bookmark 

The salaries of A, B and C are in the ratio of 7:8:15. If their total salary is Rs.3930, find the salary received by C.(in Rs)

- (A)  1965 (Correct Answer) (Chosen option)  
(B)  1985  
(C)  1975  
(D)  1995

## Question No.10

Marks: 1.00

Bookmark 

Find the least number with which you would divide 11979, to get a perfect square.

- (A)  7

- (B)  9  
(C)  13  
(D)  11 (Correct Answer)

**Question No.11**

Marks: 1.00

Bookmark 

Find the smallest number by which 4608 must be multiplied to obtain a perfect cube.

- (A)  24 (Correct Answer)  
(B)  26  
(C)  22  
(D)  28

**Question No.12**

Marks: 1.00

Bookmark 

A, B and C invested Rs.9450, Rs.7560 and Rs.5670 respectively, in a partnership business. Find the share of A in profit of Rs.3060 after a year. (In Rs.)

- (A)  1275 (Correct Answer) (Chosen option)  
(B)  1475  
(C)  1175  
(D)  1375

**Question No.13**

Marks: 1.00

Bookmark 

From a point X on a level ground, the angle of elevation of the top tower is  $60^\circ$ . If the distance between top of the tower and the point X is 1400 m, find the height of the tower. (in m and use  $\sqrt{3} = 1.73$ )

- (A)  1211 (Correct Answer)  
(B)  1411  
(C)  1311  
(D)  1111

**Question No.14**

Marks: 1.00

Bookmark 

Let's consider the data:  
39, 35, 28, 31, 35, 45, 35, 39, 38  
What is the median?

- (A)  39  
(B)  33  
(C)  37  
(D)  35 (Correct Answer) (Chosen option)

**Question No.15**

Marks: 1.00

Bookmark 

By selling a table for Rs.1820, a shopkeeper loses 30%. At what price should he sell it to gain 30%?(in Rs.)

- (A)  3580  
(B)  3680

- (C)  3380 (Correct Answer) (Chosen option)  
(D)  3480

**Question No.16**

Marks: 1.00

Bookmark 

A mobile is bought for Rs.4300 and sold at Rs.4945. Find the gain percentage.

- (A)  13  
(B)  17  
(C)  19  
(D)  15 (Correct Answer) (Chosen option)

**Question No.17**

Marks: 1.00

Bookmark 

Find the unit digit in the product  $(2422 \times 3934 \times 4296 \times 9313)$ .

- (A)  6  
(B)  2  
(C)  4 (Correct Answer) (Chosen option)  
(D)  3

**Question No.18**

Marks: 1.00

Bookmark 

The average weight of 40 bags in a godown is 170.5 kg and that of the remaining 20 bags is 35 kg. Find the average weight of all the bags in the godown.(in kg - rounding off to two decimals)

- (A)  115.34  
(B)  95.34  
(C)  125.34 (Correct Answer) (Chosen option)  
(D)  105.34

**Question No.19**

Marks: 1.00

Bookmark 

Find the smallest number by which 17280 must be divided to obtain a perfect cube.

- (A)  14  
(B)  8  
(C)  12  
(D)  10 (Correct Answer)

**Question No.20**

Marks: 1.00

Bookmark 

From a point X on a level ground, the angle of elevation of the top tower is  $45^\circ$ . If the tower is 1685 m high, find the distance of point X from the foot of the tower.(in m and use  $\sqrt{2} = 1.41$ )

- (A)  1785  
(B)  1585  
(C)  1685 (Correct Answer)  
(D)  1485

## Question No.21

Marks: 1.00

Bookmark 

A and B invest in a business in the ratio 3:2. If 10% of the total profit goes to charity and A's share is Rs. 1404, find the total profit. (In Rs.)

- (A)  2700  
(B)  2600 (Correct Answer)  
(C)  2800  
(D)  2500

## Question No.22

Marks: 1.00

Bookmark 

A number when divided by 24, 36 and 48, leaves the remainder 9 in each case. Find the smallest possible number.

- (A)  163  
(B)  143  
(C)  173  
(D)  153 (Correct Answer) (Chosen option)

## Question No.23

Marks: 1.00

Bookmark 

X began business with Rs.66000 and was joined afterwards by Y with Rs.44000. Find after how many months did Y join, if the profits at the end of the year were divided in the ratio of 9:4.

- (A)  6  
(B)  10  
(C)  8 (Chosen option)  
(D)  4 (Correct Answer)

## Question No.24

Marks: 1.00

Bookmark 

At the end of two years what will be the compound interest at the rate of 10% p.a. on an amount of Rs.6200?

- (A)  1402  
(B)  1202  
(C)  1302 (Correct Answer) (Chosen option)  
(D)  1102

## Question No.25

Marks: 1.00

Bookmark 

If  $a = 32$  and  $b = 18$ , then find the value of  $a^2 - b^2$ .

- (A)  720  
(B)  700 (Correct Answer) (Chosen option)  
(C)  710  
(D)  730

## Question No.26

Marks: 1.00

The ratio of three numbers is 13:14:15 and their sum is 1974. Find the second number of the three numbers.

- (A)  678  
(B)  648  
(C)  668  
(D)  **658 (Correct Answer)** (Chosen option)

#### Question No.27

Which of the following numbers is divisible by 12?

- (A)  29444  
(B)  31444  
(C)  **30444 (Correct Answer)** (Chosen option)  
(D)  32444

#### Question No.28

Given  $a^2 - b^2 = 1452$  and  $a + b = 242$ , then find the value of  $a - b$ .

- (A)  3  
(B)  **6 (Correct Answer)** (Chosen option)  
(C)  4  
(D)  5

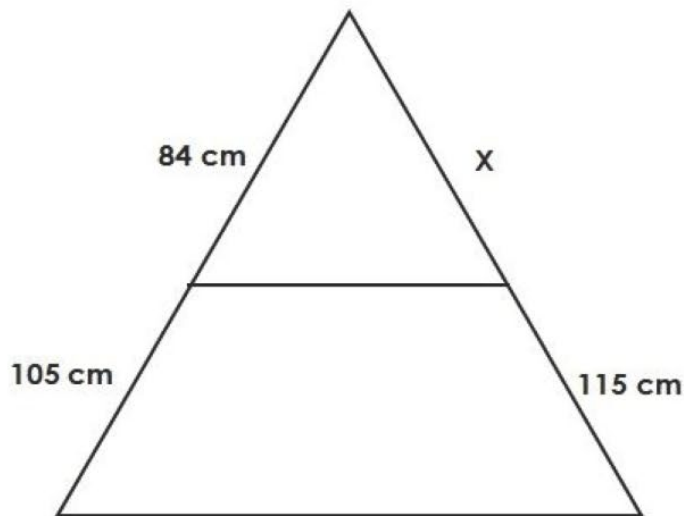
#### Question No.29

A dealer bought a washing machine for Rs.18300 and sold at a gain of 15%. Find its selling price.(in Rs)

- (A)  **21045 (Correct Answer)** (Chosen option)  
(B)  19945  
(C)  20045  
(D)  22045

#### Question No.30

From the given figure find X. (In cm)



- (A)  94  
(B)  96  
(C)  92 (Correct Answer)  
(D)  98

**Question No.31**

Marks: 1.00

Bookmark 

Two supplementary angles are in the ratio 1:5. Find the larger angle measures. (In degree)

- (A)  150 (Correct Answer) (Chosen option)  
(B)  130  
(C)  140  
(D)  160

**Question No.32**

Marks: 1.00

Bookmark 

If 73% of a number is added to 351, then the result is the number itself. Find the number.

- (A)  1500  
(B)  1400  
(C)  1200  
(D)  1300 (Correct Answer) (Chosen option)

**Question No.33**

Marks: 1.00

Bookmark 

Find the remainder, when 643928 is divided by 9.

- (A)  5 (Correct Answer) (Chosen option)  
(B)  8



- (C)  3  
(D)  7

**Question No.34**

Marks: 1.00

Bookmark 

In a moderately asymmetrical series, the values of arithmetic mean and median are 31 and 29.5. What is the value of the mode?

- (A)  28.5  
(B)  27.5  
(C)  25.5  
(D)  26.5 (Correct Answer)

**Question No.35**

Marks: 1.00

Bookmark 

If the sum of the measure of the interior angle of polygon is 7380, find the number of sides of the polygon.

- (A)  43 (Correct Answer)  
(B)  45  
(C)  41  
(D)  47

**Question No.36**

Marks: 1.00

Bookmark 

The ratio of two numbers is 7:8 and their sum is 525. Find the greater of the two numbers.

- (A)  300  
(B)  290  
(C)  270 (Chosen option)  
(D)  280 (Correct Answer)

**Question No.37**

Marks: 1.00

Bookmark 

What value will come in the place of question mark(?) in the following equation?

$$\sqrt{3844} + \sqrt{3249} = ?$$

- (A)  129  
(B)  119 (Correct Answer) (Chosen option)  
(C)  109  
(D)  99

**Question No.38**

Marks: 1.00

Bookmark 

Find the LCM of  $\frac{32}{33}$  and  $\frac{33}{34}$ .

- (A)  1056 (Correct Answer) (Chosen option)  
(B)  1156  
(C)  1256  
(D)  956

## Question No.39

Marks: 1.00

Bookmark 

The average weight of 22 box in a boat is 88 kg, it gets increased by 1 kg when a new box is added to the boat. Find the weight of the new box.(in kg)

- (A)  111 (Correct Answer) (Chosen option)  
(B)  113  
(C)  107  
(D)  109

## Question No.40

Marks: 1.00

Bookmark 

A right angled triangle has a height 'a = 129 cm', base 'b = 172 cm' and hypotenuse 'c'. Find the value of c. (In cm)

- (A)  205  
(B)  235  
(C)  215 (Correct Answer)  
(D)  225

## Question No.41

Marks: 1.00

Bookmark 

Find the greatest three digit number which is divisible by 13, 39 and 52.

- (A)  926  
(B)  906  
(C)  916  
(D)  936 (Correct Answer)

## Question No.42

Marks: 1.00

Bookmark 

18225 plants are to be planted in a garden in such a way that each row contains as many plants as the number of rows. Find the number of rows and the number of plants in each row

- (A)  135 (Correct Answer)  
(B)  133  
(C)  137  
(D)  139

## Question No.43

Marks: 1.00

Bookmark 

Find the value of  $a^3+b^3$ , given that  $3a^2b+3ab^2= 24192$  and  $a+b = 32$ .

- (A)  8676  
(B)  8376  
(C)  8476  
(D)  8576 (Correct Answer)

## Question No.44

Marks: 1.00

Bookmark 

The LCM of two numbers is 132 and their H.C.F is 11, find the product of two numbers.

- (A)  1652  
(B)  1752  
(C)  1552  
(D)  **1452 (Correct Answer)** (Chosen option)

**Question No.45**

Marks: 1.00

Bookmark 

Which of the following is a perfect cube?

- (A)  **4096 (Correct Answer)** (Chosen option)  
(B)  4396  
(C)  4296  
(D)  4196

**Question No.46**

Marks: 1.00

Bookmark 

Find the sum invested at compound interest at 20% per annum which will amount to Rs.3168 in 2 years.

- (A)  **2200 (Correct Answer)**  
(B)  2400  
(C)  2100  
(D)  2300

**Question No.47**

Marks: 1.00

Bookmark 

Find the cube root of 32768 by prime factorisation method.

- (A)  **32 (Correct Answer)** (Chosen option)  
(B)  38  
(C)  34  
(D)  36

**Question No.48**

Marks: 1.00

Bookmark 

If 20% of a certain number is 1480, then what is 90% of that number?

- (A)  6860  
(B)  **6660 (Correct Answer)** (Chosen option)  
(C)  6960  
(D)  6760

**Question No.49**

Marks: 1.00

Bookmark 

Find the simple interest on Rs.5500 at 5% per annum for 12 years.(in Rs)

- (A)  3100  
(B)  **3300 (Correct Answer)** (Chosen option)  
(C)  3200  
(D)  3400

## Question No.50

Marks: 1.00

Bookmark 

Which of the following is divisible by 3?

- (A)  **378681 (Correct Answer)** (Chosen option)  
(B)  378683  
(C)  378680  
(D)  378682

## General Science - General Science

## Question No.1

Marks: 1.00

Bookmark 

What is the magnitude of a constant force acting on a 3 kg mass body that changes its speed from 2.0 m/s to 3.5 m/s in 25 seconds without changing the direction of motion of the body?

- (A)  18 N  
(B)  1.8 N  
(C)  **0.18 N (Correct Answer)**  
(D)  0.018 N

## Question No.2

Marks: 1.00

Bookmark 

What is the peak current in an ac circuit if the root mean square value of current is 10 A?

- (A)  20 A  
(B)  **14.14 A (Correct Answer)**  
(C)  100 A  
(D)  10.0 A

## Question No.3

Marks: 1.00

Bookmark 

Which of the following is the ability of metals to be drawn into thin wires?

- (A)  Conductivity (Chosen option)  
(B)  Malleability  
(C)  Lustre  
(D)  **Ductility (Correct Answer)**

## Question No.4

Marks: 1.00

Bookmark 

Ethanal reacts with alkali to give 3-hydroxy butanal. The reaction is \_\_\_\_\_.

- (A)  Polymerisation  
(B)  Reimer-Tiemann reaction  
(C)  Claisen condensation  
(D)  **Aldol condensation (Correct Answer)**

## Question No.5

Marks: 1.00

Bookmark 

What is the total linear momentum of the system, if the total external force on the

system is zero?

- (A)  **Constant (Correct Answer)**  
(B)  Keeps changing  
(C)  Negative value  
(D)  Zero

**Question No.6**

Marks: 1.00

Bookmark 

What is the colour of insulation of live wire of the main electric power supply?

- (A)  Green  
(B)  Yellow  
(C)  **Red (Correct Answer)**  
(D)  Black

**Question No.7**

Marks: 1.00

Bookmark 

Which one is a monocotyledon crop?

- (A)  Blackgram  
(B)  **Rice (Correct Answer)**  
(C)  Groundnut  
(D)  Cotton (Chosen option)

**Question No.8**

Marks: 1.00

Bookmark 

Which of the following methods of expressing concentration is independent of temperature?

- (A)  Formality  
(B)  Molarity  
(C)  **Molality (Correct Answer)**  
(D)  Normality

**Question No.9**

Marks: 1.00

Bookmark 

The response of plants to the relative length of day and night is known as \_\_\_\_\_.

- (A)  Geotropism  
(B)  Vernalisation  
(C)  **Photoperiodism (Correct Answer)** (Chosen option)  
(D)  Thermotropism

**Question No.10**

Marks: 1.00

Bookmark 

Which among the following processes refers to the development of an embryo from the zygote?

- (A)  **Embryogenesis (Correct Answer)**  
(B)  Fertilization (Chosen option)  
(C)  Spermatogenesis

(D)  Oogenesis

**Question No.11**

Marks: 1.00

Bookmark 

Which Kepler law states that all planets move in elliptical orbits with the Sun situated at one of the foci of the ellipse?

- (A)  Law of areas  
(B)  **Law of orbits (Correct Answer)** (Chosen option)  
(C)  Law of periods  
(D)  Law of forces

**Question No.12**

Marks: 1.00

Bookmark 

Plants that complete their life cycle for a period of more than two years is termed as \_\_\_\_\_.

- (A)  Annual crops (Chosen option)  
(B)  Biennial crops  
(C)  Sequential crops  
(D)  **Perennial crops (Correct Answer)**

**Question No.13**

Marks: 1.00

Bookmark 

Which among the following are the parts of the hindbrain?

- (A)  Thalamus  
(B)  Hypothalamus  
(C)  **Cerebellum (Correct Answer)** (Chosen option)  
(D)  Cerebrum

**Question No.14**

Marks: 1.00

Bookmark 

Which of the following hormones regulates a 24-hour rhythm of the body?

- (A)  **Melatonin (Correct Answer)**  
(B)  Thyroxine (Chosen option)  
(C)  Vasopressin  
(D)  Oxytocin

**Question No.15**

Marks: 1.00

Bookmark 

Which of the following Phylum includes asymmetrical organisms?

- (A)  Annelida  
(B)  Arthropoda  
(C)  Mollusca  
(D)  **Porifera (Correct Answer)**

**Question No.16**

Marks: 1.00

Bookmark

How much energy is given to each coulomb of charge passing through a 6 V battery?

- (A)  0.6 J  
(B)  600 J  
(C)  **6 J (Correct Answer)**  
(D)  60 J

**Question No.17**

Marks: 1.00

Bookmark

Which among the following is the scientific name for a human being?

- (A)  Oryza sativa  
(B)  Bos taurus  
(C)  Canis lupus familiaris  
(D)  **Homo sapiens (Correct Answer)** (Chosen option)

**Question No.18**

Marks: 1.00

Bookmark

In which of the following unicellular organisms, the cell has a definite shape and food is taken in at a specific spot?

- (A)  Streptococcus  
(B)  **Paramecium (Correct Answer)**  
(C)  Blue-green algae  
(D)  Bacteria

**Question No.19**

Marks: 1.00

Bookmark

Which of the following products forms when heating Gypsum at 373 K?

- (A)  **Plaster of Paris (Correct Answer)** (Chosen option)  
(B)  Baking soda  
(C)  Washing Soda  
(D)  Milk of magnesia

**Question No.20**

Marks: 1.00

Bookmark

In a collision between two bodies, the total impulse on the bodies are \_\_\_\_\_.

- (A)  Unequal and opposite direction  
(B)  Unequal and in same direction  
(C)  Equal and in same direction  
(D)  **Equal and opposite direction (Correct Answer)**

**Question No.21**

Marks: 1.00

Bookmark

Which among the following is a key concept of Darwin's theory of evolution?

- (A)  Cell Division  
(B)  **Natural Selection (Correct Answer)**  
(C)  Availability Management  
(D)  Functional Change (Chosen option)

## Question No.22

Marks: 1.00

Bookmark 

The pH value of 7 indicates \_\_\_\_\_.

- (A)  **Neutral (Correct Answer)** (Chosen option)  
(B)  Strong Alkaline  
(C)  Weak Alkaline  
(D)  Strong Acid

## Question No.23

Marks: 1.00

Bookmark 

What is the mass number of an atom that has 3 protons, 4 neutrons and 3 electrons?

- (A)  3  
(B)  4  
(C)  6  
(D)  **7 (Correct Answer)**

## Question No.24

Marks: 1.00

Bookmark 

Which one is temperate fruit crop?

- (A)  Guava  
(B)  **Apple (Correct Answer)**  
(C)  Banana  
(D)  Sapota

## Question No.25

Marks: 1.00

Bookmark 

Which of the following tissues helps in transporting the water in plants?

- (A)  Nerve tissue  
(B)  Epithelial tissue  
(C)  Phloem tissue  
(D)  **Xylem tissue (Correct Answer)** (Chosen option)

## Question No.26

Marks: 1.00

Bookmark 

Which of the following principles explains evolution through algebraic equations?

- (A)  Charles Darwin Principle (Chosen option)  
(B)  Principles of Nature  
(C)  Natural Science Principle  
(D)  **Hardy-Weinberg principle (Correct Answer)**

## Question No.27

Marks: 1.00

Bookmark 

Which of the following types of solid has the tendency to flow?

- (A)  Molecular Solid  
(B)  **Amorphous Solid (Correct Answer)**



- (C)  Metallic Solid  
(D)  Ionic Solid

**Question No.28**

Marks: 1.00

Bookmark 

Which of the following minerals is required for the thyroid gland to make thyroxine hormone?

- (A)  Copper  
(B)  Zinc  
(C)  Iron  
(D)  Iodine (Correct Answer) (Chosen option)

**Question No.29**

Marks: 1.00

Bookmark 

What is the packing efficiency of hexagonal close packed structure?

- (A)  68%  
(B)  74% (Correct Answer)  
(C)  52.4%  
(D)  25%

**Question No.30**

Marks: 1.00

Bookmark 

Who among the following found out the relationship between the current  $I$  flowing in a metallic wire and the potential difference  $V$  across its terminals?

- (A)  Marie Curie  
(B)  John Hopkinson  
(C)  Charles Coulomb (Chosen option)  
(D)  Georg S Ohm (Correct Answer)

**Question No.31**

Marks: 1.00

Bookmark 

Where does the break-down of glucose (a six-carbon molecule) into a three-carbon molecule take place?

- (A)  Mitochondria (Chosen option)  
(B)  Cytoplasm (Correct Answer)  
(C)  Golgi Apparatus  
(D)  Cell Wall

**Question No.32**

Marks: 1.00

Bookmark 

Which among the following plastids stores carbohydrates?

- (A)  Chloroplasts (Chosen option)  
(B)  Amyloplasts (Correct Answer)  
(C)  Aleuroplasts  
(D)  Elaioplasts

## Question No.33

Marks: 1.00

Bookmark 

A branch of Agricultural science deals with development of varieties is called \_\_\_\_\_.

- (A)  **Plant Breeding and Genetics (Correct Answer)**  
(B)  Plant Physiology  
(C)  Agricultural Entomology (Chosen option)  
(D)  Plant Pathology

## Question No.34

Marks: 1.00

Bookmark 

Which is the lowest category in the hierarchy of classification?

- (A)  Family  
(B)  Class  
(C)  **Species (Correct Answer)**  
(D)  Genus (Chosen option)

## Question No.35

Marks: 1.00

Bookmark 

Which of the following is the correct expression of the Mirror Formula?

- (A)   $(1/u)-(1/v)=(1/f)$   
(B)   $u+v=f$   
(C)   **$(1/u)+(1/v)=(1/f)$  (Correct Answer)**  
(D)   $u-v=f$

## Question No.36

Marks: 1.00

Bookmark 

Which of the following lens is used to correct Hypermetropia?

- (A)  Bipolar lens  
(B)  Concave lens (Chosen option)  
(C)  **Convex lens (Correct Answer)**  
(D)  Unipolar lens

## Question No.37

Marks: 1.00

Bookmark 

How many number of atoms are present in a body centered cubic unit cell?

- (A)  8  
(B)  **2 (Correct Answer)**  
(C)  3  
(D)  4

## Question No.38

Marks: 1.00

Bookmark 

The solids with conductivities ranging between  $10^{-6}$  to  $10^4 \text{ ohm}^{-1}\text{m}^{-1}$  are called \_\_\_\_\_.

- (A)  **Semiconductors (Correct Answer)**  
(B)  Conductors

- (C)  Insulators  
(D)  Non-Conductors

**Question No.39**

Marks: 1.00

Bookmark 

Which antibody is secreted by the mother during the initial days of lactation to protect the infant?

- (A)  IgG  
(B)  IgM (Chosen option)  
(C)  **IgA (Correct Answer)**  
(D)  IgE

**Question No.40**

Marks: 1.00

Bookmark 

Linear molecule among the following is \_\_\_\_\_.

- (A)  H<sub>2</sub>O  
(B)  **CO<sub>2</sub> (Correct Answer)**  
(C)  NH<sub>3</sub>  
(D)  BF<sub>3</sub>

**Question No.41**

Marks: 1.00

Bookmark 

Who among the following modified the cell theory formulated by Schleiden and Schwann?

- (A)  Robert Brown  
(B)  Schwann  
(C)  Schleiden  
(D)  **Rudolf Virchow (Correct Answer)** (Chosen option)

**Question No.42**

Marks: 1.00

Bookmark 

Egg plant is otherwise called \_\_\_\_\_.

- (A)  Carrot  
(B)  Radish  
(C)  Bhendi  
(D)  **Brinjal (Correct Answer)**

**Question No.43**

Marks: 1.00

Bookmark 

Which of the following is Chloropropane?

- (A)  Alkynes  
(B)  Alkenes  
(C)  **Haloalkane (Correct Answer)**  
(D)  Aldehyde

**Question No.44**

Marks: 1.00

Bookmark 

The pH value of zero indicates \_\_\_\_\_.

- (A)  Neutral
- (B)  Weak Acid (Chosen option)
- (C)  Strong Acid (Correct Answer)
- (D)  Strong Alkaline

**Question No.45**

Marks: 1.00

Bookmark What is the common name of  $\text{CaOCl}_2$ ?

- (A)  Caustic Soda
- (B)  Washing Soda
- (C)  Baking Soda
- (D)  Bleaching Powder (Correct Answer) (Chosen option)

**Question No.46**

Marks: 1.00

Bookmark 

What is the atomic number of an atom that has 4 protons, 5 neutrons and 4 electrons?

- (A)  5
- (B)  4 (Correct Answer)
- (C)  8
- (D)  9

**Question No.47**

Marks: 1.00

Bookmark In the molecule  $\text{C}_{60}$ , each carbon is \_\_\_\_\_.

- (A)   $\text{sp}^3$  hybridised
- (B)   $\text{dsp}^2$  hybridised
- (C)   $\text{sp}$  hybridised
- (D)   $\text{sp}^2$  hybridised (Correct Answer)

**Question No.48**

Marks: 1.00

Bookmark 

Rearing of Honeybees is known as \_\_\_\_\_.

- (A)  Apiculture (Correct Answer) (Chosen option)
- (B)  Sericulture
- (C)  Pisciculture
- (D)  Arboriculture

**Question No.49**

Marks: 1.00

Bookmark 

Among these which is not one of the three bones which amplifies the vibrations received by the eardrum?

- (A)  Stirrup
- (B)  Anvil

- (C)  Hammer  
(D)  **Pinna (Correct Answer)**

**Question No.50**

Marks: 1.00

Bookmark 

Which of the following types of solids have sharp melting point?

- (A)  Non Crystalline Solids  
(B)  Pseudo Solids  
(C)  **Crystalline Solids (Correct Answer)**  
(D)  Amorphous Solids

**Question No.51**

Marks: 1.00

Bookmark 

Momentum of a body is/has \_\_\_\_\_ to its mass.

- (A)  Inversely proportional  
(B)  **Directly proportional (Correct Answer) (Chosen option)**  
(C)  Equal  
(D)  no relation

**Question No.52**

Marks: 1.00

Bookmark 

Widal test is used to diagnose \_\_\_\_\_.

- (A)  Malaria  
(B)  Pneumonia  
(C)  **Typhoid fever (Correct Answer) (Chosen option)**  
(D)  Cholera

**Question No.53**

Marks: 1.00

Bookmark 

Which of the following metals cannot be extracted by carbon reduction process?

- (A)  Zn  
(B)  Pb  
(C)  **Al (Correct Answer)**  
(D)  Hg

**Question No.54**

Marks: 1.00

Bookmark 

Which one of the following is a secondary nutrient element?

- (A)  Zn  
(B)  **Mg (Correct Answer)**  
(C)  Mn  
(D)  K

**Question No.55**

Marks: 1.00

Bookmark 

SRI method of cultivation is followed in \_\_\_\_\_.

- (A)  Sugarcane
- (B)  Groundnut
- (C)  Maize
- (D)  **Rice (Correct Answer)**

**Question No.56**

Marks: 1.00

Bookmark 

Which among the following is an example of Geostationary satellites?

- (A)  DMSP
- (B)  Landsat
- (C)  **INSAT group (Correct Answer)**
- (D)  SPOT

**Question No.57**

Marks: 1.00

Bookmark 

Metal carbonate on reaction with dilute acid releases \_\_\_\_\_.

- (A)  H<sub>2</sub>
- (B)  H<sub>2</sub>O
- (C)  CO
- (D)  **CO<sub>2</sub> (Correct Answer)**

**Question No.58**

Marks: 1.00

Bookmark 

In which of the following countries, the famous botanical garden Kew is located?

- (A)  **England (Correct Answer)**
- (B)  Afghanistan
- (C)  Pakistan
- (D)  West Indies

**Question No.59**

Marks: 1.00

Bookmark 

Which among the following is a form of extensions of mesosomes?

- (A)  Fimbriae
- (B)  **Vesicles (Correct Answer)**
- (C)  Filament (Chosen option)
- (D)  Pili

**Question No.60**

Marks: 1.00

Bookmark 

What is the time difference between the actual sunset and the apparent sunset from the observer's eye on the earth?

- (A)  **2 minutes (Correct Answer)**
- (B)  5 minutes
- (C)  3 minutes
- (D)  1 minute

**Question No.61**

Marks: 1.00

Bookmark 

The slope of force - displacement graph gives the \_\_\_\_\_ of the body.

- (A)  Momentum (Chosen option)  
(B)  Acceleration  
(C)  Impulse  
(D)  **Force gradient (Correct Answer)**

**Question No.62**

Marks: 1.00

Bookmark 

What is the electric field inside the sphere of a spherical conductor of radius 12 cm that has a charge of  $1.6 \times 10^{-7}$  C distributed uniformly on its surface?

- (A)   $4.4 \times 10^4$  N / C  
(B)   $44 \times 10^4$  N / C  
(C)  **Zero (Correct Answer)**  
(D)   $8.8 \times 10^4$  N / C

**Question No.63**

Marks: 1.00

Bookmark 

What is the position of image formed by a concave mirror if the position of the object is at infinity?

- (A)  Beyond Centre of Curvature C  
(B)  **At the Focus F (Correct Answer)**  
(C)  At infinity  
(D)  At Centre of Curvature C

**Question No.64**

Marks: 1.00

Bookmark 

Who among the following has first recognised that all bodies, irrespective of their masses, are accelerated towards the earth with a constant acceleration?

- (A)  Faraday  
(B)  **Galileo (Correct Answer)**  
(C)  Einstein  
(D)  Marie Curie

**Question No.65**

Marks: 1.00

Bookmark 

When a fluid is at rest, what is the value of resultant horizontal forces?

- (A)  **Zero (Correct Answer)**  
(B)  Infinite  
(C)  Negative value  
(D)  Weight of the fluid

**Question No.66**

Marks: 1.00

Bookmark 

Which law states that "energy can neither be created nor destroyed but can be

transformed from one form to another"?

- (A)  Newton's laws
- (B)  Kepler's Laws
- (C)  Work energy theorem
- (D)  **Law of conservation of energy (Correct Answer)** (Chosen option)

#### Question No.67

AIP (Aluminium Phosphide) is an example of \_\_\_\_\_.

- (A)  **Semiconductor (Correct Answer)** (Chosen option)
- (B)  Conductor
- (C)  Insulator
- (D)  Non-Conductor

#### Question No.68

Which of the following parts of the human body regulates the exit of the waste material?

- (A)  Retina
- (B)  **Anal sphincter (Correct Answer)** (Chosen option)
- (C)  Pericardium
- (D)  Lymph

#### Question No.69

Which among the following statements is correct with respect to acceleration of an object?

- (A)  A particle in one-dimensional motion with varying speed has zero acceleration
- (B)  A particle in one-dimensional motion with zero speed may have non-zero velocity
- (C)  A particle in one-dimensional motion with positive value of acceleration must be speeding up
- (D)  **A particle in one-dimensional motion with zero speed at an instant may have non-zero acceleration at that instant (Correct Answer)**

#### Question No.70

The yearly sequence and spatial arrangement of crops is known as \_\_\_\_\_.

- (A)  **Cropping pattern (Correct Answer)**
- (B)  Cropping system
- (C)  Mixed cropping
- (D)  Intercropping