GC INTERNATIONAL STEM OLYMPIAD - LEVEL TWO SAMPLE PAPER

Question 1

Which combination is correct to display "*" symbol?

a) Num Lock + 8

b) Shift + 8

c) Alt + 8

d) Caps Lock + 8

Key: B

Question 2

Identify the type of printer with the help of the description given below:

(i) It prints output from a computer a complete line at a time rather than character by character

(ii) It is an impact printer which makes use of a continuous feed of paper

(iii) It uses a single-color ribbon as their image source, producing output that can range close to 200 dots per inch

a)

b)

c)

d)

Key: C

Question 3

Apsara was preparing her assignment in MS-Excel, and she mistakenly repeated some of the values two-three times and when she realized her mistake, there were almost 80 records in that column. Now, which of the following MS-Excel tool will help her out to identify the repeated data in that particular column?

a) Conditional Formatting ▾

b) Cell Styles ▾

c) Format ▾

d) Find & Select ▾

Key: A

Question 4

Fill in the blank:
_____ is a cursor control device used to control on-screen movement.

a) Joystick

b) Keyboard

c) Plotter

d) Monitor

Key: A

Question 5

How many times during the day do the hands of a clock overlap?

A.22

B.12

C.24

D.23

Key: A

Question 6

Choose the correct sentence:

a) UPS is the brain of the computer system
b) Plotter is used to copy an image into the computer's memory
c) Touch Screen is an input as well as output device
d) Printer is used to scan any document

Key: C

Question 7

Which of the following statement is correct in context with Software?

Statement 1: It is a collection of data or computer instructions that tell the computer how to work
Statement 2: There are two main types of software
Statement 3: Microsoft Windows and Windows Media Player are the examples of software

a) Statement 2 and Statement 3 are correct
b) Statement 1 and Statement 3 are correct
c) Statement 1 and Statement 2 are correct
d) All the statements are correct

Key: D

Question 8

Identify the correct option based on the description given below:
I.   An input device commonly used to control the movement of a cursor on a video screen or video games.
II. It consists of a stick that pivots on a base and reports its angle or direction for controlling.

a)

b)

c)

d)

Key: C

Question 9

Udit heard about the "Disk Defragment" for the first time and he did not know about this accessory program. So, he asked his teacher about its use. What according to you would have been told by his teacher?

a) It is a utility included with Microsoft Windows operating systems and is used to view the characters in any installed font, to check what keyboard input (Alt code) is used to enter those characters, and to copy characters to the clipboard in lieu of typing them.

b) It allows you to capture portions of your screen using four methods and then save these snips as a JPG, GIF, PNG, or MHT file. The capture methods that can be used to take snips are free-form, rectangular, window, and full-screen

c) It is a utility built into Windows removes temporary, cache and log files created by the operating system and other programs - never your documents, media or programs themselves.

d) It is a utility in Microsoft Windows designed to increase access speed by rearranging files stored on a disk to occupy contiguous storage locations, a technique called defragmentation.

Key: D

Question 10

What is the sum of the given coins?

a) 10   b) 12   c) 14

Key: B

Question 11

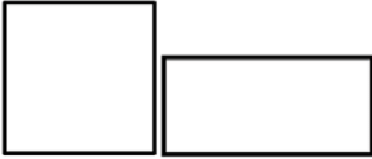Manu bought a laptop bag for Rs. 225 and a sunglasses for Rs. 535. How much money did she spend in all?

a) Rs. 310   b) Rs. 660
c) Rs. 760   d) Rs. 820

Key: C

Question 12

Look at the images given below and choose the option which is not correct?

a) Both have same number of sides.
b) Both have same size.
c) Both have same number of corners.
d) Both have same number of angles.

Key: B

Question 13

Pranav records the outside temperature each morning for a week. On Tuesday, he recorded the temperature as shown below in the thermometer. On Wednesday, the temperature was 7 degrees cooler. What was the temperature on Wednesday?
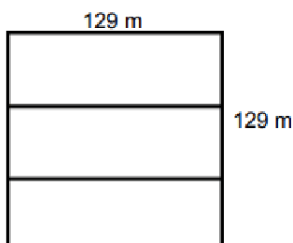

a) 22°C   b) 8°C
c) 17°C   d) None of the above

Key: B

Question 14

A square field with each side measuring 129 m was divided among 3 brothers equally as shown in the given figure. Find the perimeter of each part:

a) 516 m   b) 344 m
c) 172 m   d) 240 m

Key: B

Question 15

Rimmi jogged $2\frac{3}{5}$ km of a track on Saturday and $3\frac{1}{4}$ km on Sunday. If the total track is 10 km, then how much km of track remains to be jogged to complete one round?

a) $6\frac{5}{10}$ km

b) $5\frac{17}{20}$ km

c) $3\frac{9}{10}$ km

d) $4\frac{3}{20}$ km

Key: D

Question 16

A rectangular garden is of dimension 60 m × 40 m. There are two roads 5m wide each running in the middle of the garden, one parallel to the length and the other parallel to its breadth. If the cost of gravelling the road is Rs. 5 per m^2, then find the cost of gravelling both roads:

a) Rs. 1,055

b) Rs. 1,500

c) Rs. 2,000

d) Rs. 2,375

Key: D

Question 17

Anu needs some money for his school fee. She takes Rs. 1,800 from a bank at the beginning of a year. After 4 months, she borrowed Rs. 1,200 at a rate of interest double the previous one. If the sum of interest on both the loan become Rs. 272 at the end of the year, then find the interest rate per annum on Rs. 1,800?

a) 9%

b) 6%

c) 8%

d) 12%

Key: C

Question 18

Study the following pie chart carefully and answer the question given:

Expenditure on different sectors by university for various purposes

Purchase of overhead projectors for Ph.D classes 24%

Medical facility for students 7%

Research work 6%

Psychology laboratory 10%

Publication of journals 15%

Computer laboratory 16%

Purchase books for library 6%

Sports 12%

Total expenditure = Rs 60 lakh

What is the total sum of expenditures on research work, purchase of overhead projectors for Ph.D classes and purchase of books for library together?

a) Rs. 22.6 lakh
b) Rs. 22.8 lakh
c) Rs. 23.4 lakh
d) Rs. 20.8 lakh

Key: B

Question 19

Priya labelled the price of an article in such a way so that she earns 25% profit on selling it. However, while selling she offered 6% discount on labelled price. If she sold it for Rs. 10,340, then find the cost price of the article:

a) Rs. 8,000
b) Rs. 8,800
c) Rs. 9,200
d) Rs. 9,850

Key: B

Question 20

In the family of four members, 20 years ago the average age of them was 60 years. Two children were born in this span of 20 years. But the present average age of the family remains the same. Among the two children who were born during the 20 years, if the older child at present is 8 years older than the younger one, what is the ratio of the present age of the older child to the present age of the younger child?

a) 4: 3
b) 7: 3
c) 3: 2
d) 7: 4

Key: C

Question 21

Read the passage below and identify X correctly:

The X lies below the cerebellum. It works all the twenty-four hours and controls the heart-beat, the breathing movements and the work of many internal organs. If X is injured, the heart and the lungs will stop working and death follows instantaneously.

a) Cerebrum
b) Axon
c) Medulla oblongata
d) Thalamus

Key: C

Question 22

Refer to the diagram given below and select the correct option:
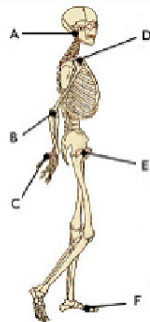
a) A – Pivot joint, B – Hinge joint, D – Ball and socket joint
b) A – Ball and socket joint, C – Hinge joint, E – Ball and socket joint
c) B – Hinge joint, D – Ball and socket joint, F – Pivot joint
d) C – Saddle joint, E – Pivot joint, F – Ball and socket joint

Key: A

Question 23

Identify the symbol shown below:

a) Facebook
b) Wi-Fi
c) Hotspot
d) Bluetooth

Key: B

Question 24

In a lake near a farm the growth of algae suddenly increased. This increase was most likely due to which of the following?

A. a decrease in air temperature

B. a decrease in water level

C. fertilizer runoff from the farm

D. exhaust gases from farm equipment

Key: C

Question 25

Since the introduction of the cellular phone, many advances in wireless communication have been made. Which of the following features has been added to cellular phones for the purpose of finding someone who has placed an emergency call?

A.A caller identification
B.digital camera
C.global positioning system
D.text messaging

Key: C

Question 26

In which of the following cases, the friction is not useful:

1. Sharpening a pencil.

2. Gears (in machines) rubbing against each other.

3. Striking a matchstick to light it.

4. Ball bearing in roller bladders.

a) 1 and 4   b) 2 and 4   c) 1 and 3   d) 3 and 4

Key: B

Question 27

Which of the following tools would not be used as a standard measurement?

A. Yard Stick   B. Ruler

C. Hands   D. None of these

Key: C

Question 28

Anamika poured equal amounts of water, each of a different temperature into two identical glasses, A and B. She then covered them with the identical lids. After five minutes, she observed the water droplets as shown below:
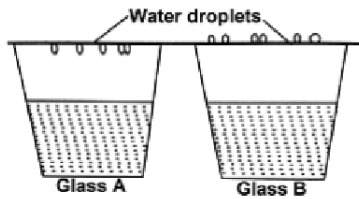
a) Water in Glass A – Cold, Water in Glass B - Cold
b) Water in Glass A – Hot, Water in Glass B - Hot
c) Water in Glass A – Cold, Water in Glass B - Hot
d) Water in Glass A – Hot, Water in Glass B - Cold

Key: D

Question 29

A clock reads 4:30. If the minute hand points East, in what direction will the hour hand point?

A. North   B. North-West

C. North-East   D. None of these

Key: C

Question 30

Samay took some dry moong seeds and soaked them overnight in water. Then, he boiled the seeds. After boiling, he drained the extra water, wrapped the boiled seeds in a wet cloth and set them aside for 28 hours. After 28 hours, he observed that seeds did not germinate. Which of the following is the reason for the failure of germination?

a) Seeds should have been wrapped in a dry cloth.

b) Seeds should not have been soaked in water overnight.

c) Seeds should not have been boiled.

d) Extra water should not have been drained.

Key: C

Question 31

Mirrors do not make their own light. Mirrors just _____ light.

A. Reflect   B. Replace

C. Destroy   D. Eat up

Key: A

Question 32

Hailey wanted to try an experiment with water. She decided to fill a water balloon up and place it in the freezer. What statement would correct with her findings?

A. The water balloon stays the same size.

B. The water balloon will always pop.

C. The water balloon shrinks because water contracts as it changes from a liquid to a solid.

D. The water balloon expanded because water expands as it changes from a liquid to a solid.

Key: D

Question 33

Look at the picture of Kia's little brother.

He should not play under the sink. Kia wants her brother to be safe. What problem does Kia need to solve?

A. how to teach her brother to walk

B. how to stop her brother from crawling

C. how to stop her brother from opening cabinets

D. None of these

Key: C

Question 34

Identify the herbivore among the following.

A. Jaguar   B. Lion   C. Giraffe   D. Tiger

Key: C

Question 35

Anni wants to play games in her computer for some time. What can Annie use to play computer games?

A.   B.
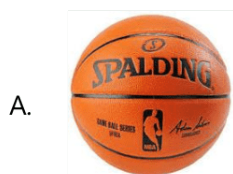
C.   D. None of these

Key: C

Question 36

There are _____ rectangles and _____ circles in the following figure.

a) 6, 2

c) 4, 2

b) 7, 3

d) 5, 3

Key: D

Question 37

If January = 31, February = 28, then March = ?

a) 31

c) 29

b) 30

d) 27

Key: A

Question 38

From the following options, select the one which is embedded in the question figure (size may differ) :

a)

b)
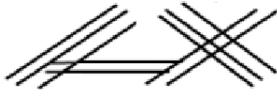
c)

d)
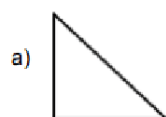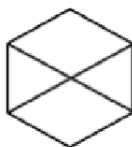
Key: C

Question 39

Find the next figure in the following pattern:

a)

b)

c)

d)

Key: C

Question 40

How many slanting lines are there in the given lines?

a) 10
c) 9

b) 7
d) 8

Key: A

Question 41

Among the 10 students, Rekha stood 5th. If the sum of positions of Rekha and Ajit is 12, then how many students are standing after Ajit?

a) 8
c) 7

b) 3
d) 4

Key: B

Question 42

Which number will replace the question mark (?)?

a) 12
c) 39
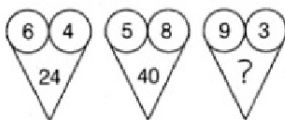
b) 54
d) 27

Key: D

Question 43

Study the following arrangement carefully and answer the question given below:
T 4 © T 2 E % M P 5 W 9 @ L Q R 6 U H 3 Z 7 * A T B 8 V # G S Y D

How many such symbols are there in the above arrangement, each of which is immediately preceded by a number and immediately followed by a letter?

a) None
c) Two

b) One
d) Three

Key: D

Question 44

In a certain language, 'BREAKDOWN' is written as 'NWODKAERB', then how will 'TRIANGLES' be?

a) SELGNTRIA
c) SELGNAIRT

b) AIRTNSELG
d) AIRTGNSEL

Key: C

Question 45

If Tuesday falls 3 days after today, then what day of the week was it on 4 days before yesterday?

a) Monday
c) Wednesday

b) Tuesday
d) Sunday

Key: A

Question 46

How many quadrilaterals are there in the given figure?

a) 4
c) 3

b) 2
d) 5

Key: D

Question 47

Which image most closely resembles the image of the given word, if the mirror is placed vertically to the right?

a)

b)

c)

d)

Key: A

Question 48

Four boxes are labelled as 1, 2, 3, and 4. Each of them has a different weight. Box 2 is heavier than box 4. More than one boxes are heavier than box 1. Box 1 is not the lightest. Box 1 is heavier than box 3. Which of the following box is the lightest?

a) 1   b) 2
c) 3   d) 4

Key: C

Question 49

Jose has two bar magnets. He pushes the ends of the two magnets together and then he lets go. The magnets move quickly apart. Which of the following statements best explains why this happens?
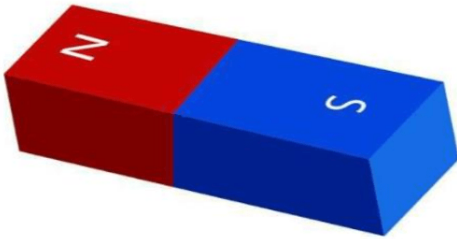
A. The north poles of the two magnets are facing each other.
B. One magnet is a north pole and one magnet is a south pole.
C. The ends of magnets repel each other but the centres attract.
D. One magnet is storing energy and one magnet is releasing energy

Key: A

Question 50

The led lightbulb is considered perhaps one of the top technological advances of the 21st century. what does "led" stand for?

A. Long-lasting electronic display

B. Light-emitting diode

C. Liquid energy device

D. The inventor was a huge fan of the rock band Led Zeppelin.

Key: B

Question 51

Alexis took a total of 243 000 steps during the 30 days in the month of April. What was her mean (average) number of steps per day in April?

(A) 7900

(B) 8100

(C) 8000

(D) 7100

Key: B

Question 52

Three words are given in the following question, which have something in common among themselves. Out of four given alternatives, choose the most appropriate alternative which is similar to the given words:

Intestine : Liver : Heart

a) Blood
c) Forehead

b) Hand
d) Kidney

Key: D

Question 53

Which of the following will be the correct mirror image of the given figure, when the mirror is placed vertically?

Paint79

a) 97tniaP

b) 9sintᎢe

c) eᎢtnis9

d) 6Ꮇtnisₚ

Key: D

Question 54

4 pies of equal sizes were cut as follows: pie 1 was cut into 12 pieces, pie 2 was cut into 8 pieces, pie 3 was cut into 14 pieces while pie 4 was cut into 6 pieces. From which pie should you eat so that you get the smallest piece?
a) Pie 1
b) Pie 2
c) Pie 3
d) Pie 4

Key: C

Question 55

How many lines of symmetry is/are there in the given figure?
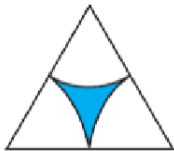
a) 1
b) 6
c) 3
d) 4

Key: C

Question 56

Three friends shared a pizza. If Hari ate 5/12th of the pizza while Sara ate 1/3rd of the
remaining pizza, what fraction of the pizza did Ali eat?
a) 3/12
b) 6/12
c) 7/18
d) 10/18

Key: C

Question 57

Which of these computer user authentications is not a biometric method?

A. Face ID

B. Touch ID

C. Username and password

D. Voice recognition

Key: C

Question 58

You are renting an office building and one of the features listed is "UPS." what is UPS?

A. United Parcel Service

B. Uninterruptible power supply

C. Unique paint scheme

D. Universal partitioning system

Key: B

Question 59

Rare-earth elements are used in which of the following devices?

A. Cellular telephones

B. Computer hard drives

C. Electric and hybrid vehicles

D. All of the above

Key: D

Question 60

At Burger Shack, the price of 2 hamburgers and 2 orders of fries is equal to the price of 3 hamburgers, as modelled below
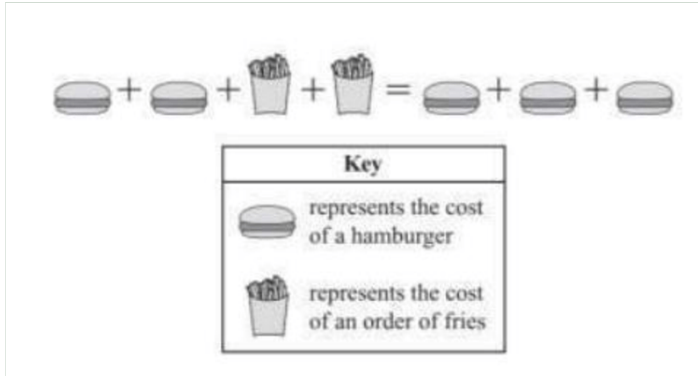
Which of the following equations models the price of an order of fries in terms of the price of a hamburger at Burger Shack?

Key: A