

000204

19/11/2022



# Ocean University of Sri Lanka

## Aptitude Test 2022/2023

### BSc in Oceanography



NIC Number:

Index No:

Date: 19.11.2022

Time allowed: 02 Hours

#### Instructions:

- There are 4 sections in this test carrying equal weight
- Total questions for each section are indicated at the beginning of the section
- Students may take 30 minutes for each section and spend equal effort to all parts
- Only one answer is allowed for each question
- Underline and fill in blanks are the most appropriate answer
- Use a dark pencil or ball point pen (blue/black) to mark the answers
- Calculators are not allowed
- Return the question paper along with the answers
- Each section carries equal marks
- Attempt all questions

#### SECTION-A: GENERAL KNOWLEDGE – 25 QUESTIONS

Underline the correct answer

01. What is the name of Sri Lanka's first research satellite launched into an orbit in the space in June 2019?  
a. Raavana 1      b. Rohini 1      c. Kalpana 1      d. Rakshasa 1
02. Coronavirus disease (COVID-19) is an infectious disease caused by a new virus that had not been previously identified in humans. What is the name of the city of China that it was first reported from?  
a. Wuhan      b. Harbin      c. Kunming      d. Nanjing
03. Health Ministry of Sri Lanka has introduced a Color-Coding System based on the level of sugar content for soft drink industry. What are the three colors used for this purpose?  
a. red, orange and blue      b. red, blue and green  
c. red, amber and blue      d. red, amber and green

04. The World Happiness Report is submitted by the United Nations Sustainable Development Solutions Network after conducting a survey in 156 countries on how happy their citizens perceive themselves to be. What is the country which tops the United Nations 2019 list of world's happiest countries?
- a. Norway                      b. Finland                      c. Denmark                      d. Iceland
05. In which year the "Victoria Dam" completed?
- a. 1980                      b. 1985                      c. 1986                      d. 1992
06. In which year that WHO (World Health Organization) declared Sri Lanka as a Malaria free country?
- a. 2015                      b. 2016                      c. 2017                      d. 2018
07. Government Information Centre has trilingual call center facilities to provide information and to give directions to the general public on how to obtain government services. What is the toll-free number to call this service?
- a. 1900                      b. 1919                      c. 1960                      d. 1991
08. There was a controversy over certain imported milk powder varieties in the market mentioning that they contain a particular chemical compound. This chemical compound is,
- a. Melamine                      b. Malathion                      c. Methanol                      d. Morphine
09. Which organization does this logo represent?
- 
- a. The World Bank                      b. The World Health Organization (WHO)
- c. The International Monetary Fund (IMF)                      d. The International Civil Aviation Organization (ICAO)
10. This renowned English scientist who wrote the popular science book "A Brief History of Time" passed away on 14<sup>th</sup> March 2018.
- a. John Young                      b. Arthur C. Clarke                      c. Carl Segan                      d. Stephen Hawking
11. The World Health Organization has launched programs to minimize non-communicable diseases, which result from a combination of genetic, physiological, behavioral and environmental factors. Which of the following is not a non-communicable disease?
- a. Cancer                      b. Cardiovascular diseases
- c. Measles                      d. Chronic Kidney disease



21. Which one of the following sports has been decided to be reintroduced into the sports program for the Asian Games 2022 in Hangzhou, China by the Asian Olympic Council?  
a. Tennis                      b. Baseball                      c. Football                      d. Cricket
22. Marylebone Cricket Club (MCC), the former governing body of cricket, founded in London, England in 1787, has appointed its first non-British President from 1<sup>st</sup> October 2019 for a period of one year. Who is this person?  
a. Brian Lara                      b. Kumar Sangakkara  
c. Mahela Jayawardene                      d. Sunil Gavaskar
23. The Independence Day of Sri Lanka is observed annually on 4<sup>th</sup> February. In which year was the 70<sup>th</sup> Independence Day celebrated?  
a. 2015                      b. 2016                      c. 2017                      d. 2018
24. What is the lifetime award presented to authors at the State Literary Awards Ceremony in Sri Lanka for their invaluable service towards the advancement of literature in Sinhala, Tamil or English Languages?  
a. Sahithya Rathna                      b. Swarna Pusthaka  
c. Sahithya Sammana                      d. Gratiaen Award
25. By the researchers of which country has a Virtual Reality (VR) software 3D model of cancer been built  
a. UK                      b. Russia                      c. USA                      d. France

## SECTION-B: SUBJECT GENERAL KNOWLEDGE – 25 QUESTIONS

**Underline the correct answer**

01. Study of oceanography may include  
a. Study of biological features of ocean                      b. Study of chemical features of ocean  
c. Study of physical features of ocean                      d. All of the above
02. When is the World Oceans Day celebrated?  
a. 5<sup>th</sup> of June                      b. 6<sup>th</sup> of June                      c. 7<sup>th</sup> of June                      d. 8<sup>th</sup> of June
03. Which is true?  
a. Oceanology only covers living things                      b. Oceanology only covers non-living things  
c. Both a and b                      d. None of the above



15. The term territorial water means
- The water found within the country in form of rivers and lakes
  - The water secured from other countries
  - The water which is supplied to other countries
  - Water of the sea located close to the coast of a country
16. In which ocean the Bermuda triangle located at
- Black Sea
  - Caspian Sea
  - Atlantic Ocean
  - South China sea
17. Which of the following has increased Pirate Activities?
- Gulf of Aden
  - Gulf of Oman
  - Red sea
  - Gulf of Khambhat
18. Which ocean does the river Amazon flow in to?
- Indian
  - Atlantic
  - Arctic
  - Pacific
19. World's saltiest sea is
- Mediterranean Sea
  - Red Sea
  - Caribbean Sea
  - Red Sea
20. How many oceans does the equator run through?
- Four
  - Three
  - Two
  - One
21. What are the three categories of marine life?
- Plankton, nektons, and benthos
  - Quarks, scire, and angiosperms
  - Hyphae, lipids, and prophase
  - Pelagic, epipelagic, and demersal
22. What are plankton?
- Organisms that float on water
  - Organisms that actively swim in water
  - Organisms that live on the seafloor
  - Organisms that live on the sub bottom
23. The coastline of Sri Lanka is nearly
- 1700 km
  - 2000 km
  - 1500 km
  - 2500 km
24. GPS stands for
- Geographical Positioning System
  - Global Positioning System
  - Geological Prediction System
  - Global Prediction System
25. Identify the non-renewable energy resource from the followings
- Coal
  - Tide energy
  - Wind Energy
  - Wave Energy

**SECTION-C: ENGLISH KNOWLEDGE – 05 QUESTIONS**

1. Fill in the blanks with correct preposition [05 Marks]

Mr. Hill arrived in New York (a)..... May 10<sup>th</sup> (b).....eight o'clock (c) ..... the evening. He decided to call his uncle who lived (d).....Fifth Avenue. He got on a bus (e).....the station and put his fare (f) .....the fare box. The bus was very crowded, so Mr. Hill had to stand up all the way. When he reached 85<sup>th</sup> Street, Mr. Hill got off the bus and walked a short distance (g) .....the apartment building (h) ..... which his uncle lived. He knocked (i) .....the door (j).....his uncle's apartment.

2. Fill in each blank with the correct form of the verb given in brackets [05 Marks]

- a) Your friends ..... for you for over an hour. (wait)
- b) It is not worth ..... so much money for this concert. (pay)
- c) When I reached the station, the train ..... (leave)
- d) I ..... Taj Mahal last month. (visit)
- e) The criminal .....the victim with a blunt object. (attack)
- f) His company is ..... after an elders' home. (seek)
- g) His courage .....Him. (forsake)
- h) The terrified people..... to the mountains. (Flee)
- i) The police .....no stone unturned to trace the culprits. (leave)
- j) The robber .....him a blow on the head. (strike)

3. Re-write the following phrases in the correct order to construct meaningful sentences.

[05 Marks]

- a) was / last week / he / in hospital.

.....

- b) science / today / in / we / an era / are / of / and / living / technology

.....

- c) the library / take / I / the book / will / today / to

.....

- d) must / at five o'clock / leave / we / the house

.....

- e) widen / reading / knowledge / helps / to / our

.....

4. Change the following sentences in to passive voice [05 marks]

a) They feed the elephants at the zoo twice a day.

.....

b) The Prime Minister will survey the tsunami-affected areas.

.....

c) The author has written a special edition for children.

.....

d) The volunteers are helping the villagers rebuild their houses.

.....

e) They have written letters appealing to the district administration for help.

.....

5. Select any 5 words from list within the bracket and construct sentences to bring out its meaning clearly. (Pandemic, devastating, contagious, smart, curriculum, devoted, borrow, quarantine) [05 Marks]

a) .....

.....

b) .....

.....

c) .....

.....

d) .....

.....

e) .....

.....

**SECTION-C: INTELLIGENCE QUALIFICATION TEST – 25 QUESTIONS**

**Underline the correct answer**

01. The day of the date 2021-01-01 was a Friday. The day of the date 2023-01-01 is

a. a Sunday

b. a Monday

c. a Tuesday

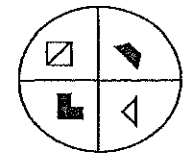
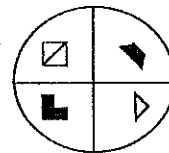
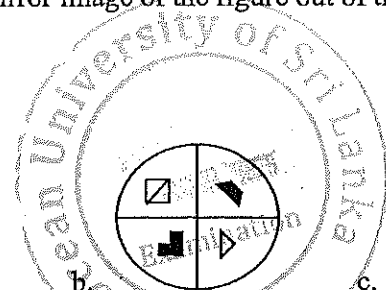
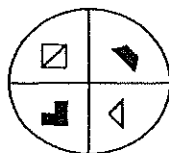
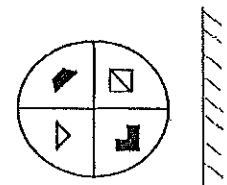
d. a Wednesday

02. What is 12.5% expressed as a fraction?  
 a.  $\frac{1}{8}$                       b.  $\frac{1}{5}$                       c.  $\frac{1}{4}$                       d.  $\frac{5}{12}$
03. Five Students took a test in which the pass mark was 20. They all passed the test and the sum of the marks scored by them was 105. If the highest mark was scored by two students, what could have been the highest mark?  
 a. 22                      b. 23                      c. 24                      d. 25
04. A test was given in a class having 30 girls and 20 boys. The average test score for girls was 80 and the average test score for boys was 70. What was the average test score of the students in this class?  
 a. 76                      b. 75                      c. 74                      d. 73
05. What should be the number in the last cage according to the pattern?

5	5	10	30	120	600	3 600	?
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- a. 22,400                      b. 24,200                      c. 25,200                      d. 25,400
06. Saama was born on Saturday, 29 February 2020. What is the earliest year that her birthday could fall on a Saturday 29 February again?  
 a. 2040                      b. 2048                      c. 2044                      d. 2052
07. Mr. Mendis, who was born in 1958, will be twice as old as Lahiru, in 2024. How old is Lahiru in 2022?  
 a. 30 years                      b. 31 years                      c. 32 years                      d. 33 years
08. If the length of each side of a rectangle is increased by 40%, then what is the percentage increase in the area of the rectangle?  
 48%                      49%                      64%                      96%

09. A plane mirror is held in front of the given figure as shown here. Select the correct mirror image of the figure out of the figures given below.

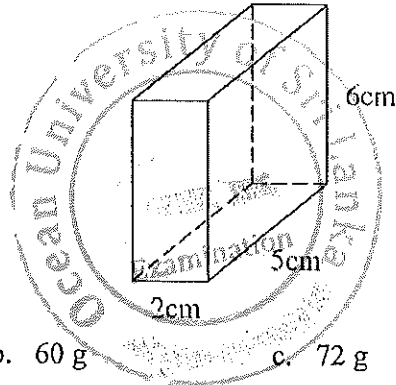


10. A garage owner buys a used car for Rs.3.2 million and spends Rs. 800,000 to repair it before selling the car for Rs.4.8 million. What is the profit percentage?  
 a. 15.5%                      b. 16%                      c. 18%                      d. 20%

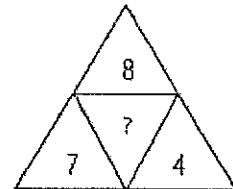
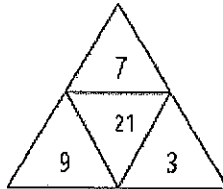
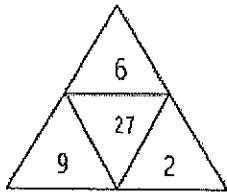
11. A 200 meters long train travelling at a speed of 60 kilometers per hour takes 30 seconds to pass a tunnel. What is the length of the tunnel in meters?  
a. 270                      b. 300                      c. 290                      d. 310
12. Starting from the stumps at the bowler's end of a cricket ground, Ramesh walks 5 m towards east and then 9 m towards north and finally 7 m towards east and takes a position in the field. What is the distance between Ramesh and the stumps at the bowler's end?  
a. 21 m                      b. 19 m                      c. 16 m                      d. 15 m
13. Kamal travelled from a city to another in 6 hours. He travelled first half of the distance at the rate of 24 kilometers per hour and second half at the rate of 30 kilometers per hour. What is the total distance of the journey in kilometers.  
a. 120                      b. 140                      c. 160                      d. 200
14. To win a 50-over cricket match the target set is 309 runs. At the end of the 10<sup>th</sup> over the run rate was 4.5. What is the required minimum run rate in the remaining 40 overs to reach the target?  
a. 6.4                      b. 6.5                      c. 6.6                      d. 7.5
15. Bavan is going to drive from city *A* to city *B*. He drives the first one-third of his trip at an average speed of 30 km h<sup>-1</sup> and then the rest of the distance at an average speed of 40 km h<sup>-1</sup>. The total trip from *A* to *B* takes 4 hours. What is the distance between *A* and *B* in kilometers?  
a. 136                      b. 140                      c. 144                      d. 150
16. Eight identical machines, operating at the same constant rate, can produce 280 items per minute. At the same rate, how many such items could 15 similar machines produce in 6 minutes?  
a. 2750                      b. 3000                      c. 3150                      d. 3300
17. A, B and C are employees of the same company earning salaries in the ratio 2:3:4. If they received increments of 20%, 20% and 30% respectively in their salaries, then what will be the new ratio of their salaries?  
a. 5:9:13                      b. 6:6:13                      c. 6:9:13                      d. 6:9:14
18. A listed price of a certain book was Rs. 900. 1000 copies of this book were sold as follows: 60% were sold at 50% discount, 20% were sold at 30% discount and the remainder were sold at the listed price. What was the total revenue in rupees?  
a. 500,000                      b. 510,000                      c. 504,000                      d. 576,000



23. What is the mass of the solid in the diagram if its density is  $1.2 \text{ g cm}^{-3}$ ?



- a. 50 g                      b. 60 g                      c. 72 g                      d. 38.4 g
24. Identify the number pattern and underline the number match to the “?” mark



- a. 14                      b. 15                      c. 17                      d. 19
25. A car used 12 liters of petrol and traveled a total distance of 290 km. The car’s fuel efficiency is 25 km per liter on the highway and 20 km per liter in the city. The variable  $h$  will represent the number of liters used on the highway. Which equation could be used to find  $h$ ?
- a.  $25h + 20(12 - h) = 290$                       b.  $25(12 - h) + 20h = 290$   
c.  $25(12 + h) + 20h = 290$                       d.  $25h + 20(12 + h) = 290$

