



Ocean University of Sri Lanka
Aptitude Test 2024/2025
B.Sc. in Coastal and Marine Resources
Management



NIC Number:

Index No.:

Time Allowed: Two (02) hrs.

Date : 27/10/2024

Instructions:

- Answer all the questions on this itself
- Use a dark pencil/black or blue pen to mark the answers
- Calculators are not allowed

SECTION A- GENERAL KNOWLEDGE - 25 QUESTIONS

1. Who won the ICC Women's T 20 World cup in year 2024?
(i) Australia (ii) New Zealand
(iii) West Indies (iv) South Africa
2. What is the name of sail training war ship reached to Colombo port recently?
(i) Shi Yan 6 (ii) Express pearl
(iii) Po Lang (iv) Express of China
3. Which district shares a boundary with the highest number of districts in Sri Lanka?
(i) Anuradhapura (ii) Kurunegala
(iii) Kandy (iv) Rathnapura
4. Which is the national bird in Sri Lanka?
(i) Sri Lanka Grey Hornbill (ii) Sri Lanka Jungle fowl
(iii) Sri Lanka Woodpigeon (iv) Sri Lanka Spurfowl
5. What is the percentage of government allocation from the Gross national Production (GDP) to the education sector in Sri Lanka in 2024?
(i) 1.8% (ii) 1.6% (iii) 1.5% (iv) 1.4%
6. Where is the first under water museum located in Sri Lanka?
(i) Hambantota (ii) Trincomalee
(iii) Colombo (iv) Galle
7. Which metal is the heaviest metal?
(i) Osmium (ii) Titanium
(iii) Iron (iv) Platinum

8. Who is the father of Nano technology?
 (i) Richerd Feynman (ii) Anton Zelinger
 (iii) John Clauser (iv) Alian Aspect
9. What is the theme of "Earth Day" in 2024?
 (i) Planet Vs Plastics (ii) Our power Our Planet
 (iii) Invest our planet (iv) Protect our Home
10. What is the Booker Awarded book in 2024?
 (i) Real life (ii) Kairos
 (iii) The New wildness (iv) The Shadow King
11. Which countries are started the One Belt-One road project?
 (i) Russia & China (ii) Frans & United Kingdom
 (iii) United states and United Kingdom (iv) Canada & United states
12. Who has been awarded the Nobel prize for literature in 2024?
 (i) Annie Ernaux (ii) Han Kang
 (iii) Louise Glück (iv) Olga Tokarczuk
13. What is the call center number for disaster management in Sri Lanka
 (i) 118 (ii) 1990 (iii) 117 (iv) 1927
14. What is the name of "Comet" which is showing in the sky at month of October, 2024?
 (i) Atlas (ii) Centurium
 (iii) Proxima Tais star (iv) Cereous
15. Who was the first Attorney General in Sri Lanka?
 (i) Ms. Eva Wanasundara (ii) Ms. Shriyani Bandaranayeka
 (iii) Ms. Indika Dewmini (iv) Ms. Ayesha Jinasena
16. Which country has highest human development index in 2024?
 (i) Denmark (ii) Netherland (iii) Switzerland (iv) Finland
17. When is the "Global Biodiversity day"?
 (i) December 27 (ii) February 27
 (iii) June 05 (iii) September 08
18. What is the first "Smart City" in Sri Lanka?
 (i) Colombo (ii) Kandy
 (iii) Polonnaruwa (iv) Matara
19. Who is the present CEO in IMF?
 (i) Chritine Lagard (ii) Kristalina Georgieva
 (iii) Takehiko Naka (iv) Bhargav Dasgupta

20. Which country is going to be remove the petrol and diesel vehicle usage at the 2040?
 (i) Japan (ii) United States (iii) France (iv) China
21. What is the total distance of the A-9 road (Kandy Dabulla -Vavuniya- Jaffna)?
 (i) 378 km (ii) 318 km (iii) 398 km (iv) 348 km
22. Which bank has funded for Southern High Way in Sri Lanka?
 (i) China Exim Bank (ii) Bank of China
 (iii) The peoples bank of China (iv) China Construction Bank
23. What is the smallest district is Sri Lanka?
 (i) Killinochchi (ii) Mulative
 (iii) Colombo (iv) Puttalam
24. Who was men's ODI all-rounder ranked in 2024?
 (i) Ravi Chandran Ashwin (ii) Raveendra Jadeja
 (iii) Shakib Al Hassan (iv) Ben Stokes
25. What is the most popular social media in the world?
 (i) Twitter (ii) Tik Tok
 (iii) Facebook (iv) Instagram

SECTION B – SUBJECT KNOWLEDGE - 25 QUESTIONS

1. In marine food chains, zooplankton typically serve as:
 (i) Producers (ii) Primary consumers
 (iii) Secondary consumers (iv) Decomposers
2. The carbon cycle is closely tied to the energy cycle because
 (i) Both involve water
 (ii) Carbon moves through all living organisms
 (iii) Carbon storage involves fossil fuels which are sources of energy
 (iv) Energy is produced during carbon fixation in the soil
3. The following marine resources is used in desalination to provide fresh water
 (i) Ocean sediments (ii) Seawater
 (iii) Methane hydrates (iv) Marine algae
4. Ballast water discharged from ships can cause marine pollution by
 (i) Introducing invasive species into new ecosystems
 (ii) Releasing large amounts of oil
 (iii) Causing overfishing
 (iv) Depleting oxygen in the water
5. What is the IUPAC name for $\text{CH}_3\text{CH}_2\text{OH}$?
 (i) Methanol (ii) Ethanol (iii) Propanol (iv) Butanol

6. Oil spills affect marine life by
- Reducing oxygen levels in water
 - Poisoning marine organisms
 - Blocking sunlight and photosynthesis
 - All of the above
7. Microplastics are a concern in marine ecosystems because they
- Are highly biodegradable
 - Are ingested by marine animals and enter the food chain
 - Are only found near coastlines
 - Decompose quickly
8. Which of the following is a non-living resource extracted from the seafloor?
- Fish
 - Coral reefs
 - Polymetallic nodules
 - Mangroves
9. Which of the following benefits is provided by coastal wetlands?
- Desertification prevention
 - Flood protection
 - Deforestation
 - Earthquake resistance
10. What type of tide occurs when the Earth, Moon, and Sun are aligned?
- Spring tide
 - Neap tide
 - Low tide
 - High tide
11. What is a common method used to prevent coastal erosion?
- Afforestation
 - Building sea walls
 - Mining
 - Agriculture
12. Which of the following ecosystems is commonly found in coastal areas?
- Desert
 - Mangrove forests
 - Tundra
 - Savanna
13. The swim bladder in fish is used for
- Circulating blood
 - Reproduction
 - Regulating buoyancy
 - Excretion
14. Fish primarily respire through
- Skin
 - Gills
 - Lungs
 - Fins
15. Which molecule carries genetic information?
- RNA
 - DNA
 - Protein
 - Carbohydrate
16. Which of the following is an example of an operating system?
- Microsoft Word
 - Google Chrome
 - Linux
 - Adobe Photoshop

17. Which type of bond involves the sharing of electrons between atoms?
 (i) Ionic bond (ii) Covalent bond
 (iii) Metallic bond (iv) Hydrogen bond
18. Which of the following functional groups is present in esters?
 (i) -OH (ii) -COOH (iii) -COOR (iv) -CHO
19. What is the mass number of an atom with 6 protons, 6 neutrons, and 6 electrons?
 (i) 6 (ii) 12 (iii) 18 (iv) 24
20. Which of the following is NOT a state of matter?
 (i) Solid (ii) Liquid (iii) Gas (iv) Plasma
21. What is the pH of pure water?
 (i) 0 (ii) 7 (iii) 14 (iv) 10
22. Which of the following is commonly extracted from red algae and used in biotechnology?
 (i) Agar (ii) Hemoglobin
 (iii) Collagen (iv) Insulin
23. The process of overlaying two or more layers in GIS is called
 (i) Clipping (ii) Geocoding
 (iii) Spatial analysis (iv) Map overlay
24. Tides are primarily caused by
 (i) Wind patterns (ii) The rotation of the Earth
 (iii) The gravitational pull of the Moon and Sun (iv) Ocean currents
25. The average salinity of seawater is
 (i) 15% (ii) 20% (iii) 35% (iv) 45%

SECTION C – ENGLISH LANGUAGE

1. Fill in the blanks with a suitable preposition from box below.

in	on	for	over	from
between	to	through	with	since

- (i) The organizers have no controlthe situation.
 (ii) Menaka keeps the jewelriesthe locker.
 (iii) Teacher asks the class monitor to hang the duster the hook.
 (iv) The difference the two paintings is subtle.
 (v) Students needs to bring their parents the meeting.
 (vi) The cat walked the open door and into the garden.
 (vii) He signedthe pen given by her.

- (viii) She has been absent from lectures Monday
- (xi) Mother needs to leave early airport tomorrow.
- (x) Kamal will join with usUSA.

(0.5 x 10 = 05 marks)

2. Fill in the blanks with the suitable pronouns
- On (i)..... trip to the Maldives, Maala and Neeta stayed at a luxurious resort. (ii)..... spent their days relaxing on the beach, swimming in the crystal-clear ocean. Maala is a good swimmer and (iii)..... enjoyed snorkeling among colorful coral reefs. In the evening their guide Arun took (iv)..... to explore the city. (v)..... explain Maala and Neeta about the culture and traditions in Malé.

(0.5 x 5 = 2.5 marks)

3. Read the following sentences and underline the most suitable word to fill the blank given in brackets

- (i) It is..... to wear a seatbelt while driving. (necessary/ carefully).
- (ii) The audience applauded (vigorous/ enthusiastically).
- (iii) Gollum looked at the ring (mutually/ greedily).
- (iv) The commission rejected his (apologize/ application).
- (v) The detective questioned the culprit (thoroughly/ thankfully)

(0.5 x 5 = 2.5 marks)

4. Underline the option that best expresses the meaning of each of the sentence below

- (i) **Before going to bed, I brushed my teeth**

- (a) I brushed my teeth and then went to bed.
- (b) I went to bed before brushing my teeth.
- (c) I did not brush my teeth or go to bed.
- (d) I went to bed instead of brushing my teeth.

- (ii) **The students studied hard for the exam, and they passed.**

- (a) The students studied hard for the exam, but they failed.
- (b) The students did not study hard for the exam, but they passed.
- (c) The students studied hard for the exam and then failed.
- (d) The students studied hard for the exam and then passed.

- (iii) **After the Fellowship was broken, Frodo continued his journey with Sam**

- (a) Frodo and Sam continued their journey before the Fellowship was broken.
- (b) The Fellowship was broken, and then Frodo and Sam continued their journey.
- (c) Frodo and Sam did not continue their journey or break the Fellowship.
- (d) Frodo and Sam continued their journey instead of breaking the Fellowship.

- (iv) **The cat ate the fish before the dog could get to it.**

- (a) The dog ate the fish before the cat could get to it.
- (b) The cat and the dog ate the fish together.

- (c) The cat ate the fish after the dog had already eaten it.
- (d) The cat ate the fish before the dog had a chance to eat it.

(v) **The children played outside until it got dark.**

- (a) The children did not play outside or let it get dark.
- (b) The children played outside before it got dark.
- (c) The children played outside and then it got dark.
- (d) The children played outside instead of letting it get dark.

(05 marks)

5. Read the passage and answer the questions

How do we know where do they go?

Study of the diving and feeding behavior of marine mammals has been greatly enhanced by continuing advances in satellite telemetry and microprocessors, which provide information on where animals go and what they do underwater. Data are collected from sensors that measure various parameters such as water temperature, depth, light intensity, swimming pattern and velocity, heart rate, and body temperature. These sensors transmit data to orbiting communication satellites that relay the information to receiving stations on Earth, enabling the animals to be tracked wherever they go. Think of these instruments as flight recorders for marine mammals. Tracking projects in progress, such as the Tagging of Pacific Predators (TOPP), which began more than a decade ago, have provided much data on the underwater activities of various marine animals, including elephant seals. In another project, scientists from NOAA's Southwest Fisheries Science Center placed satellite tags on fur seals, Weddell seals, and penguins to track their movements in Antarctica over the austral winter (our summer), when weather conditions make it nearly impossible for us to monitor them. Pinnipeds have proven particularly amenable to study since they haul out to breed and molt at predictable times and locations, making it feasible to attach and to retrieve animal-borne instruments.

-The Life and Evolutionary Times of Marine Mammals by A. Berta-

- (i) What are the technologies which help to collect information about where animals go and what they do underwater? (01mark)
.....
.....
- (ii) Name two parameters that are measured using these technologies. (01mark)
.....
.....
- (iii) Name one marine mammal tracking project. (01mark)
.....
- (iv) Find words that gives similar meanings to the followings from the passage (02 marks)
 - (a) Improved -
 - (b) Allowing -
 - (c) Different -
 - (d) Possible -

6. Read the notice and mark each statement as True (T), False (F), or Not Given (N) in the brackets provided.

**5TH ANNUAL INTERNATIONAL RESEARCH SYMPOSIUM OF
THE OCEAN UNIVERSITY OF SRI LANKA**

- The 5th Annual International Research Symposium of Ocean University of Sri Lanka will be held on 20th December 2024 at the university auditorium.
- The theme for this year's symposium is "*Oceans of Opportunity: Integrating Science, Innovation, and Sustainability for Future Marine Solutions.*"
- We invite local and international researchers, as well as postgraduate and undergraduate students, to present their research findings at this esteemed forum in front of panel of experts.

For abstract submission guidelines and payment information, please visit www.ocu.ac.lk.

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|-------|--|-----|
| (i) | The research symposium is held every year | () |
| (ii) | Only Sri Lankan citizens are allowed to present their research at this symposium | () |
| (iii) | The panel of experts consists of university professors | () |
| (iv) | Participants should visit the website for more details | () |
| (v) | Climate change is a key topic that will be addressed at this symposium. | () |
- (05 marks)

SECTION D- IQ TEST- 25 QUESTIONS

1. Which number should come next in series?
8,10,24,8,72, 6,

(i) 4	(ii) 216	(iii) 432	(iv) 36
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2. The train travelling at 105 mph enters a tunnel that is 3.5 miles long. How long does it take for the whole train to pass through the tunnel?

(i) 2 min.	(ii) 2.5min.	(iii) 3min.	(iv) 3.5min.
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3. Nimal has Rs. 900 on hand. He spent 0.7 for medicine, 1/9 for food, and 1/30 for incense sticks. How much is the balance?

(i) Rs.70/-	(ii) Rs.120/-	(iii) Rs.90/-	(iv) Rs.140/-
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4. The scale of the map is given as 1:300,000. Two cities are 5 cm apart on the map find the actual distance between them.

(i) 1.5 km	(ii) 150 km	(iii) 15 km	(iv) 5 km
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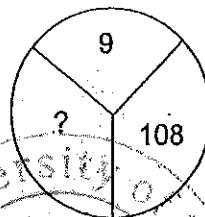
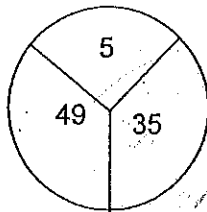
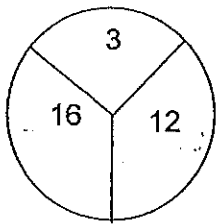
5. A tank with a length of 20 m, a width of 10 m, and a depth of 8 m is filled with water. The entire volume of water will be pumped into another tank with a length of 30 m and a width of 15 m. What will be the depth of water in the second tank?

(i) 4 m	(ii) 3 5/9 m	(iii) 8 m	(iv) 5 m
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6. Rasika is 5 years younger than Nimala. The sum of twice Nimala's age and Rasika's age is equal to 25 years. What are ages of Rasika and Nimala, respectively?

(i) 20 & 5	(ii) 10 & 5	(iii) 10 & 15	(iv) 5 & 10
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7. What number should replace the blank?

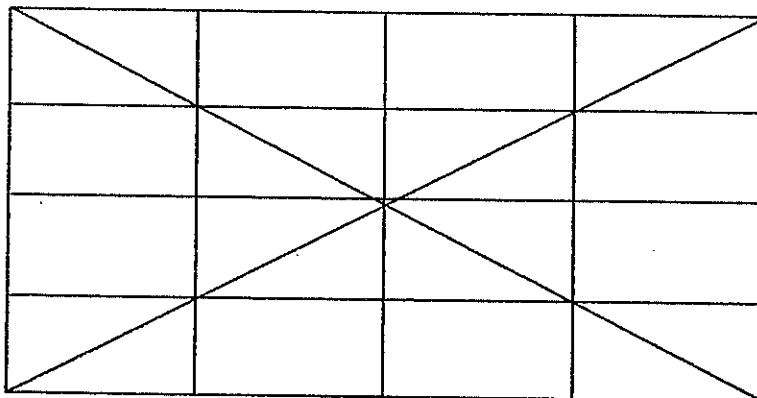


- (i) 12 (ii) 772 (iii) 144 (iv) 81

8. If E, F, I, represent G, M, S, What will be the A, D, K, represent,

- (i) D, G, M (ii) C, I, W (iii) W, I, C (iv) I, C, W

9. How many squares are in following diagram?



- (i) 20 (ii) 26 (iii) 21 (iv) 30

10. 299 is which odd number?

- (i) 101st (ii) 150th (iii) 50th (iv) 90th

11. If "XLOLNYL" shows "COLOMBO", "PZMWB" shows the,

- (i) BANDY (ii) BANTY (iii) KANDY (iv) NONDY

12. Kasun is 28 years younger than his mother. Kasun's brother is born in 1968 and he is 38 years younger than his mother. When was Kasun born?

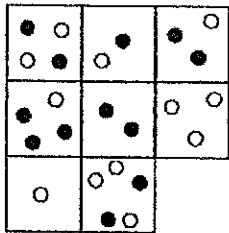
- (i) 1938 (ii) 1948 (iii) 1958 (iv) 1978

13. The length and width of the rectangular hall are 9.6 m and 6 m, respectively. How many tiles are required to cover the hall if each tile has 36 cm² area?

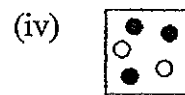
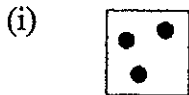
- (i) 6000 (ii) 10000 (iii) 16000 (iv) 1600

14. Selvam, Jinadasa, and Abdul invest money in a business. Selvam invests Rs. 20,000 at the beginning of the year. Jinadasa invests Rs. 30,000 after 2 months, and Abdul invests Rs. 40,000 after 4 months. The total profit earned is Rs. 65,000. How should the profit distribute to the Selvam?
- (i) 25000/- (ii) 20000/- (iii) 65000/- (iv) 45000/-
15. The metal statue is made of silver and copper in the 3:5 ratio, respectively. If the total weight of copper in the statue is 9 kg, what is the total weight of the statue?
- (i) 14.4 kg (ii) 17 kg (iii) 12 kg (iv) 15 kg
16. Six persons take 15 days to pluck coconuts in the estate. How many days will 18 persons need to complete the same task?
- (i) 5 Days (ii) 9 Days (iii) 6 Days (iv) 10 Days
17. If today is March 15, three days earlier was Wednesday. What day is two days after yesterday?
- (i) 18th Tuesday (ii) 17th Tuesday
(iii) 16th Monday (iv) 17th Monday
18. Telephone poles are fixed at 10 m intervals apart. If 114 poles are fixed, what is the distance from the first pole to the last pole?
- (i) 1.1 km (ii) 11.1 km (iii) 1.11 km (iv) 1.01 km
19. If (\div) represent $(+)$, $(-)$ represent (\div) , (x) represent $(-)$ and $(+)$ represent (x) , the value of statement $9 + 8 \div 8 - 4 \times 9 = ?$
- (i) 26 (ii) 65 (iii) 17 (iv) 11
20. Which letters comes next in the sequence? ZB YD XF WH VJ UL TN
- (i) ST (ii) SP (iii) UT (iv) CT

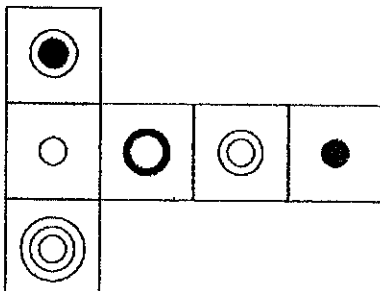
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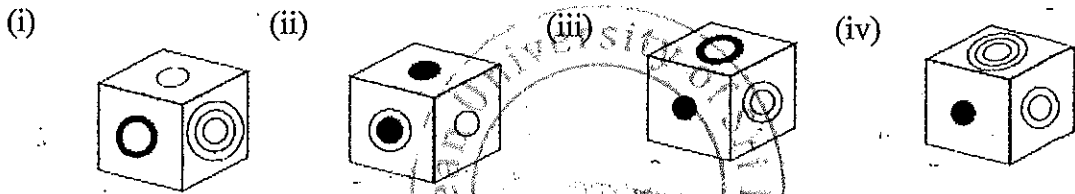
What is the missing tile?



22.



When the above is folded to form a cube, which is the only one of the following that can be produced?



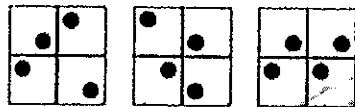
23.

3	9	1	2	8	3
9	?	?	2	1	9
1	?	?	3	9	1
2	1	9	3	8	2
8	3	9	1	2	8
3	8	2	1	9	3

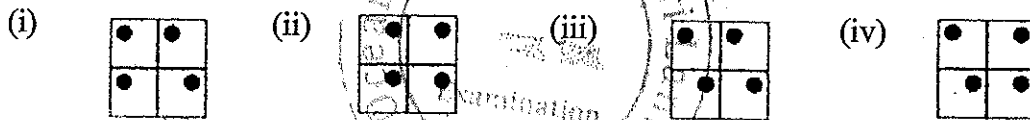
Which is the missing section?



24.



What comes next in the sequence?



25. Which line of figures is the odd one out?

