First Term Examination - 2015

Science

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Grade 07

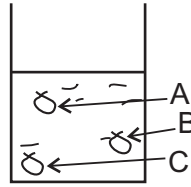Time: 02 Hours

Name/ Index No.

Part I

● **Answer all questions.**

01 An animal can be named as a herbivore is,

    (1) bear   (2) crow   (3) Mynah   (4) butterfly

02 Answer which shows producer and second defended respectively in the food chain

    plant → rabbit → fox is,

    (1) rabbit, fox   (2) plant, crow   (3) plant, fox   (4) fox, plant

03 Not a migrating bird is,

    (1) dove   (2) flamingo   (3) quail   (4) robin

04 The group comprises the plant drynaria is

    (1) xerophytes   (2) aquatic plants   (3) mangroves   (4) ephiphytes

05 Not a factor taken by organisms from abiotic environment is,

    (1) water   (2) food   (3) air   (4) warmth

06 Four equal boxes of matches are filled with sugar, flour, wool and sand. Which of the followings is equal in all 4 boxes.

    (1) mass   (2) relative density   (3) volume   (4) density

07 Standard unit of speed is,

    (1) ms^{-1} (2) cms^{-1} (3) kmh^{-1} (4) mh^{-1}

08 If a wheel of cycle rotates 100 rounds within 5 minutes, its rate of rotation in rounds per minute is,

    (1) 5×100 (2) $5 \div 100$ (3) $100 \div 5$ (4) $5 + 100$

09 'Plimsoll line' can be seen on

    (1) body of aeroplance   (2) hull of ships

    (3) body of motor vehicles   (4) yoke of bullock cart

10 Volume of a cube shape object having length, breadth, height 6m, 4m, 2m respectively is,

    (1) $24\,m^3$ (2) $18\,m^3$ (3) $8\,m^3$ (4) $48\,m^3$

11 Basic building unit of body of organisms is,

    (1) tissue   (2) system   (3) organ   (4) cell

12 Following diagram shows 3 polythene bags filled with kinds different which immersed in a vessel of water. Here A, B, C, can be,
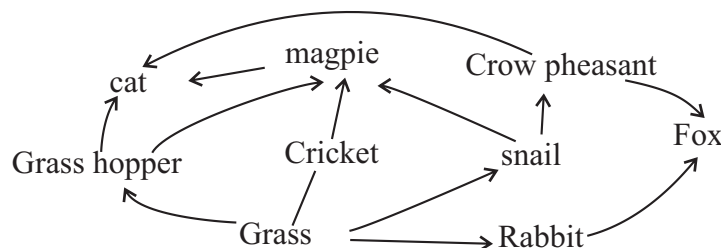   (1) stones, coconut oil, kerosene oil
    (2) kerosene oil, coconut oil, stones
    (3) coconut oil, stones, kerosene oil
    (4) kerosene oil, stones, coconut oil

13 The special type of roots can be seen in betel is,
    (1) fibrous roots   (2) clinging roots   (3) stilt roots   (4) prop roots

14 The blood vessel brings blood out from heart is,
    (1) vein   (2) artery   (3) capillary   (4) none of the above

15 Main excretory organ of human body is,
    (1) kedneys   (2) lungs   (3) skin   (4) all abov

16 Speed of light is,
    (1) $330 \, ms^{-1}$ (2) $300000000 \, ms^{-1}$
    (3) $1500 \, ms^{-1}$ (4) $300000 \, ms^{-1}$

17 Amount of urine filtered by kedneys of a health person per day is about,
    (1) $0.5 - 1 \, l$ (2) $1 - 2 \, l$ (3) $3 - 4 \, l$ (4) $5 - 6 \, l$

18 The system which transports substances in human body is,
    (1) respiratory system   (2) excretory system
    (3) blood circulatory system   (4) digestive system

19 The tissue which adapted for the transportation of water in a plant is,
    (1) phloem tissue   (2) xylem tissue
    (3) stomata   (4) epithelial tissue

20 The organ which adjusted for sexual reproduction of a plant is,
    (1) seeds   (2) roots   (3) flowers   (4) fruits

(02 x 20 = 40 marks)

Part II

- **Answer 4 questions.**

01 Following is a diagram prepared by a group of students to study the competency of 'inter relationships of organisms.

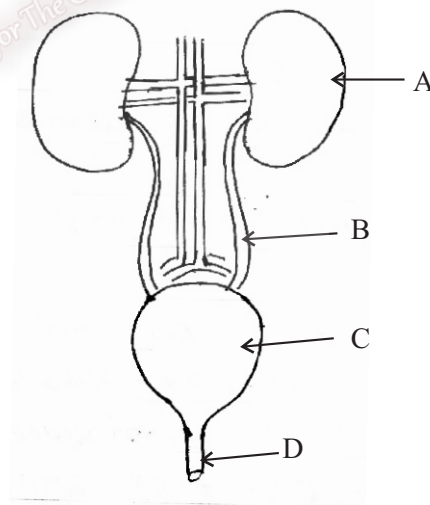   (1) What is the name used for above diagram ?   (02 m.)
    (2) What type of environment was used by students for this diagram?   (02 m.)
    (3) Write a food chain with 4 links in the above diagram.   (02 m.)
    (4) Name the producer and second dependant of the above food chain.   (02 m.)

(5) From the animals given in the above diagram,

    (a) What is the protective behaviour can be seen in snails ?   (02 m.)

    (b) What is the adaptation for protection of grass hopper ?   (02 m.)

(6) Select a terrestrial animal and an arboreal animal from the above diagram and write them separately.   (02 m.)

(7) One of the students mentioned that there would be ticks on the body of cat. There what is the name to be used for the relationship between tick and cat ?   (01 m.)

02   Human body is made up of several systems. One of them is blood circulatory system.

    (1) What is the main function of human blood circulatory system ?   (01 m.)

    (2) What is the organ which supplies force for the process of blood circulation ?(02 m.)

    (3) Name main 3 types of blood vessels of this system.   (03 m.)

    (4) What is the instrument used by doctors for observing heart beat ?   (02 m.)

    (5) Two substances transported by this system are given below. Mention that from where does each substance added to blood circulatory system.
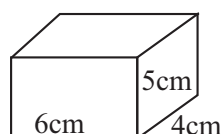
        (a)   urea   (b) oxygen   (02 m.)

    (6) One of systems you mentioned above in (a) and (b) is given below. Name its parts A, B, C, D.   (04 m.)

    (7) What is the name used for the fluid comprises excretory substances released by the above system ? (01 m.)

03   Measurements such as volume, density, speed, rate are used to describe substances and phenomena in the environment.

    (1) What is meant by Volume of a liquid ?   (02 m.)

    (2) Write down the equation used for finding volume of a regular solid.   (02 m.)

    (3) Find the volume of the following regular solid.   (03 m.)

5cm
6cm
4cm

(4) Mention 3 instruments you use to measure volume of an irregular object in laboratory. (03 m.)

(5) Describe what the density is. (02 m.)

(6) What is the standard unit of measuring density? (01 m.)

(7) What is the instrument used for measuring density of a liquid in laboratory. (01 m.)

(8) What is the density of water ? (01 m.)

04 Both biotic and abiotic environment are necessary for the survival of organisms, equally.

(1) Write 3 abiotic (non-living) factors necessary for organisms. (03 m.)

(2) What is perennation ? (02 m.)

(3) Mention a plant which shows perennation. (02 m.)

(4) How does name the living of some animals like squirrels, rabbits inside hollows in trees inactively untill the end of winter season ? (02 m.)

(5) What is known as migration ? (02 m.)

(6) Mention 2 main ways of weathering of rocks. (02 m.)

(7) How does name the organisms which decompose organic matter ? (02 m.)

05 (1) What is speed ? (02 m.)

(2) If a sportsman spent 25 seconds to run 200 m distance, find his speed. (03 m.)

(3) What is the unit of speed given in speedometers of vehicles ? (02 m.)

(4) Write the standard symbol of that unit. (02 m.)

(5) What is the time in hours taken by a motor car which travels 300 km distance with an average speed of 60 kilometers per hour ? (02 m.)

(6) What is the rate of an incident ? (02 m.)

(7) Find the rate of rotation of a wheel, if it rotates 60 rounds within 5 minutes. (02 m.)

06 (1) Name two xerophytic plants. (02 m.)

(2) Name two soil animals. (02 m.)

(3) Name two types of micro organisms live in lichens. (02 m.)

(4) Mention two factors which affect for soil erosion. (02 m.)

(5) Mention 3 equipments used for measuring liquids in laboratory. (03 m.)

(6) How many milliliters contain in 1 liter ? (02 m.)

(7) How does name the process of producing food in plants ? (02 m.)