

# Question bank

## Chapter-1 Topic 1: Living things

**Q-1 Give the definition of:**

- a) biome
- b) adaptation
- c) vegetation
- d) photosynthesis
- e) respiration

**Q-2 Name three different biomes in Nigeria.**

**Q-3 Describe the following adaptations.**

- a) three adaptations of animals to an aquatic environment
- b) two adaptations of aquatic plants

**Q-4 Draw a food chain with the following organisms: snail; frog; fish; pond weed; fish eagle.**

**Q-5 Give four reasons why humans are unique.**

**Q-6 Copy and complete the following table.**

## Chapter-2 Topic 2: Body image

**Q-1 Explain body image and puberty.**

**Q-2 State two physical features of body image.**

**Q-3 State four pubertal changes in:**

- a) boys
- b) girls

## Chapter-3 Topic 3: Reproductive health

**Q-1 Explain the benefit to a couple, who could have a hereditary problem, of going to a genetic counsellor.**

**Q-2 Answer the following questions on breastfeeding:**

- a) For how long does the World Health Organization suggest a mother breastfeeds her baby?
- b) How does breastfeeding save money?
- c) What is in breast milk that helps fight infections in the baby?
- d) Name three nutrients that are in breast milk.
- e) Name two important facts that mothers should know about breastfeeding.

## **Chapter-4 Topic 4: Chemicals**

**Q-1 Answer the following:**

- a) What is a chemical?
- b) Give an example of a chemical.

**Q-2 Answer the following:**

- a) How are chemicals classified?
- b) Give two examples of the following: i) pharmaceutical chemicals ii) cosmetics iii) agrochemical chemicals iv) industrial chemicals v) laboratory chemicals vi) carcinogenic chemicals

**Q-3 Answer the following:**

- a) What are nuclear chemicals?
- b) What are nuclear fuel chemicals used for?

**Q-4 Give the meaning of the following words:**

- a) indicator
- b) solvent
- c) toxic
- d) carcinogen
- e) flammable

**Q-5 Give one function of each chemical:**

- a) soda ash
- b) acids

- Q-6 **List three safety precautions that you need to take when working with chemicals.**
- Q-7 **Draw and complete the table for the safety symbols.**

## **Chapter-5 Topic 5: Work, energy and power**

- Q-1 **Complete the sentences.**
- a) Work done = Force  $\times$  \_\_\_\_.
  - b) The unit of work is the \_\_\_\_.
  - c) \_\_\_\_ is the ability to do work.
  - d) When work is done, \_\_\_\_ is the rate at which work is done, or energy transferred.
  - e) The unit of power is the \_\_\_\_.
- Q-2 **Do the following calculations.**
- a) How much work is done if the box weighs 500 N and the distance lifted is 3 m?
  - b) What force is used to lift the box if 2 000 J of work is done and the distance lifted is 4 m?
  - c) What is the mass of the box if 1 000 J of work is done and the box is lifted 5 m? (A mass of 1 kg exerts a force of 10 N.)
  - d) What distance is the box lifted if the box weighs 500 N and 10 000 J of work is done?
- Q-3 **Explain the difference between potential energy and kinetic energy. Give two examples of each.**
- Q-4 **The scheme depicts three energy transfers that take place at a power station. Describe the energy transfers for stages 1, 2 and 3 in the power station diagram.**
- Q-5 **Beko and Dila race to the top of the stairs. Compare Beko and Dila's power in racing up the stairs.**

## **Chapter-6 Topic 6: Kinetic particle theory**

- Q-1 **Match the terms to their correct definitions. Write down only the letter and matching number.**

**Q-2 Order solids, liquids and gases from greatest to lowest according to the following characteristics.**

- a) distance between particles
- b) kinetic energy or movement of particles
- c) forces of attraction between the particles

**Q-3 Answer the following.**

- a) Why do solids, liquids and gases expand when heated?
- b) Why do solids and liquids change their state when they are heated?

**Q-4 Explain the difference between evaporation and boiling.**

**Q-5 List four factors that affect the rate of evaporation.**

## **Chapter-7 Topic 7: Thermal energy**

**Q-1 Say whether the statements are True or False.**

- a) Another term for thermal energy is heat energy.
- b) It is difficult to keep heat in one place; it tends to spread.
- c) Heat is transferred by conduction, convection and radiation.
- d) Temperature is energy.

**Q-2 Look at the diagrams.**

- a) Describe the direction of heat flow from A and for B.
- b) If the temperature difference is 50 °C in A and 10 °C in B, which has the greatest heat flow?
- c) Why does heat tend to spread (flow)?
- d) When does heat flow stop?

**Q-3 The picture shows three different methods of heat transfer.**

- a) Define or describe each method of heat transfer.
- b) List two materials that are good conductors of heat.
- c) List two materials that are poor conductors of heat.
- d) Give two everyday examples of heat convection.
- e) If the pot is black, is it a good or bad emitter of radiation?
- f) If the pot is silver, is it a good or bad emitter of radiation?

## **Chapter-8 Topic 8: Crude oil and petrochemicals**

- Q-1 Briefly explain what crude oil is.**
- Q-2 How does refined oil differ from crude oil?**
- Q-3 List three petroleum products that are produced through the refining process.**
- Q-4 Discuss the importance of crude oil production for Nigeria.**
- Q-5 Answer the following:**
- a) What are petrochemicals?
  - b) List three products made from petrochemicals.

## **Chapter-9 Topic 9: First aid**

- Q-1 What do the A, B and C of first aid stand for?**
- Q-2 Why is it important to have disposable gloves in a first aid box?**
- Q-3 In the case of a burn, what is the first thing that should be done? Explain why it is important to do this immediately.**
- Q-4 Explain how a deep wound on the leg that keeps bleeding should be treated.**
- Q-5 Answer the following:**
- a) What does CPR stand for?
  - b) Give a detailed explanation of how CPR is carried out.

## **Chapter-10 Topic 10: Rescue operations**

- Q-1 What equipment is used to rescue people trapped in a vehicle after an accident?**
- Q-2 Answer the following:**
- a) What equipment is used to secure the neck after an accident?
  - b) Why is the neck support equipment used?

Q-3 **If a motor vehicle accident occurs at night, what can be used to warn other motorists?**

Q-4 **If it can be avoided, why should people not be moved after they have been injured?**

## **Chapter-11 Topic 11: Materials and their common uses**

Q-1 **List four types of furniture commonly made from wood.**

Q-2 **List four uses of wood in the construction industry.**

Q-3 **Answer the following:**

a) What is iron and steel?

b) Name some common products manufactured from iron and steel.

Q-4 **Discuss the production and common uses of rubber.**

Q-5 **Answer the following:**

a) Where does plastic come from?

b) Name the common uses of plastic.

## **Chapter-12 Topic 12: Geometric construction**

Q-1 **Name parts A–D of the circle.**

Q-2 **Match the terms to their correct definitions.**

Q-3 **Use triangles A–E to answer the questions.**

a) Identify the triangles: i) three  $60^\circ$  angles ii) a  $90^\circ$  angle iii) two equal angles iv) an obtuse angle.

b) Which triangle is a: i) right-angled triangle ii) isosceles triangle iii) acute scalene triangle iv) obtuse scalene triangle.

c) Complete the statement: All three angles of a triangle add up to.... .

Q-4 **Identify the quadrilaterals A–H and their properties.**

a) Name the quadrilaterals A–H.

b) Identify the quadrilaterals with: i) one opposite pair of equal angles ii) two opposite pairs of equal angles (one pair acute, one pair obtuse) iii) two pairs of equal angles (one pair acute, one pair obtuse) iv) four right angles.

## Chapter-13 Topic 13: Plane figures

**Q-1 Write the formula for calculating the area of:**

- a) triangle
- b) rectangle
- c) square
- d) Which of these plane figures are quadrilaterals?

**Q-2 Calculate the area of the:**

- a) triangle
- b) rectangle
- c) square

**Q-3 Use the simple drawing of a house to answer the questions.**

- a) What would be the height of the wall if you: i) reduced the drawing 2.5 times; ii) reduced the drawing by a scale factor of 5; iii) reduced the drawing by a ratio of 5 : 3; iv) reduced the drawing by a ratio of 5 : 1; v) enlarged the drawing 2 times; vi) built the house on a scale of 1 : 50?
- b) Give the scale factor that the area of the square would be: i) reduced by in a(ii); ii) enlarged by in a(v)

## Chapter-14 Topic 14: Woodwork machines

**Q-1 Explain the use of these portable woodwork machines.**

- a) sander
- b) drill
- c) fret saw

**Q-2 Answer the following:**

- a) What is a wood lathe?
- b) Why is a wood lathe not portable?
- c) Give another example of a non-portable woodworking machine.

**Q-3 List four things you should consider when buying new woodwork power tools and machines.**

**Q-4 What is the power source used for woodwork power tools and machines?**

## **Chapter-15 Topic 15: Metalwork machines**

- Q-1 Explain the uses of the following metalwork machines:**
- a) pedestal drilling machine
  - b) centre lathe
  - c) power hacksaw
- Q-2 Discuss the care and maintenance of metalwork machines and power tools.**
- Q-3 What are the three main differences between woodwork and metalwork power tools and machines?**

## **Chapter-16 Topic 16: Friction**

- Q-1 List two advantages and two disadvantages of friction.**
- Q-2 Explain the role of lubricants in controlling and preventing friction. Mention at least three different lubricants in your answer.**
- Q-3 Identify the object shown:**
- a)
  - b) Explain how this object can reduce friction in an engine or machine.

## **Chapter-17 Topic 17: Belt and chain drives**

- Q-1 What is the common principle of belt and chain drives?**
- Q-2 What is the basic difference between a belt drive and a chain drive?**
- Q-3 Explain the difference between a smooth belt and a toothed belt.**
- Q-4 Answer the following:**
- a) Name the advantages of belt and chain drives.
  - b) Name the disadvantages of belt and chain drives.

## **Chapter-18 Topic 18: Gears**

**Q-1 Explain the following terms:**

- a) bevel gear
- b) spiral gear
- c) helical gear

**Q-2 List three common uses of gears.**

**Q-3 Explain gear ratios and how this has an effect on speed rotation.**

**Q-4 List four functions of gear lubricants.**

**Q-5 Explain viscosity, as it applies to lubricants.**

## **Chapter-19 Topic 19: Hydraulic and pneumatic machines**

**Q-1 Explain the working principles behind:**

- a) hydraulic machines
- b) pneumatic machines

**Q-2 List three advantages of:**

- a) hydraulic machines
- b) pneumatic machines

**Q-3 Name four common parts of hydraulic and pneumatic machines.**

**Q-4 List five common uses for hydraulic and pneumatic machines.**

**Q-5 Will heavy machinery such as a bulldozer or excavator be hydraulically or pneumatically powered? Explain your answer.**

## **Chapter-20 Topic 20: Building construction**

**Q-1 Write a paragraph explaining what happens during site preparation on a construction site.**

**Q-2 List four examples of plant that might be used on a construction site.**

**Q-3 Explain why accurate setting out is needed on a building site before construction starts.**

- Q-4 Explain why timbering of foundation trenches is necessary on a construction site.
- Q-5 Name two different types of timbering.
- Q-6 Explain why it is necessary to provide water on a building site.

### **Chapter-21 Topic 21: Posture and postural defects**

- Q-1 Name the condition that causes bow legs and identify the vitamin in short supply which causes the condition.
- Q-2 Why is it important to bend the knees when leaning down to pick something up?
- Q-3 Explain what is meant by kyphosis.
- Q-4 Postural defects can be caused by lifestyle choices, for example lack of exercise. Explain why it is important to exercise regularly to maintain good posture and avoid some postural defects.

### **Chapter-22 Topic 22: Issues and challenges in physical and health education**

- Q-1 What is the term for an intentional physical act in sport that causes harm?
- Q-2 Give one reason why people sometimes go willingly with traffickers.
- Q-3 Give two ways people can suffer mentally from being trafficked.
- Q-4 Give two ways people can suffer physically after being trafficked.
- Q-5 What two problems can be caused when people are made to do factory work?
- Q-6 Discuss three ways that may help to prevent human trafficking.
- Q-7 Answer the following:
- What is the name of the law in sport that prevents the use of illegal substances?
  - Explain the reason why these substances should not be used in sport.

## **Chapter-23 Topic 23: Sport and society**

- Q-1 What is sport?**
- Q-2 Discuss the benefits of a nation hosting a sporting event.**
- Q-3 Explain how school sport could unify the whole school.**
- Q-4 How does being involved in sport benefit young people?**

## **Chapter-24 Topic 24: Recreation, leisure and dance activities**

- Q-1 Give the definition of the following terms: dance; rhythm; aerobics**
- a) dance
  - b) rhythm
  - c) aerobics
- Q-2 Look at the bar chart that shows activities that young people enjoy and answer the questions**
- a) Which is the most popular activity?
  - b) How many people enjoy: i) soccer; ii) dancing; iii) computer games
  - c) How many people took part in the survey?
- Q-3 Answer the following about dance:**
- a) Name three different types of dance.
  - b) Among which people is the bata dance popular?
  - c) What do korosa dancers use around their legs?
  - d) Who performs the atilogwu dance?
  - e) Explain why traditional dances are important.
- Q-4 Name three computer games**

## **Chapter-25 Topic 25: The striking games**

- Q-1 Outline the main differences between tennis and table tennis.**
- Q-2 Briefly explain the points scoring system and how a game is won in table tennis.**

- Q-3 **List the officials for a table tennis match played at tournament level.**
- Q-4 **What are the two major strokes in tennis?**
- Q-5 **Explain the unusual system of scoring in tennis.**
- Q-6 **How many players take part in the following:**
- a) singles tennis or table tennis
  - b) doubles tennis or table tennis

## **Chapter-26 Topic 26: Field events**

- Q-1 **Explain the basic procedure followed in the following throwing events:**
- a) Shot put
  - b) Javelin
  - c) Discus
  - d) Hammer throw
- Q-2 **What is the difference between high jump and long jump?**
- Q-3 **Name two materials needed to make the poles used in pole vaulting.**
- Q-4 **What are the three jumps done in the triple jump event?**

## **Chapter-27 Topic 27: Judo**

- Q-1 **Where did judo originate?**
- Q-2 **How many contestants take part in a judo match?**
- Q-3 **What is the name given to the surface on which a judo match takes place?**
- Q-4 **What clothing does a judoka wear?**
- Q-5 **How is a judo contest won?**
- Q-6 **List the general benefits associated with practising judo as a sport.**

## **Chapter-28 Topic 28: First aid and safety education**

- Q-1 Discuss two ways bicycles should be made more visible if being used after dark.**
- Q-2 Name two ways children can be prevented from getting burned in a kitchen.**
- Q-3 Discuss one way to prevent children being injured by vehicles outside the school.**
- Q-4 What is the term for a bone in a joint moving out of place?**
- Q-5 What is the term for pain in the lower leg, often found in runners?**
- Q-6 In first aid, what does the term RICE stand for?**
- Q-7 What sort of glass should be used in a glass door?**

## **Chapter-29 Topic 29: Personal, school and community health**

- Q-1 FRESH is an acronym. What does each letter of the word stand for?**
- Q-2 Biological control can be used to control pests.**
  - a) Explain what is meant by biological control.
  - b) What is the advantage of biological control?
- Q-3 Why should batteries and electronic waste (e-waste) not be thrown out with general waste?**
- Q-4 Give four examples of the types of materials that can be recycled.**
- Q-5 Name two ways we can reduce the amount of plastic used at home.**

## **Chapter-30 Topic 30: Family life education**

- Q-1 Write your own definitions of the following words:**
  - a) communication
  - b) conversation
  - c) etiquette

- Q-2 **Draw a diagram of the communication process.**
- Q-3 **Why is it important to listen when people are speaking to you?**
- Q-4 **Name two qualities a good communicator uses during a conversation.**

### **Chapter-31 Topic 31: Abstinence from sex**

- Q-1 **Answer the following:**
- a) Name the three types of abstinence.
  - b) Explain the three types of abstinence.
- Q-2 **Discuss the advantages of abstaining from pre-marital sex regarding:**
- a) pregnancy
  - b) sexually transmitted diseases.

### **Chapter-32 Topic 32: Non-communicable diseases and their prevention**

- Q-1 **Explain the following terms:**
- a) non-communicable disease
  - b) haemoglobin
  - c) obesity
  - d) inflammation
- Q-2 **Answer the following:**
- a) Give three examples of non-communicable diseases.
- Q-3 **List three factors that increase the risk of dying from a non-communicable disease.**
- Q-4 **Answer the following:**
- a) What causes sickle cell anaemia?
  - b) What test can a person have to see if they have sickle cell anaemia?
  - c) Describe three symptoms of sickle cell anaemia.
  - d) How is sickle cell anaemia treated?
- Q-5 **Answer the following:**
- a) Give two reasons why people become obese.
  - b) Give three ailments that obese people may experience.

c) How can obesity be treated?

**Q-6 Answer the following:**

- a) Name three triggers for asthma.
- b) What are the symptoms of asthma?
- c) What is the treatment for asthma?

**Q-7 Answer the following:**

- a) Give three reasons why people get anaemia.
- b) What is the treatment for anaemia?

**Q-8 Answer the following:**

- a) What disease may cause a child to have a low body mass, suffer from diarrhoea and fatigue, and have many infections?
- b) Why do you think a child with the above symptoms is given food slowly?

**Q-9 List six ways that non-communicable diseases can be prevented.**

### **Chapter-33 Topic 33: Classification of computers**

**Q-1 Explain why the size of a computer is important.**

**Q-2 List three functions, or uses, of a modern computer.**

**Q-3 Name three types (versions) of the modern personal computer.**

**Q-4 What is a processor and what does it do in a computer?**

**Q-5 Explain what the term 'versatility' means in reference to computers.**

### **Chapter-34 Topic 34: The computer system**

**Q-1 Answer the following:**

- a) systems analyst
- b) data capturer
- c) programmer
- d) technician

**Q-2 Name five computer hardware components.**

**Q-3 Explain the difference between computer hardware and computer software.**

**Q-4 Answer the following:**

- a) Explain the difference between computer input and output devices.
- b) List three examples of input devices.
- c) List three examples of output devices.

**Q-5 Answer the following:**

- a) What is a computer's arithmetic logic unit (ALU)?
- b) What function does a computer's arithmetic logic unit perform?

### **Chapter-35 Topic 35: Computer software**

**Q-1 Define the term 'computer software'.**

**Q-2 Briefly explain the difference between system software and application software.**

**Q-3 Explain the functions of a word processing programme.**

**Q-4 Answer the following:**

- a) What is a graphics programme?
- b) Give two examples of graphics programmes that can be bought.

**Q-5 Answer the following:**

- a) What is a spreadsheet programme?
- b) How is a spreadsheet programme different from a word processing programme?

### **Chapter-36 Topic 36: Operating system**

**Q-1 Explain what an operating system does on a computer.**

**Q-2 Can a computer run without an operating system? Explain your answer.**

- Q-3 **List four common computer operating systems.**
- Q-4 **Which of the four operating systems, listed in question 3, is the most popular on personal computers (PCs)?**
- Q-5 **When talking about computers, what is a utility, or utility programme?**

### **Chapter-37 Topic 37: Units of storage in computers**

- Q-1 **What does the term binary mean?**
- Q-2 **State the number that represents 10 in:**  
a) digital system  
b) binary system
- Q-3 **Explain the terms:**  
a) byte  
b) kilobyte  
c) gigabyte
- Q-4 **Where is computer data or information commonly stored?**

### **Chapter-38 Topic 38: Computer problem-solving skills**

- Q-1 **What is the difference between a computer programme and a programming language?**
- Q-2 **Briefly describe and explain the following computer languages:**  
a) LOGO  
b) BASIC  
c) C (including C+)
- Q-3 **What is meant by an arithmetic function?**
- Q-4 **What is meant by a computer command?**

### **Chapter-39 Topic 39: BASIC programming**

- Q-1 What do the letters stand for in the computer language BASIC?**
- Q-2 Answer the following:**
- a) What is meant by the character set in BASIC?
  - b) Name the three types of character.
- Q-3 Explain what will happen in a computer programme (and on the monitor screen) in response to the following BASIC commands:**
- a) GOTO
  - b) CLS
  - c) RETURN
  - d) IF...THEN
- Q-4 In computing, who would use BASIC: a programmer, or an end user? Explain your answer.**

## **Chapter-40 Topic 40: Computer ethics**

- Q-1 Provide the correct terms for each of the following statements.**
- a) A set of moral standards that determine how we make use of computers.
  - b) The law that gives the owner of a work (for example, a book, movie, picture, website or song) the right to say how other people can use it.
  - c) Sudden increases in electrical voltage.
  - d) A device that is used to keep a computer running after a power outage to allow the user to safely shut down their computer, therefore protecting against the loss of active data.
  - e) Distributing computer viruses to harm another person's computer.
  - f) Distributing unwanted advertising.
  - g) The unauthorised intrusion into a computer or network.
- Q-2 The email below is an example of a poorly written email. Identify the errors in the email and explain what the writer needs to do to improve this email.**
- Q-3 Name four precautions you should take when using the computer.**

## **Chapter-41 Topic 41: Safety measures**

- Q-1 Identify three ways in which the lady is adopting good posture in the photograph on the right compared to her posture in the photograph on the left, and describe what type of injury the lady will prevent if she maintains her posture on the right.**
- a)
  - b)
- Q-2 State four guidelines that will ensure safe use of the computer room.**

### **Chapter-42 Topic 42: Graphic packages**

- Q-1 What are computer graphics?**
- Q-2 Match Column A with Column B.**
- Q-3 List five features of graphics packages.**
- Q-4 What is the difference between painting packages and drawing packages?**

### **Chapter-43 Topic 43: Paint environment**

- Q-1 Identify the MS Paint tools numbered 1–6.**
- a)
  - b)
  - c)
  - d)
  - e)
  - f)
- Q-2 State the functions of the following tools.**
- a) The copy function
  - b) The select tool
  - c) The colour fill tool
  - d) The rulers and gridlines (not illustrated)
  - e) The edit colours tool

## **Chapter-44 Topic 44: IT as a transformational tool**

- Q-1 **Name five ICT devices.**
- Q-2 **List five functions of ICT devices.**
- Q-3 **Explain five ways that we benefit from the use of IT gadgets.**
- Q-4 **Describe five disadvantages of the use of IT gadgets.**

## **Chapter-45 Topic 45: IT gadgets**

- Q-1 **What do the following acronyms stand for?**
- a) GSM
  - b) SIM
- Q-2 **Answer the following about SIM cards.**
- a) What is the purpose of a SIM card?
  - b) What information does a SIM card store?
  - c) What security feature do SIM cards usually have?
- Q-3 **Landline telephones and faxes are regarded as important communication devices. For each, state two reasons why this is true.**
- Q-4 **Answer the following about satellites.**
- a) Explain what a satellite is.
  - b) Name two natural satellites.
  - c) What are the benefits of satellites to us?

## **Chapter-46 Topic 46: Internet**

- Q-1 **Provide the correct terms for:**
- a) The unique address of devices connected to the internet.
  - b) The information sharing system on the internet.
  - c) A location on the web that is made up of webpages.
  - d) The address for a webpage.
  - e) The programme used to navigate the internet on a computer.

**Q-2 Answer the following:**

- a) Name three key features of websites.
- b) Name three ways in which the internet can be abused.
- c) Describe four benefits of the internet.

## **Chapter-47 Topic 47: Internet environment**

**Q-1 Name five characteristic features of the internet.**

**Q-2 Provide three examples of good netiquette practice when writing an email.**

**Q-3 Why are internet icons useful?**