

SUGGESTED ANSWERS OF PLE 2022

1	(i) Hoe, machete, panga, rake, watering can, spraying pump, spade, (ii) Trowel, file, watering wheel, sickle, tractor, axe, pickaxe, forked hoe. Etc.	26	<table border="0"> <thead> <tr> <th>Diseases</th> <th>Symptoms</th> </tr> </thead> <tbody> <tr> <td>i) Tapeworms</td> <td>a) Difficulty in breathing</td> </tr> <tr> <td>ii) Pneumonia</td> <td>b) Worms might be seen in droppings</td> </tr> </tbody> </table>	Diseases	Symptoms	i) Tapeworms	a) Difficulty in breathing	ii) Pneumonia	b) Worms might be seen in droppings									
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2	spirit level is a carpentry tool that is used to check whether the surface is horizontal or vertical while a plumb line is a masonry tool used to find out whether the wall is upright or not.	27	(i) It should be strong and wide (ii) It should have clean water, and feeders															
3	Flash disk is used for storing data (music, videos, pictures, documents etc.)	28	<table border="0"> <thead> <tr> <th>Animals</th> <th>Respiratory organs</th> </tr> </thead> <tbody> <tr> <td>a) Tilapia</td> <td>i) Book lungs/trachea</td> </tr> <tr> <td>b) Spider</td> <td>ii) Gills</td> </tr> <tr> <td>c) Mosquito</td> <td>iii) Spiracles</td> </tr> <tr> <td>d) Man</td> <td>iv) Lungs</td> </tr> </tbody> </table>	Animals	Respiratory organs	a) Tilapia	i) Book lungs/trachea	b) Spider	ii) Gills	c) Mosquito	iii) Spiracles	d) Man	iv) Lungs					
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4	By putting oil or grease on a turning part of a machine. By keeping a machine in a dry and clean place.																	
5	It is a source of information It creates friendship among the people	29	A cow provides meat and milk which contain nutritious food elements															
6	<table border="0"> <thead> <tr> <th>Tool</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>Clamp</td> <td>Holding a piece of wood to prevent its movement</td> </tr> <tr> <td>Hack saw</td> <td>Cutting metals</td> </tr> <tr> <td>Bellow</td> <td>Blowing air into the fire</td> </tr> </tbody> </table>	Tool	Use	Clamp	Holding a piece of wood to prevent its movement	Hack saw	Cutting metals	Bellow	Blowing air into the fire	30	(i) Butterflies, bees, moths							
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7	(i) Wearing protective gear/clothes like gloves, boots, overall (ii) Not keeping tools in a path of other workers	31	Photosynthesis is the process by which green plants make their own food by using water, carbon dioxide and chlorophyll while transpiration is the loss of water from plant leaves in a form of water vapour.															
8	(i) Toys help children to play and relax (ii) Toys are a source of happiness to children	32	<table border="0"> <thead> <tr> <th>Parts of a flower</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>a) Petals</td> <td>i) Contains ovules</td> </tr> <tr> <td>b) Sepals</td> <td>ii) Receives pollen grains</td> </tr> <tr> <td>c) Stigma</td> <td>iii) Holds stigma in position</td> </tr> <tr> <td>d) Style</td> <td>iv) Pushes pollen grains</td> </tr> <tr> <td>e) Ovary</td> <td>v) Protect young flower</td> </tr> <tr> <td>f) Anther</td> <td>vi) Attract pollinators</td> </tr> </tbody> </table>	Parts of a flower	Function	a) Petals	i) Contains ovules	b) Sepals	ii) Receives pollen grains	c) Stigma	iii) Holds stigma in position	d) Style	iv) Pushes pollen grains	e) Ovary	v) Protect young flower	f) Anther	vi) Attract pollinators	
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9	(i) Turtle Art, Scratch	33																
10	<table border="0"> <thead> <tr> <th>Material</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>a) Spunlax, hie bands</td> <td>i) Learning objects</td> </tr> <tr> <td>b) Beakers, Cables, Triangle</td> <td>ii) Toy objects</td> </tr> <tr> <td>c) Doll, Teddy bear</td> <td>iii) Utility objects</td> </tr> </tbody> </table>	Material	Use	a) Spunlax, hie bands	i) Learning objects	b) Beakers, Cables, Triangle	ii) Toy objects	c) Doll, Teddy bear	iii) Utility objects									
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11	Papers, manila papers, threads, banana fibers, wool, wood	34	Pollination is the transfer of pollen grains from the anthers to the stigma while fertilization is the union or fusion of male and female sex cells.															
12	Coiling, plaiting, twining	35	<table border="0"> <thead> <tr> <th>Organ</th> <th>Sense</th> <th>Nerve</th> </tr> </thead> <tbody> <tr> <td>Eye</td> <td>Sight</td> <td>Optic nerves</td> </tr> <tr> <td>Tongue</td> <td>Taste</td> <td>Gustatory/ lingual</td> </tr> <tr> <td>Ear</td> <td>Hearing</td> <td>Auditory nerves</td> </tr> <tr> <td>Nose</td> <td>Smell</td> <td>Olfactory nerve</td> </tr> </tbody> </table>	Organ	Sense	Nerve	Eye	Sight	Optic nerves	Tongue	Taste	Gustatory/ lingual	Ear	Hearing	Auditory nerves	Nose	Smell	Olfactory nerve
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13	(i) It is used for storing data (ii) It is used for communication	36	a) Organs that help us to see, hear, smell, taste, and feel are called "Sensory organs". b) Our body is supported by a framework of bones called the "Skeleton"															
14	<table border="0"> <thead> <tr> <th>Terms</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>a) Hardware</td> <td>i) Computer programs</td> </tr> <tr> <td>b) Internet</td> <td>ii) Physical components of a computer</td> </tr> <tr> <td>c) Software</td> <td>iii) Worldwide interconnection</td> </tr> <tr> <td>d) Application</td> <td>iv) Instructions written by computer specialist</td> </tr> </tbody> </table>	Terms	Meaning	a) Hardware	i) Computer programs	b) Internet	ii) Physical components of a computer	c) Software	iii) Worldwide interconnection	d) Application	iv) Instructions written by computer specialist	37	Short-sightedness is an eye defect when a patient can see well objects which are near while long-sightedness is an eye defect when a patient can see well distant objects.					
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15	Nitrogen, oxygen, carbon dioxide	38	<table border="0"> <thead> <tr> <th>Food substances</th> <th>End product</th> </tr> </thead> <tbody> <tr> <td>Carbohydrates</td> <td>Glucose</td> </tr> <tr> <td>Proteins</td> <td>Amino acids</td> </tr> <tr> <td>Fats</td> <td>Fatty acids and glycerol</td> </tr> </tbody> </table>	Food substances	End product	Carbohydrates	Glucose	Proteins	Amino acids	Fats	Fatty acids and glycerol							
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16	Fumes, carbon monoxide, Sulphur dioxide, nitrogen dioxide etc.	39	In boys Testosterone In girls Progesterone															
17	a E-mail account	40	Blood transports oxygen and nutrients to the body tissues Blood carries cells and antibodies that fight infections Blood transports carbon dioxide and other wastes from cells to excretory organs															
18	a) 78%	41	Breathing in: The ribs move upwards and outwards while the lungs expand in size.															

					Breathing out: The ribs move downwards and inwards while the lungs reduce in size.										
19	Cholera, dysentery, typhoid			42	Abstaining from sexual intercourse Being faithful to your partner Avoid drug abuse										
20	Evaporation is the process when a liquid changes to gas while condensation is the process when a gas changes to a liquid.			43	Ovum is bigger than sperm (Ovum is bigger whereas sperm is smaller) Sperm is long with tail and head while ovum is spherical and has no tail.										
21	(i) Deforestation, overgrazing (ii) Burning forests, growth of industries			44	<table border="1"> <tr> <td>Process (A)</td> <td>Process (B)</td> </tr> <tr> <td>a) Ovation</td> <td>i) Union of sperm and ovum</td> </tr> <tr> <td>b) Implantation</td> <td>ii) Period from fertilization to birth</td> </tr> <tr> <td>c) Fertilization</td> <td>iii) The release of ovum by the ovary</td> </tr> <tr> <td>d) Pregnancy</td> <td>iv) Attachment of the embryo to the uterus</td> </tr> </table>	Process (A)	Process (B)	a) Ovation	i) Union of sperm and ovum	b) Implantation	ii) Period from fertilization to birth	c) Fertilization	iii) The release of ovum by the ovary	d) Pregnancy	iv) Attachment of the embryo to the uterus
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22	(i) Loam soil, clay soil (ii) Sand soil														
23	(i) Fertilizers increase soil fertility (They boost productivity of the soil) (ii) They help crops to grow well and fast			45	(i) Dropping out of school (ii) It causes emotional stress (iii) It leads to illegal abortion and family rejection										
24	Because plastic bags do not decompose Because plastic bags cause soil pollution			46	Liquid water is in liquid state, when you heat it for a long time, it becomes vapour which is in gaseous state. When you cool water until 0°C and below, it becomes ice.										
25	Because toilets keep wastes (Faeces and urine) which contains germs that cause diseases. Because it is good to maintain hygiene and sanitation.			47	(i) Objects sink in water because their density is higher than that of water (ii) Objects sink in water because they have tightly packed molecules										
				48	(i) Liquid has no definite (fixed) shape (ii) Liquid flows easily										
50	The given Mass= 95 g Volume= 19 cm ³	Unknown Density=?	Formula $D = \frac{\text{mass}}{\text{volume}}$	Calculation $D = \frac{95g}{19cc}$ $D = 5g/cc$	49 (i) It is used for lighting, welding, shaving hair. Ironing clothes (ii) It is used for operating electric devices like TV, Radio etc. Refrigeration										