ANNEXURE -A

DAV PUBLIC SCHOOLS, ODISHA, ZONE

HALF YEARLY EXAMINATION: 2023-24

CLASS :VI ,

SUBJECT :SCIENCE AND TECHNOLOGY

BLUE PRINT OF QUESTION PAPER

Sl No.	Chapters / units	Marks Allotted in Syllabus	LA (___ Nos)	SA-II (___ Nos.)	SA-I (___ Nos.)	VSA (__ Nos.)	TOTAL (__ NOS.)
1	Chapter 1	9	-	1	1	3+ 1 (A/R)	6
2	Chapter 2	9	1			Case based (4*1)	2
3	Chapter 3	6		1	1	1(A/R)	3
4	Chapter 4	15	1	1		Case based (4*1), 1,1,1	6
5	Chapter 5	10		1	2	3	6
6	Chapter 7	16	1	1	3	2	7
7	Chapter 12	15	1	1	2	3	7
MARKS		**80**	**5*4= 20**	**3*6= 18**	**2*9=18**	**1*14=14 1*2=2 4*2=8**	**37**

Remembering and understanding 50% = 40 marks
Application and analysis 40% = 32 marks
Hots 10% = 8 marks
Total= 80 marks

ANNEXURE -B

DAV PUBLIC SCHOOLS, ODISHA, ZONE

HALF YEARLY EXAMINATION: 2023-24

CLASS : VI

SUBJECT :SCIENCE AND TECHNOLOGY

QUESTIONWISE ANALYSIS

Sl No.	Chapters / units	Forms of Question - (LA , SA-II, SA-I, VSA)	Marks Allotted	(R), (U), (A), (H), (E)
1	CH -1- OUR ENVIRONMENT	SA-II, SA-I , VSA(WITH A/R)	9 (3,2,1(4))	(A),(E),(R, R, R, ,H)
2	CH-2- FOOD	LA,VSA(CASE BASED)	9 (5,4)	(A),(U)
3	CH- NATURE OF MATTER	SAII, SA-I, VSA(A/R)	6(3,2,1)	(U),(U),H
4	CH- 4 – SEPARATION OF SUBSTANCES	LA, SAII, VSA+CASE BASED	15 (5, 3,4,1,1,1)	(U), A, ,A, R, U,H
5	CH -5- CHANGES AROUND US	SAII, SAI, VSA	10 (3,2,2,1,1,1)	U,H, U, A,R, H
6	CH-7 – THE WORLD OF LIVING	LA, SA-II, SA-I,VSA	16 (5,3,2x3, 1x2	U, A, R,A, A, R.
7	CH-12- LIGHT AND SHADOW	LA, ,SA-II, SA-I(2), VSA(3)	15 (5,3,2x2,1x3	A, A/U, U, R, R, R , H

ANNEXURE –C

DAV PUBLIC SCHOOLS, ODISHA, ZONE

HALF YEARLY EXAMINATION: 2023-24

CLASS : VI , SUBJECT :SCIENCE AND TECHNOLOGY

MARKING SCHEME

QSTN NO	Value Points	Marks Allotted	PAGE NO. OF NCERT /TEXT BOOK
1	Drooping of leaves of mimosa plant, movement of the shoot tip towards light, earthworm tendency to move away from light, animals moving away from	1	106
2	When a ray of light fall on an opaque object, the light reflect back to the same medium is called reflection.	1	195
3	Physical and reversible	½+½	73,74
4	Amoeba, yeast(any relevant example)	½+ ½	107
5	Physical change/ irreversible	1	74
6	(a) Energy absorbed	1	77
7	Rainwater harvesting	1	5
8	autotrophs	1	8
9	luminous	1	188
10	Glass	1	189
11	Decomposers break down the dead bodies and enrich the soil with minerals.(clean the environment)	1	3
12	Loading	1	57
13	Gravel , sand	½ + ½	61
14	• Sublimation • magnetic separation	½+½	54,55
15	a) both A and R are true and R is the correct explanation of A.	1	35
16	b) both A and R are true but R is not the correct explanation of A	1	7
17	(I) (c) Vitamin D (II) (a) Vitamin B (III) (d) sterility (IV) (b) Vitamin C	1+1+1+1	20
18	(I) (d) Crystallisation (II) (b) hand picking (III) (c) Evaporation (IV) (d) Both threshing and winnowing	1+1+1+1	49 to 60
19	Black in colour don't have efficient sweat gland **OR** Morning glory bloom out at sunrise and closed down after sunset. Animals like rat ,cockroaches and owls are active during night.	½ + ½ + 1	8 7
20	Curd cannot comes back to milk again .Milk changes to curd which is a new substance having different properties	1+1	72
21	a) Permanent/ chemical/irreversible change b) Milk to cheese, cooking of food or any relevant answer of chemical and irreversible permanent change. **(any one)**	1 + 1	75
22	Mesophytes are plants that need moderate amount of water for their survival. Hydrophytes are plants found in water which need more amount of water for their survival.	1+1	112

<table>
<tr><td></td><td>OR
Shrubs are the plants which attain 3m height and have non-woody hard stem. Trees attain several metres height and have strong woody stem</td><td></td><td></td></tr>
<tr><td>23</td><td>a) X- carbon dioxide
Y- oxygen
b) The solubility of gas decreases with the increase in temp. of water</td><td>½+½+1</td><td>43</td></tr>
<tr><td>24</td><td>a) Lateral inversion
b) ex, - ambulance and secret coding</td><td>1+1</td><td>196</td></tr>
<tr><td>25</td><td>Carrot and radish survive for two season, in one season they have vegetative growth, in the second season they have fruits and flowers.</td><td>1+1</td><td>110</td></tr>
<tr><td>26</td><td>• image is colourful; shadow is black.
• image cannot be obtained on a screen; a shadow is always obtained on a screen. (Any other appropriate answer)</td><td>1+1</td><td>197</td></tr>
<tr><td>27</td><td>Frugivores – animals who eats fruits only. Ex – parrot
Insectivores – animals eats on insects, ex- lizard, any relevant examples</td><td>1+1</td><td>115</td></tr>
<tr><td>28</td><td>Diagram of solar eclipse, explanation of formation of shadow, i.e. when sun moon and earth happen to be in straight line, moon coming in between sun and the earth.
OR
Diagram of lunar eclipse, Sun moon & Earth happen to be in straight line with earth coming in between sun and the moon.</td><td>2+1</td><td>193</td></tr>
<tr><td>29</td><td>• In solids particles are very tightly packed. In gases particles are very loosely packed.
• Inter- molecular space is least in solids whereas maximum in gases.
• Inter-molecular force of attraction is maximum in solids and minimum in gases.</td><td>1+1+1</td><td>36</td></tr>
<tr><td>30</td><td>
<table>
<tr><td colspan="2">ANIMALS</td></tr>
<tr><td>Vertebrates</td><td>Invertebrates</td></tr>
<tr><td>1. They have a backbone, which made up of several small ring-like bones, called vertebrae.</td><td>They do not have a backbone.</td></tr>
<tr><td>2. These animals are well-developed and have a bony skeleton.</td><td>These animals have a soft body.</td></tr>
<tr><td>3. The examples are
Human beings
Fist
Frog
Lizard
Birds</td><td>The examples are :
Earthworm
Cockroach
Snail
Octopus
Star fish</td></tr>
</table>
OR
Animals reproduce by laying eggs, by dividing their bodies and by giving birth to young ones(relevant examples in each case)</td><td>1+1+1</td><td>116

115</td></tr>
<tr><td>31</td><td>It is a method used to separate the fine particles suspended in a liquid by rotating the mixture at a high speed. It is widely used in dairies and at homes to churn out butter from cream. In</td><td>1+1+1</td><td>61</td></tr>
</table>

	centrifugation the heavier particle tend to settle down at the bottom of the container while the lighter one stays at the top. Thus butter being lighter floats at the top.		
32	Rusting of iron, formation of day and night, ripening of fruits, growing of trees are slow changes. The changes which take place in a short period of time are called fast changes. Example: Burning of paper, stretching of a rubber band, blowing of balloons, bursting of crackers are fast changes.	1+1+1/2+1/2	72
33	1.Not using plastic, segregation of biodegradable and non biodegradable waste before disposing into the environment, making compost /vermicompost from these substances.. any relevant answers **OR** Schematic diagram	1+1+1 3	4, 5 11
34	a) Mixing of more then one substance together in any ratio b) Air- nitrogen, hydrogen, oxygen argon…… Crude oil (patrol, kerosene, diesel) c) Homogeneous mixture – same composition through out it, different parts cannot be distinguished from each other . Components are uniformly distributed Heterogeneous – doesn't have same composition, different parts can be distinguished from each other Components are not uniformly distributed	1+2+2	51,52
35	a) Pigeon chest , as the chest protrudes out due to weakening of ribs. b) Rickets c) Bowed legs, knocknees, Bones become weak d) Vitamin D, Milk(any other relevant source)	1+1 + 1 + 1 + 1/2 +1/2	24
36	a) Xerophyte b) Root c) C is thin and spiny leaves helps to minimise water loss d) Cacti, Babool (any other relevant example) e) Xerophyte need very small amount of water	1 1 1 1/2+1/2 1	76
37	Reference activity 1 page no 189 **OR** Reference activity 2 page no 192	2+3	189, 192