Government Science College, Vankal

Department of Zoology

Short Term Course Attendance Sheet (2022-23)

Course Name: Aguazium Mouragement (STC 200)

Date 3- 25/07/2012 to 6/09/2012

| | Student's Name | Class | 02/7/20 | 00/7122717128817123917128 | h2 28/11/1 | 39/7/26 | 2 Hg | 2/8/22/8/62 | 2/8/62 | 2/8 | 23/8/4/ |
|-----|------------------------|-------|---|---------------------------|-------------|------------------|--------------|--------------------------|------------|-----------|------------|
| | Gamit Harshil R. | ZBC | H. Gamilt H. | remit H. acus | mit & Grami | H. CACIONIT | Comon | Y. W.C.IMI | J. Coermin | WYOU. | MUSE TOD A |
| 7 | Vasava Sahil N. | ZBC | (Subid) | Jahil Clock | 1 Barris | Copyl | ani | (clothi) | Complet | conil | clothil |
| 3 | Chaudhari Yashvi N. | ZBC | 1 . | V-C 7 2.0 | JM.Y) | 7.N.C | J.M.C | 1 | ٠. | 7.1/1. | 7.N.C |
| 4 | Chaudhari Vibhuti S. | ZBC | TO TOPACE | Lender Callettan Co | - | STONE THOUSE THE | - | J. FORME | Sport C | Trans Co | E-PAMC |
| 10 | Chaudhari Priya F. | ZBC | | P. C. P. C. | - | 0.0.0 | | D. C. C. | P.C.C | P. R. C | P.C. |
| 9 | Chaudhari Krutika D. | ZBC | | - | 100 | | (Breath | Dreesel Presenti Prairie | | (Protect) | A bread to |
| 7 | Chaudhari Anjali R. | ZBC | | | - 4 | | | # Arangi | | Anthon | Adura |
| 90 | Vasava Raxa R. | ZBC | | | | - | | | 2. Q. Q | | R.R.V |
| ¥ 6 | Khan Aabida S. | ZBC | elida. | ٠, | | e chairs. | | | | 4 | wide |
| 10 | Chaudhari Ayushi N. | ZBC | A.N.C | بر | CANC | A.N.C | | A.N.C | 1 | ANG | D-N-C |
| 11 | Chaudhari Ajana K. | RZ ZB | 3 | D AD | A. | 4 | B | 2 | - | 3 | 4 |
| 12 | Chaudhari Arpit R. | ZB | A SA | Are Mas | Q.9 | a de | GRE | 130 | A8 (| 618 V | ES ES |
| 13 | Chaudhari Devangini H. | 8Z | 0 % | o The | Mo | No | No. | 77 | A. | No | 4 |
| 14 | Chaudhari-Devanshi V. | ZB | 0000 | 70 370 | S. KO DI | 757.0 | P.74 | 5.70 | 5710 | 27.0 | 220 |
| 15 | Chaudhari Divyangi L. | ZB | 10.L.C | 1.0 0.L | 27.0 D | - Ap | 2.70 | 2.1.6 | 27.0 | 21.0 | SE SE |
| 91 | Chaudhari Jankhya G. | RZ ZB | (e) | 9 | 9 | (T) | 0 | 6 | 1. | (A | A |
| 17 | Chaudhari Krupati N. | RZ ZB | Tall Tall Tall Tall Tall Tall Tall Tall | Kanter Kantert | the Kouley | Kayler | Krond Person | Kon Beth | TEBLES | Care feet | Kanex |
| 18 | Chaudhari Kunjan J. | ZB | XXX | スナン | 15/2/5 | X.35 | K.76 | K.35 | | R. 35 | A.P. |
| 61 | Chaudhari Mansi R. | ZB | M.R. C. M.R | R.C Millie | e MR.C | 2 M.R.C | M.R.C | MR.C | M.R.Q | M.R.C | M.R.c |
| 20 | Chaudhari Mital M. | ZB | म् | mm mm | (A) | S S | (mm) | J WW | mm) | mod | E LE |
| 21 | Chaudhari Nitiksha C. | ZB | いい、い | CC N.C. | J. D. C.C | 7.C.C | N.C.C. | 2.C.C. | 1.5. N | N.C.C | 1.2.6. |
| 22 | Chaudhari Shreya M. | ZB | S-N.C. 5. | S.M.C. S.M.C | | S.M.C | S.M.C | 5-M.C S | SMC | S.M.C | 5. 19.0 |
| 3 | Chaudhari Zinal H. | ZB | 立方は | 10 Jac | 200 | 740 | 1 de | N + N | The I | 210 | の見 |
| 24 | Chaudhari Zinal J. | RZ ZB | | 10 L | 700- | 3 | 0 | の い い | 3 | | N |
| 25 | Gamit Dipti N. | ZB | - | | | うどれ | EVA. | | あるつ | DNG | PNG |
| 26 | JAdav Hetal A. | ZB | Jeday Ja | Jacon Jacon | 3/400 | The second | # | Tagor | SE SE | E S | Leady |
| | | | | | | | | | | | 1 |

Short Term Course Attendance Sheet

2000

| Sr. | Student's Name | Clace | 6.0 | 2 | - | | | 4 | 6 | | | - |
|----------------|-------------------------|---------|-------------------|--|--------------------------------|------------------|--|---------------------------|--|-------------|--------------|--------------------|
| S _o | | | 2/4/20 | 7/4/0 | THE | 2/2/8 | 2/2/8 | 17/2/ | 18/2 | 2/8/ | 2/8/8/ | 18/2 |
| 27 | Naik Rekha K. | ZB | P. K. P | 245 | 2.K.R | 2.K.R | 2.K.2 | 2.K.P | 2. K.O | 12.14.N | Q.14.70 | 12.KO |
| 28 | Prajapati Het R. | ZB | A C | _ | 21/20 | ME | MIL | 1180 | JANK. | TOTE | 1180 | |
| 59 | Vasava Ankita A. | ZB | () rescure | A STOREGE | 9 rady | Shrikung | SACCIONAL PARTY | MINELSCING | Shrauw. | 350 | SUN PROPERTY | SANSONE SANSONE |
| 30 | Vasava Ankit P. | ZB | Inhat. | A.H.F. | | Inkit | Jost it | Ambi F | An Lih | Int. | 12. Lih | 1 |
| 31 | Vasava Avantika C. | ZB | (A) NOTHER | | (A)NONE | Colored . | | 9 | 1 | | 1 | A struct |
| 32 | Vasava Nikhil V. | ZB | V.V. | > ? | 7.7.2 | >>> | _ | | - | N.V.V | 2.2.5 | 4 |
| 33 | Vasava Pranjal A. | 8Z | Pacento | - | Apendi Pachgal | Pocugal | 1 | 0 | - | Poemine | Coerrie | |
| 34 | Vasava Priya G. | ZB | THE PARTY | Cary Pery | Person | Parties Miles | Par's E | Pary Pary | - | Parke | PASSE POSSE | |
| 35 | Vasava Sagar C. | SZB | V.C.V | | SCV | S.C.V. | S.CV. | S.C.V. S.C.V. S.C.V. | Sicv | SCIV | Sc. 1 | |
| 36 | Vasava Sarjana K. | ZB | Susday | Quanto | _ | | (S) yeasuly | Sver avg | SVENSOW SUCKNICE SUCKNIME ONESCH | Suctson) | E)KISUM | Prace 14 |
| 37 | Vasava Sneha D. | ZB | September | - | | Goreles | Someth | Something | Sollow | Sall | Some | Soll |
| 38 | Vasava Yash C. | ZB | 4.0.V | ٦٠٥٠٩ | 7.0.7 | 4.0.7 | | Y.C.L | Lacal | | 1.c.V | Y C.V |
| 39 | Vasava Yogita P. | 8Z | 109/th | NAUFA EATHA | Maita | | | 子かん | 109:ta | か出力 | | > |
| 40 | Vasava Amit J. | 8Z | 別は | Sec. The sec. | 12 July 1 | An its | | Marit | 02 | A. 1201 | Amit | P |
| 41 | Valvi Rahul R. | ZB | Reshus. | Down | Puhus | Poito | Buhal. | Bered | Ontral | 1. 1. O | Brand | Duly L |
| 42 | Bhagat Nutan G. | Zoology | The Late | Thomas Co | (A) PAVELECT | TIMNOO! | A ANGE | TENOO MENOO | A CO | | | を |
| 43 | Bhandari Dhrumil J. | Zoology | O.T.R | A T. 8. | D. J. 8 | D T. R | 3.1.8 | 2 T.B | | B.T.B | ST. C | 27.8 |
| 44 | Bhati Disha K. | Zoology | TOUG, | - | Ok Brak | OK BURK | THUNG T | D.H. Shun | K. Brak | かんませい | JA. 872 | Ky Shut |
| 45 | Chaudhari Ashmita A. | Zoology | J. B.A. | A PA P | からか | U. 4 | 7 A A | A-A.C | A.A.C. | A.A. | A.A. A.AC. | H.AC |
| 46 | Chaudhari Bhargavi R. | Zoology | R.R.C | R.R.C | B.R.C | R.R.C | 1 | | R.R.C | R.R.C R.R.C | R.R.C | P.R.C |
| 47 | Chaudhari Bhumika A. | Zoology | B.A.c | 8-A.c | B.A.c | B.A.c. | Q.A.c | 8. A. C | | B.A.c | 8.A.C | B.A.C. |
| 48 | Chaudhari Hemangi | Zoology | Pl challio | H-Clarent) | H choustha | Honding | Homelin | P-chanlie Hdoner Achmelki | Y.dramm | - Hochen | H.chenill | 1. A.choush |
| 49 | Chaudhari Nikhil R. | Zoology | 3 | 3 | % | S | (3) | (3) | (CV) | (3 | 3 | 9 |
| 20 | Chaudhari Priyanshu | Zoology | (gc/hu/ | 20- | Pari | | | | Con Contract of the Contract o | 60 | 2 | San, |
| 51 | Chaudhari Tejashwini R. | Zoology | T) | The state of the s | T | Tage 1 | (五) | (tel | | 四 | 位 | 中 |
| 52 | Chaudhari Vaishnavi N. | Zoology | (a) | 原 | 405 | Sep. | Se S | Va | (st | to | Not Not | NOT |
| 53 | Chaudhari Vishal P. | Zoology | Visua | Jrong | View D | Visup | Nicht. | Wind P | Visup | Visue | View | View |
| 24 | Chaudhari Nainesh H. | Zoology | G.F. | 色 | (H-N) | ~ | | W.H. | (N.11) | (FA) | N. (F) | (A) (A) |
| 55 | Dhodiya Tarang S. | Zoology | 600 | B | 690 | STO STO | 800 | 450 | | 68 | F208. | 1886.8 |
| 99 | Kadu Mahima S. | Zoology | M.S. Kodiu | | M.S. Kadulm.S. Kadul M.S. Kadu | M.S. Kodu | | M.S. Kadu | M.S. HOOLY PLS. 10084 M.S. Kadul M.S. Kadu | M.S. CONG | M.S. Kadu | Mr.S. Kadu |
| 57 | Mahida Hiteshwari K. | Zoology | E | E | (E) | Œ | E | E | Ð | Œ | (F) | B |
| 58 | Padavi Jaydeep K. | Zoology | 9. Y. C |). K. | | J. K.P | J. K.P. | J.K.P | | 2. K. P. | JAKB | J.K.P |
| 59 | Patel Kruti B. | Zoology | (H.) Date ! | (A) Parke | @posted | (R) portel | (K patel | (R) postel | | land al | (R.Dobel | (k)eakel |
| 09 | Patel Manshi B. | Zoology | 100 100 100 | P.M.8- | P.M.B | P. M.G | P. M.B | P. M. B. | P. m.B | 121 | ·m.B p.m.B | P. m. B. |
| 61 | - | Zoology | Kate | (kgs | kak Kak | _19 | 0/ | 12 | (K.g.e.) | 3 | Kada | 262 |
| 62 | Vasava Hemant R. | Zoology | 3 | | (40) | | | 14° | | | F C | 1 |
| | | | | 在日 | 4 | | | | | 1 | | 1 |

20 E < 4

MrcSuV Poelmin Orthol Outral Colha Colha Outral Colha Col 36 (ONGERNAL ENDERNIES) VERLINGES STELLING STELL M. S. Tecch M.S. Korely M.S. Kadul M.S. Kodul M.S. Kodul M.S. Kadul M.S. Kodul M.S. Kadul M.S. Kadul M.S. Kadu THE BURNEY KOMMENTON BURNEY ON THE BURNEY OF P. M.B. S.d. 15,91 अवस्य रेट्यमा कुर्वस्य प्रमुख्य प्रमुख A. A.C. A.A. B. R. C B. R. C B. R. mes any DECEMBE GOLOMAN BUCASH perioliphocomy point poenty poenty poorty poenty pochy 1,000 1/2 Cal 5.3.B. が、ひつ B.A.C J.K.P 7 B D.7.8 A.A.C B. A. C. NOV Š 8.7.B N.V.V A-Ac 25xtres B.A.e B.R.C J.KP 15088 A.V.D Hr. is 3 RAMOI Mescup Musumbalasan CARD CAD CAD CARD AAA 1. K.P Hebrushi Hehmelix アプレス 2.1.8 B.R.c 8.R.C B.A.C VIST P. M. Ž Allowed a comet P J. K. P 7.C.1 4.C.V A SP. C B.A.C KANDI 3.0 ۷.V.۷ 9 C.V. S.C.V.S.C.V. S.C.V. S.C.V. S.C.V.S.C. 3 S. D. J.B. 20年 (Karla) A.Ap B.R.C B.R.C N.V.V 8-A.c Vicep 3. K.P 3. K.P P. M. B. Anit Amis Yan Y # NON BACK 109.ts Although Althous Althous Although Althouse Although N.V.V 0.5.B. D.J.B. Hedrane V (wester 1/2) actel P.W.B. A. A.C. A.A.C 8-A.C T 3 るななど Short Term Course Attendance Sheet S X monde prantal manning OP BRITISH BACK AB C S.C.N N.V.V H charling Hichard 200 Virup 18-A.C 788 P. 17 . P. m.B. pm. B. B. A.A.C B.R.C とうとうとうろう 10014 THE REAL PROPERTY OF THE PROPE Bernal Presien AL WAS B.A.C N.V.V X.V.V VIST Y-C.> B DY BUN J. K.P 3. F.P Copyle Co a.R.c -Lernchin Mis. Hady M.S. Kady M.S. Kody M.S. Kody M.S. Hady M.S. Kady M.S. Kadu 3.3.8 A R. H (Cardo 700 VIEW Armit Anit B.A.C るののの ğ Dand C Comment of the second Marsan Brascing of Jesqui poenty poenty poenty poenty poenty poenty とはなっては Horandhi B.R.C Charle Charle Care Care Charle Care Constant N.V.V N.V.V N.V.V 7.05 2 J. A. L VISTAP B.A.c 23.6 S.E F B HAR CHO Harringo J. K.P (8)artol D.M.8 ScV. S.C.V. S.C.V ひなせ Class 7-0-7 8. A.C. JISAR S 3.3 3 经 0 TO BUTTON A.AC P.M.B And Margaret 西京 中央 S. v zedol B.R.C B.R.C B.A.C 8.A.C 400 VIS 4 Roth Y.C. VY.C.N A. H.C Jumph Burd Broad Broad All Control 5.7.6 portel P.M.B J. K.C N.V.V. N.V.V.N.V.V. Print 3 YOUTH WELL WALTH MACH 3 Charles of the Shuth A.A.C B.R.C Kardol 2.7.6 4.C.V B.M.C (A) ころというという AAR B.R.C 9.2.0 lahar X 3 B.A.c 古る くじく イググ A.A.C 2 Achough! 3.2.8 B.A.C 3 2.7.2 2 JAST. Z Amit. HANDE THE Portra paragra N.N.N THE M.S. Kardy M.S. Kady 0.3.8 18.4.C 3.7.8 ア・ファ Visve #** S W をおう 30 Mill F. 31 N.N.N LEOK-Brok A.A.C 8.A.c Though 48 Holomba 正るべ 0.T.8 53 Noug イバイ 41 Bine TIM 419 24 38 97 35 33 न्न 35 39 43 # S 59 9 777 왕

polate 2 golate 2419 2419 2919 2019 21 812 polate gleter 41812 polate gleter 41812 41812 polate gleter 41812 41812 41812 Alberture Missing missing translage V.S.S | V.S.S | V.S.S | V.S.S | V.S.S | V.S.S | V.S.S N 55 V.5.S V.S.S Zoology Zoology Zoology Zoology Zoology Zoology Class Vasava Priyanka K. Vasava Krishnal P. Vasava Mahima G. Vasava Pravina D. Vasava Rekha C. Student's Name Vasava Sonal S. 64 65 99 89

20-82-00

6/8/12 10/8/12 12/8/12 18/8/12 64 Myson Brus Quesa Austra Ares & Lew Brusa Press & Levy & Lough Brusa & Levy Bress Bress & Levy Brass & Lough Brusa Brusa & Brusa & Lough Brusa & Lough Brusa & Lough R.C. V.5.S R.C.V V. S.S V. S.S V. S.S V. S.S P. H. V R.C.V R.C.V R.C.V P.K.V P. 14.V V.S.S P.K.V P.K.V P.K.V P.K.V P.K.V R.CV RICH RCY ROW ROV ROW ROW ROW ROW ROW ROW V. 5.5 V, 5.5 V. 5.5 V. 5.5 V. 5.5 V. 5.5 P.R.V P.K.V P.K.V P.R.V P.R.V P.R.V P.R.V V.5.5 V.S.S V.5.5 68 V.S.S. V.S.S V.S.S R.C.V P.14.V RC.V 66 P.K.V GARCIV

Short Term Course Attendance Sheet

Aquarium Management Module Syllabus Covered

| Day | Time (1 hour/day) | Module Focus | Tasks |
|-------|-------------------|---|--|
| Day 1 | 1 hour | Overview & Planning | Overview of the module, high-level planning, and architecture. |
| Day 2 | 1 hour | Fish & Species Management - Part 1 | Design species database schema, list fish attributes (e.g., habitat, temperature, diet). |
| Day 3 | 1 hour | Fish & Species Management - Part 2 | Refine the schema and ensure all attributes are covered. |
| Day 4 | 1 hour | Fish & Species Management - Part 3 | Implement basic CRUD operations for fish species. |
| Day 5 | 1 hour | Fish & Species Management - Part 4 | Complete CRUD and review. |
| Day 6 | 1 hour | Health Monitoring & Compatibility Checker | Implement fish health monitoring and compatibility features. |
| Day 7 | 1 hour | Water Parameters Tracking - Part 1 | Plan water parameter tracking (temperature, pH, chemical levels) logic. |
| Day 8 | 1 hour | Water Parameters Tracking - Part 2 | Implement temperature and pH |

tracking logic.

| Day 9 | 1 hour | Water Parameters Tracking - Part 3 | Test temperature and pH features. |
|--------|--------|---------------------------------------|--|
| Day 10 | 1 hour | Water Parameters Tracking - Part 4 | Implement ammonia, nitrite, and nitrate tracking logic with alerts. |
| Day 11 | 1 hour | Water Parameters Tracking - Part 5 | Review and test chemical tracking and alert system. |
| Day 12 | 1 hour | Feeding Schedules - Part 1 | Plan feeding schedules based on fish type and diet. |
| Day 13 | 1 hour | Feeding Schedules - Part 2 | Implement automated feeding reminders. |
| Day 14 | 1 hour | Feeding Schedules - Part 3 | Implement food type tracking and review schedule logic. |
| Day 15 | 1 hour | Tank Maintenance - Part 1 | Plan water change schedules and filter maintenance reminders. |
| Day 16 | 1 hour | Tank Maintenance - Part 2 | Implement water change and filter maintenance logic. |
| Day 17 | 1 hour | Tank Maintenance - Part 3 | Test and refine the tank maintenance system. |
| Day 18 | 1 hour | Plant Management - Part 1 | Plan plant management schema (plant types, care requirements, etc.). |

| Day 19 | 1 hour | Plant Management - Part 2 | Implement plant care schedule logic (light and fertilizer schedules). |
|--------|--------|--|--|
| Day 20 | 1 hour | Plant Management - Part 3 | Test plant care scheduling and review. |
| Day 21 | 1 hour | Budget & Inventory Management - Part 1 | Plan budget tracking and inventory management. |
| Day 22 | 1 hour | Budget & Inventory Management - Part 2 | Implement expense tracking logic. |
| Day 23 | 1 hour | Budget & Inventory Management - Part 3 | Implement inventory management (track food, medication, and supplies). |
| Day 24 | 1 hour | Notifications & Alerts - Part 1 | Implement notification system for critical alerts (water parameters, feeding, etc.). |
| Day 25 | 1 hour | Notifications & Alerts - Part 2 | Test notifications and refine the alert system. |
| Day 26 | 1 hour | Reports & Analytics - Part 1 | Implement report generation for water parameters and fish health. |
| Day 27 | 1 hour | Reports & Analytics - Part 2 | Refine analytics and implement historical data tracking for trends. |
| Day 28 | 1 hour | Mobile & Web | Plan mobile app and cloud sync logic |

| | | Interface - Part 1 | (optional feature). |
|--------|--------|------------------------------------|--|
| Day 29 | 1 hour | Mobile & Web Interface - Part 2 | Begin implementing the mobile app interface (or integrate with existing web technologies). |
| Day 30 | 1 hour | Final Review & Testing | Final testing of the entire system, including crossplatform integration and reports. |

Aquarium Management Module Timetable (1 hour/day, 30 days)

| Day | Time (1 hour/day) | Module Focus | Tasks |
|-------|-------------------|---|--|
| Day 1 | 1 hour | Overview & Planning | Overview of the module, high-level planning, and architecture. |
| Day 2 | 1 hour | Fish & Species Management - Part 1 | Design species database schema, list fish attributes (e.g., habitat, temperature, diet). |
| Day 3 | 1 hour | Fish & Species Management - Part 2 | Refine the schema and ensure all attributes are covered. |
| Day 4 | 1 hour | Fish & Species Management - Part 3 | Implement basic CRUD operations for fish species. |
| Day 5 | 1 hour | Fish & Species Management - Part 4 | Complete CRUD and review. |
| Day 6 | 1 hour | Health Monitoring & Compatibility Checker | Implement fish health monitoring and compatibility features. |
| Day 7 | 1 hour | Water Parameters Tracking - Part 1 | Plan water parameter tracking (temperature, pH, chemical levels) logic. |
| Day 8 | 1 hour | Water Parameters Tracking - Part 2 | Implement temperature and pH |

tracking logic.

| Day 9 | 1 hour | Water Parameters Tracking - Part 3 | Test temperature and pH features. |
|--------|--------|---------------------------------------|--|
| Day 10 | 1 hour | Water Parameters Tracking - Part 4 | Implement ammonia, nitrite, and nitrate tracking logic with alerts. |
| Day 11 | 1 hour | Water Parameters Tracking - Part 5 | Review and test chemical tracking and alert system. |
| Day 12 | 1 hour | Feeding Schedules - Part 1 | Plan feeding schedules based on fish type and diet. |
| Day 13 | 1 hour | Feeding Schedules - Part 2 | Implement automated feeding reminders. |
| Day 14 | 1 hour | Feeding Schedules - Part 3 | Implement food type tracking and review schedule logic. |
| Day 15 | 1 hour | Tank Maintenance - Part 1 | Plan water change schedules and filter maintenance reminders. |
| Day 16 | 1 hour | Tank Maintenance - Part 2 | Implement water change and filter maintenance logic. |
| Day 17 | 1 hour | Tank Maintenance - Part 3 | Test and refine the tank maintenance system. |
| Day 18 | 1 hour | Plant Management - Part 1 | Plan plant management schema (plant types, care requirements, etc.). |

| Day 19 | 1 hour | Plant Management - Part 2 | Implement plant care schedule logic (light and fertilizer schedules). |
|--------|--------|--|--|
| Day 20 | 1 hour | Plant Management - Part 3 | Test plant care scheduling and review. |
| Day 21 | 1 hour | Budget & Inventory Management - Part 1 | Plan budget tracking and inventory management. |
| Day 22 | 1 hour | Budget & Inventory Management - Part 2 | Implement expense tracking logic. |
| Day 23 | 1 hour | Budget & Inventory Management - Part 3 | Implement inventory management (track food, medication, and supplies). |
| Day 24 | 1 hour | Notifications & Alerts - Part 1 | Implement notification system for critical alerts (water parameters, feeding, etc.). |
| Day 25 | 1 hour | Notifications & Alerts - Part 2 | Test notifications and refine the alert system. |
| Day 26 | 1 hour | Reports & Analytics - Part 1 | Implement report generation for water parameters and fish health. |
| Day 27 | 1 hour | Reports & Analytics - Part 2 | Refine analytics and implement historical data tracking for trends. |
| Day 28 | 1 hour | Mobile & Web | Plan mobile app and cloud sync logic |

| | | Interface - Part 1 | (optional feature). |
|--------|--------|------------------------------------|--|
| Day 29 | 1 hour | Mobile & Web Interface - Part 2 | Begin implementing the mobile app interface (or integrate with existing web technologies). |
| Day 30 | 1 hour | Final Review & Testing | Final testing of the entire system, including crossplatform integration and reports. |



DEPARTMENT OF ZOOLOGY



Date: 09/09/2022

Sr. No. SCTZO04/2022-23/09

This is to certify that Mr. / Ms. <u>Khan Aabida S</u> has successfully completed **Short Term Certificate**Course of 30 hours on <u>STCZO04: Aquarium Management</u> offered by Department of Zoology from
25/07/2022 to 06/09/2022 and secured "A" grade during performance evaluation.

Principal

Course Coordinator



DEPARTMENT OF ZOOLOGY



Date: 09/09/2022

Sr. No. SCTZO04/2022-23/57

This is to certify that Mr. / Ms. <u>Mahida Hiteshwari K</u> has successfully completed **Short Term** Certificate Course of 30 hours on <u>STCZO04: Aquarium Management</u> offered by Department of Zoology from <u>25/07/2022 to 06/09/2022</u> and secured "<u>A</u>" grade during performance evaluation.

Principal

Course Coordinator



DEPARTMENT OF ZOOLOGY



Date: 09/09/2022

Sr. No. SCTZO04/2022-23/35

This is to certify that Mr. / Ms. <u>Vasava Sagar C</u> has successfully completed **Short Term Certificate**Course of 30 hours on <u>STCZO04: Aquarium Management</u> offered by Department of Zoology from
25/07/2022 to 06/09/2022 and secured "<u>A</u>" grade during performance evaluation.

Principal

Course Coordinator



DEPARTMENT OF ZOOLOGY



Date: 09/09/2022

Sr. No. SCTZO04/2022-23/16

This is to certify that Mr. / Ms. <u>Vasava Sneha D</u> has successfully completed **Short Term Certificate**Course of 30 hours on <u>STCZO04: Aquarium Management</u> offered by Department of Zoology from

25/07/2022 to 06/09/2022 and secured "<u>A</u>" grade during performance evaluation.

Principal

Course Coordinator



DEPARTMENT OF ZOOLOGY



Date: 09/09/2022

Sr. No. SCTZO04/2022-23/37

This is to certify that Mr. / Ms. <u>Chaudhari Jankhya G.</u> has successfully completed **Short Term** Certificate Course of 30 hours on <u>STCZO04: Aquarium Management</u> offered by Department of Zoology from <u>25/07/2022 to 06/09/2022</u> and secured "<u>A</u>" grade during performance evaluation.

Principal

Course Coordinator



Government Science College, Vankal Department Of Zoology Short term course (2021-22)

Course Name: Aquarium management

| Stude | ent Name | : | |
|-------|----------|-----------|--------|
| Each | question | (2 | marks) |

- 1. What is the ideal pH range for most freshwater aquarium fish?
- a) 4.0-5.0 b) 6.0-7.5
- c) 8.0-9.0 d) 9.5-10.5
- 2. What is the primary purpose of a biological filter in an aquarium?
- a) To remove debris and waste b) To circulate water
- c) To provide a surface for beneficial bacteria to break down ammonia and nitrite
- d) To heat the water
- 3. What is the nitrogen cycle in an aquarium?
- a) The process of changing water
- b) The conversion of ammonia to nitrite and then to nitrate by beneficial bacteria
- c) The movement of fish within the tank
- d) The daily feeding routine of fish
- 4. How often should you perform water changes in a well-maintained aquarium?
- a) Daily b) Weekly
- c) Monthly d) Yearly
- 5. What is the purpose of a heater in an aquarium?
- a) To filter the water b) To circulate the water
- c) To maintain a stable water temperature suitable for the fish d) To aerate the water
- 6. What is the recommended water temperature range for most tropical fish?
- a) $50-60^{\circ}F(10-15^{\circ}C)$ b) $65-75^{\circ}F(18-24^{\circ}C)$
- c) 75-80°F (24-27°C) d) 85-90°F (29-32°C)

| 7. What is the primary function of an air pump in an aquarium? |
|---|
| - a) To filter the water - b) To provide oxygen to the water through aeration |
| - c) To circulate the water |
| - d) To maintain the water temperature |
| 8. Why is it important to acclimate fish before introducing them to a new aquarium? |
| - a) To allow the fish to get used to the water temperature |
| - b) To ensure the fish are not stressed by the new environment |
| - c) To avoid sudden changes in water parameters like pH and temperature |
| - d) All of the above |
| 9. Which of the following is a sign of poor water quality in an aquarium? |
| - a) Clear water - b) Healthy, active fish |
| - c) Cloudy water with a strong odor - d) Growing plants |
| 10. What is the best way to reduce nitrate levels in an aquarium? |
| - a) Increase feeding - b) Perform regular water changes |
| - c) Add more fish - d) Reduce aeration |
| 11. What is the purpose of adding aquarium salt to a freshwater tank? |
| - a) To increase pH - b) To treat certain fish diseases |
| - c) To soften the water - d) To promote plant growth |
| 12. Which type of lighting is best for a planted aquarium? |
| - a) Incandescent - b) Fluorescent |
| - c) LED - d) UV |
| 13. How can you prevent aloae overgrowth in an aquarium? |

13. How can you prevent algae overgrowth in an aquarium?

- b) Overfeed the fish - a) Increase lighting
- c) Keep the aquarium in direct sunlight
- d) Maintain a regular cleaning schedule and avoid overfeeding

14. What is the main reason for using a gravel vacuum during water changes?

- a) To aerate the water b) To remove uneaten food and waste from the substrate
- c) To clean the fish d) To increase water temperature

15. Which of the following is a common sign of fish stress in an aquarium?

- a) Bright coloring b) Active swimming
- c) Rapid gill movement and hiding d) Normal feeding behavior

16. What is the recommended stocking level for an aquarium?

- a) 1 inch of fish per gallon of water b) 10 inches of fish per gallon of water
- c) 1 inch of fish per 10 gallons of water d) 1 fish per gallon of water

17. What is the purpose of adding live plants to an aquarium?

- a) To increase oxygen levels and provide hiding places for fish
- b) To raise the temperature of the water
- c) To increase nitrate levels
- d) To decrease pH levels

18. How can you stabilize pH levels in an aquarium?

- a) By adding chemicals to the water b) By using a buffering substrate
- c) By changing the water temperature d) By increasing the number of fish

19. What is the recommended duration of lighting for most aquariums?

- a) 2-4 hours per day b) 4-6 hours per day
- c) 8-10 hours per day d) 12-14 hours per day

20. Why is it important to quarantine new fish before adding them to your main aquarium?

- a) To prevent the spread of diseases to existing fish
- b) To allow the new fish to grow
- c) To help new fish get used to their new diet
- d) To increase the bioload in the main tank

21. What is the main function of carbon in aquarium filtration?

- a) To remove physical debris

- b) To reduce ammonia levels
- c) To absorb toxins and chemicals from the water d) To increase oxygen levels

22. What is the primary cause of ammonia spikes in an aquarium?

- a) Overfeeding and accumulation of waste
- b) Adding too much water conditioner
- c) Too much light exposure
- d) Low water temperature

23. How can you tell if an aquarium is properly cycled?

- a) The water is cloudy
- b) There is no detectable ammonia or nitrite, and nitrate levels are present
- c) Fish are swimming rapidly d) Plants are not growing

24. What should you do if you notice fish gasping for air at the surface of the aquarium?

- a) Increase the temperature of the water

- b) Decrease the lighting
- c) Increase aeration or check for ammonia/nitrite spikes
- d) Add more fish

25. What is the best way to acclimate fish to a new aquarium?

- a) Release them directly into the tank
- b) Float the bag in the tank for 15 minutes, then slowly add small amounts of tank water to the bag before releasing the fish
- c) Pour them into a separate container, then into the tank
- d) Place them directly on the substrate

OMR ANSWER SHEET

EXAMINATION: Short term Cource-2022-23

EXAMCENTER: Government Science college - Vernkal

DATE:

Name - Khan Aabida S.

ROII NO - 9

| Q. ANSWER | .Q. ANSWER | Q. ANSWER | Q. ANSWER | Q. ANSWER |
|-----------|---|--------------------|--------------------|--------------------|
| | 11 00 0 0 | 21 A B D | 31 ABCD | 41 (A) (B) (C) (D) |
| 2000 | 12 (4) (B) (D) | 22 0 B C D | 32 A 9 C D | 42 A B C D |
| 12000 | 13 T B © ●, | 23 A © © D | 33 A B C D | 43 A B C D |
| 12600V | | 24 ♂ ® ● ® | 34 (A) (B) (C) (D) | 44 A B C D |
| 50000 | X ⁶ BBCD | 35 € © © | 35 (A) (B) (C) (D) | 45 A B C D |
| | 16 BCO | 26 A B C D | 36 A B C D | 46 ABCO |
| X7 8000 . | 12 (((((((((((((((((((| 27 A B C D | 37 A B C O | 47 (A) (B) (C) (D) |
| | 18 🔊 🕭 🔘 🛈 | 28 (A) (B) (C) (D) | 38 (A) (B) (C) (D) | 48 A B C D |
| 123000 L | 19 @ ® • ® | 29 ABCD | 39 (A) (B) (C) (D) | 49 (A) (B) (C) (D) |
| | 24 • ® © D | 30 ABCO | 40 (A) (B) (C) (D) | 50 A B C D |

OMR ANSWER SHEET

EXAMINATION: Short term cource - 2022-23

SUBJECT: Aquarium managment

EXAM CENTER: Government Science college, Vantal

Name - Mahida Hiteshawi K.

Roll no-57



| | Q. ANSWER | Q. ANSWER | Q. ANSWER | Q. ANSWER | Q. ANSWER |
|---|---|----------------|--------------------|--------------------|--------------------|
| | Q. ANSWER | T | 21 A B • D | 31 A B C D | 41 A B C D |
| | <u>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</u> | 12/A B • D | 22 • B © D | 32 A B C D | 42 A B C D |
| - | ★ ③ ③ • ⑤ | [3/♠®©● | 22 A • © D | 33 A B C D | 43 A B C D |
| - | | | 24 ③ B ● D | 34 (A) (B) (C) (D) | 44 A B C D |
| 1 | 5 ∕0 ® • Ø | 15 A B • D | 25 A ● © ① | 35 (A) (B) (C) (D) | 45 (A) (B) (C) (D) |
| | | 16 ● B © D | 26 A B C D | 36 A B C D | 46 (A) (B) (C) (D) |
| | / (h • © © | 17.0000 | 27 A B C D | 37 (a) (B) (C) (D) | 47 (A) (B) (C) (D) |
| - | % (0 (0 ● | | 28 (A) (B) (C) (D) | 38 (A) (B) (C) (D) | 48 A B C D |
| | 1 | <u>*</u> 12 | 29 (A (B) (C) (D) | 39 A B C D | 49 A B C D |
| メ | | > | 30 A B C O | 40 (A) (B) (C) (D) | 50 A B C D |
| | | <u> </u> | | | J |

OMR ANSWER SHEET

EXAMINATION: Short term collect 2022-23
SUBJECT: Aquarium munuament
EXAMICENTER: CROVERNMENT Science college, Vankul

DATE:

Name - Vasava Sagar C.

ROIL no -35



| Q. ANSWER | .Q. ANSWER | Q. ANSWER | Q. ANSWER | Q. ANSWER |
|--|-------------------------|--------------------|--------------------|--------------------|
| 1.A • © D | 11 A C D | 21 A B D | 31 A B C D | 41 (A) (B) (C) (D) |
| | 12 A B • D | 22 • B C D | 32 (A) (B) (C) (D) | 42 A B C D |
| .3 (a) (b) (c) | | 23 A C D | 33 A B C D | 43 A B C D |
| | X ,14⁄ (A) ● (C) (D) | 24 A B • D | 34 (A) (B) (C) (D) | 44 A B C D |
| 5/A B • D | 15 A B • D | 25 № © © | 35 (A) (B) (C) (D) | 45 A B C D |
| | 16 B C D | 26 A B C D | 36 A B C D | 46 (A) (B) (C) (D) |
| | 17 0 0 0 | 27 A B C D | 37 (A) (B) (C) (D) | 47 (A) (B) (C) (D) |
| X • • • • • • • • • • • • • • • • • • • | | 28 A B C D | 38 (A) (B) (C) (D) | 48 A B C D |
| 2 N D ● D | 19 A B O O | 29 (A (B) (C) (D) | 39 (A (B (C) (D) | 49 A B C D |
| | 20 9 3 0 0 | 30 (A) (B) (C) (D) | 40 (A (B) (C) (D) | 50 (1) (1) (1) |
| | | | | J |

OMR ANSWER SHEET

EXAMINATION: Short term cource -2022-23

SUBJECT: Aguarium managment

EXAM CENTER: Government science college, van kul

Name - Vasava sneha D.



| Q. ANSWER | Q. ANSWER | Q. ANSWER | Q. ANSWER | Q. ANSWER |
|-------------------------------|------------------------|--------------------|--------------------|--------------------|
| 8 C D | | 21 A B • D | 31 (A) (B) (C) (D) | 41 A B C D |
| .2 🔑 🗓 🗨 🛈 | | 22 • B © D | 32 A 3 C D | 42 A B C O |
| (3 (a) (a) (10 (10)) | 11 A B C • | 23 A © © | 33 A B C D | 43 A B C D |
| | | 24 D B • D | 34 A B C D | 44 A 3 C D |
| .5 A B • D | 15 ● B © D | 25 | 35 (A) (B) (C) (D) | 45 A II C D |
| 6 € ® • ® | 16 • @ © ® | 26 ABCO | 36 A B C D | 46 A ® C ® |
| x ⁷ A ® ● © | 17 9 19 (2 (1) | 27 (A (B) (C) (D) | 37 A B C D | 47 (A) (B) (C) (D) |
| \$ 3 € 0 | 16 9 6 31 | 28 (A) (B) (C) (D) | 38 A B C D | 48 (A) (B) (C) (D) |
| 3_ 3 ●©® | 19, (A) (C) (D) | 29 ABCD | 39 (A) (B) (C) (D) | 49 A B C D |
| v0 | 20 9 (9 (C) (D) | 30 A B C O | 40 ABCD | 50 (A) (B) (C) (D) |

OMR ANSWER SHEET

EXAMINATION: Short term COURSC-2022-33
SUBJECT: A QUURIUM MANAJEMENT
EXAM CENTER: CTO VERNMENT 6 CIENCE CONAJE-VAN KU L

DATE:

Name-chaudhari Junkhya G.



| | Q. ANSWER | Q. ANSWER | Q. ANSWER | Q. ANSWER | Q. ANSWER |
|----------|--------------------|--|--|--------------------|--------------------|
| , | | 11 A • © D | 21 A O O D | 31 (A) (B) (C) (D) | 41 A B C D |
| ` | 2/A B • D | 12 A B • D | 22 A B D | 32 A 3 C D | 42 A B C D |
| 1 | 2 (A ● © ® (| 13 ∧ B © ● | 23 A O O O | 33 A B C D | 43 A B C D |
| | 9 A ● O O , | 14 0 0 0 0. | 24 A B • D | 34 A B C D | 44 (A) (B) (C) (D) |
| 1 | | 15 A B • D | 25⁄ (A) ● (C) (D) | 35 (A) (B) (C) (D) | 45 A B C D |
| , | & Ø ® ● ®, | 16 • @ © ® | 26 ABCO | 36 A B C D | 46 (A) (B) (C) (D) |
| <u> </u> | 1 (A ● © (B) | 12 ♥ ® © ® | 27 ABCO | 37 (A) (B) (C) (D) | 47 (A) (B) (C) (D) |
| | 5 ® ® © ● , | 28 | 28 (A) (B) (C) (D) | 38 (A) (B) (C) (D) | 48 (A) (B) (C) (D) |
| | 3 A B D D | √ 8 ● 3 © ® | 29 ABCO | 39 (A) (B) (C) (U) | 49 ABCD |
| 4 | | (0 () (0 () | 30 ABCO | 40 A B C D | 50 (A) (B) (C) (D) |
| 1 | | a page a security of a superior section of the second contract of th | and come to the A. Carrier and the comment of the c | | |