## Tables

Training schedules

Table 2 First Month Aerobic Training Schedule (November, 2021)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Days per week | Types of Exercises | Duration  40 (min) | Frequency  (Rep/ sets) | Rest | Intensity of exercise |
| Monday  5:00pm-5:55pm | **1.Warming up exercise**  Different types of exe. for  **General** and **specific**. | 10min | - |  | Light intensity 40-50% |
| **2.Main work out** |
| Jogging | 5min |
| Rope jumping | 7min | 46x3 | 1min per set |
| Step up and down | 6min | 19x2 | 1min per set |
| Step aerobics dance | 7min |  | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |
| Wednesday  5:00pm-5:55pm | **1.Warming up exercise**:  Different types of exe. for  **General** and **specific** | 10min | - |  | Light intensity 40-50% |
| **2. Main work out** |
| Jogging | 5min |
| Rope jumping | 7min | 46x3 | 1min per set |
| Step up and down | 6min | 19x2 | 1min per set |
| Step aerobics exe. | 7min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |
| Friday  5:00pm-5:55pm | **Warming up exercise**:  Different types of exercises for  **General** and **specific** exercise | 10min | -  - |  | Light intensity 40-50% |
| **2. Main workout** |
| Jogging and running on treadmill | 5 min |
| Rope jumping | 7min | 46x3 | 1min per set |
| Step up and down | 6min | 19x2 | 1min per set |
| Step aerobics dances | 7min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |

The above table showed the first month (November, 2021) training schedule for Aerobic group

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Days per week | Types of Exercises | Duration  (50min | Frequency  (Rep/ sets) | Rest | Intensity of  exercise |
| Monday  5:00pm-6:00pm | **1.Warming up exercise**  Different types of exe. for  **General** and **specific** exercise | 10min | - |  | Moderate  50-60 |
| **2.Main work out** |
| Running on track | 9min |
| Rope jumping | 8min | 46x4 | 1min per set |
| Step up and down | 8min | 20x3 | 1min per set |
| Step aerobics dance | 10min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |
| Wednesday  5:00pm-6:00pm | **1.Warming up exercise**:  **General** and **specific** | 10min | - |  | Moderate  50-60 |
| **2. Main work out** |
| Running on track | 9min |
| Rope jumping | 8min | 46x4 | 1min per set |
| step up with right, left | 8min | 20x3 | 1min per set |
| foot, combination |  |  |  |
| Step aerobics exe. | 10min | - | 1min |
| **3. Cooling down**: | 5min | - |  |
| Friday  5:00pm-6:00pm | **Warming up exercise**:  **General** and **specific** exercise. | 10min | -  - |  | Moderate  50-60 |
| **2. Main workout** |
| Running on track | 9 min |
| Rope jumping | 8min | 46x4 | 1min per set |
| Step up and down | 8min | 20x3 | 1min per set |
| Step aerobics exe. | 10min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |

Table 3. Second Month Training Schedule for Aerobic group (December, 2021)

The above training schedule was performed every week of December, 2021

Table 4 Training for Third Month for Aerobic Group. (January,2021)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Days per week | Types of Exercises | Duration  (60min) | Frequency  (Rep/ sets) | Rest | Intensity of exercise |
| Monday  5:00pm-5:50pm | **1.Warming up exercise**  Different types of exe. for  **General** and **specific** | 10min | - |  | Moderate  50-60% |
| **2.Main work out** |
| Walking | 5min |
| Treadmill running | 8min |
| Rope jumping | 7min | - | 1min per set |
| Aerobic dance | 13min | - | 1min per set |
| Step aerobics exe. | 10min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 7min | - |  |
| Wednesday  5:0 0pm-5:50pm | **1.Warming up exercise**:  Different types of exe. for  **General** and **specific** | 10min | - |  | Moderate  50-60% |
| **2. Main work out** |
| Aerobic dance |  |
| Walking | 5min |
| Rope jumping | 7min | 42x3 | 1min per set |  |
| Step up and down | 10min | 17x2 | 1min per set |
| Step aerobics exe. | 10 min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |
| Friday  5:00pm-5:50pm | **Warming up exercise**:  **General** and **specific** | 10min | -  - |  | Moderate  50-60% |
| **2. Main workout** |
| Walking | 8 min |
| Rope jumping | 7min | 42x3 | 1min per set |
| Step up and down | 6min | 17x2 | 1min per set |
| Step aerobics exe. | 8min | - | 1min |
| **3. Cooling down**: different | 5min |  |  |
| Types of stretching exe. |  | - |  |

The above table showed the training schedule January for aerobic group

Table 5. First month stretching exercise (November, 2021)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Days per week | Types of Exercises | Duration  (40min) | Frequency  (Rep/ sets) | Rest | Intensity of exercise |
| Monday  5:00pm-5:55pm | **1.Warming up exercise**  Different types of exe. for  **General** and **specific**. | 10min | - |  | Light intensity 40-50% |
| **2.main work out** |
| Jogging | 8min |
| leg extension | 9min | 46x3 | 1min per set |
| stretch the lower abdominal | 6min | 19x2 | 1min per set |
| sit and rich ,side to side stretch | 5min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |
| Wednesday  5:00pm-5:55pm | **1.Warming up exercise**:  Different types of exe. for  **General** and **specific** | 10min | - |  | Light intensity 40-50% |
| **2. main work out** |
| Jogging | 8min |
| Rope jumping | 9min | 46x3 | 1min per set |
| hip stretching side to side | 6min | 19x2 | 1min per set |
| Double leg curl | 5min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |
| Friday  5:00pm-5:55pm | **Warming up exercise**:  Different types of exercises for **General** and **specific** exercise | 10min | -  - |  | Light intensity 40-50% |
| **2. main workout** |
| Jogging | 8 min |
| Double leg curl | 9min | 46x3 | 1min per set |
| Sit and rich | 6min | 19x2 | 1min per set |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |

The training schedule for every weeks of Month for Stretching Exercise (Novber, 2021)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 6. Second month training for stetching (December, 2021) | | | | | |
| Days per week | Types of Exercises | Duration  (50min) | Frequency  (Rep/ sets) | Rest | Intensity of exercise |
| Monday  5:00pm-5:55pm | **1.Warming up exercise**  Different types of exe. for  **General** and **specific**. | 10min | - |  | Moderate  50-60 |
| **2.Main work out** |
| Jogging | 5 |
| leg extension | 12min | - | 1min per set |
| stretch the lower abdominal | 10min | -- | 1min per set |
| sit and rich ,side to side stretch | 8min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |
| Wednesday  5:00pm-5:55pm | **1.Warming up exercise**:  **General** and **specific** | 10min | - |  | Moderate  50-60 |
| **2. Main work out** |
| Jogging | 8min |
| Rope jumping | 9min | 46x3 | 1min per set |
| hip stretching side to side | 6min | 19x2 | 1min per set |
| Double leg curl | 5min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |
| Friday  5:00pm-5:55pm | **Warming up exercise**:  **General** and **specific** exercise | 10min | -  - |  | Moderate  50-60 |
| **2. Main workout** |
| Jogging | 8 min |
| Double leg curl | 9min | 46x3 | 1min per set |
| Sit and rich | 6min | 19x2 | 1min per set |
| **3. Cooling down**: different | 5min | - |  |
| Type of stretching exe. |

The above table indicate the training schedule December, 2021 for stretching group

Table 7 Third Month Training for Stretching (January2021)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Days per week | Types of Exercises | Duration  (60min) | Frequency  (Rep/ sets) | Rest | Intensity of exercise |
| Monday  5:00pm-5:55pm | **1.Warming up exercise**  Different types of exe. for  **General** and **specific**. | 10min | - |  | Moderate  50-60 |
| **2.Main work out** |
| Jogging | 8min |
| leg extension | 9min | 46x3 | 1min per set |
| stretch the lower abdominal,duble leg curl | 15min | 19x2 | 1min per set |
| sit and rich ,side to side stretch | 10 min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |
| Wednesday  5:00pm-5:55pm | **1.Warming up exercise**:  Different types of exe. for  **General** and **specific** | 10min | - |  | Moderate  50-60 |
| **2. Main work out** |
| Jogging | 8min |
| Rope jumping | 9min | 46x3 | 1min per set |  |
| hip stretching side to side | 10min | 19x2 | 1min per set |
| Double leg curl | 8min | - | 1min |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |
| Friday  5:00pm-5:55pm | **Warming up exercise**:  **General** and **specific** exercise | 10min | -  - |  | Moderate  50-60 |
| **2. Main workout** |
| Jogging | 8 min |
| Double leg curl | 9min | 46x3 | 1min per set |
|  |  |  |  |
| Sit and rich | 6min | 19x2 | 1min per set |
|  |  |  |  |
| **3. Cooling down**: different types of stretching exe. | 5min | - |  |

The above table shows the training schedule for every week of January

Paired Samples Test for all variables

Table 8. Paired Sample Test for VAS

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | | | |
| Parameters  VAS | | Paired Differences | | | | | | | t | | df | Sig. (2-tailed) |
| Mean | | Std. Deviation | | Std. Error Mean | 95% Confidence Interval of the Difference | |
| Lower | Upper |
| VAS - | PrS - PoS | -2.50000 | | 1.03280 | | .25820 | 1.94966 | 3.05034 | 9.682 | | 15 | .000 |
| VAS - PrA- PoA | | | 1.81250 | 1.75950 | .43987 | | .87493 | 2.75007 | 4.120 | 15 | | .001 |

Table 9 Paired sample t test of pain symptoms, of primary dysmenorrehea

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | | | | | | | | | | | | |
| Parameters (pre-post) | | | Paired Differences | | | | | | | | | | | t | | Df | | Sig. (2-tailed) | | | |
| Mean | Std. Deviation | | | Std. Error Mean | | | 95% Confidence Interval of the Difference | | | |
| Lower | | Upper | |
|  | Muscle\_stiff - A | -.75000 | | | 1.43759 | | | .35940 | | | -1.51604 | | .01604 | | -2.087 | | 15 | | .054 | |
| Muscle stiff- S | | | -.81250 | 1.22304 | | .30576 | | | -1.46421 | | | -.16079 | | -2.657 | | 15 | | | | .018 | |
| Backache-A | | | -.43750 | 1.93111 | | .48278 | | | -1.46651 | | | .59151 | | .59151 | | 15 | | | | .379 | |
| Backache-S | | | -.25000 | 1.23828 | | .30957 | | | -.90983 | | | .40983 | | -.808 | | 15 | | | | .432 | |
| general\_acheA | | | -.87500 | 1.78419 | | .44605 | | | -1.82573 | | | .07573 | | 1.962 | | 15 | | | | .069 | |
| general ache-A | | | -.50000 | 1.46059 | | .36515 | | | -1.27830 | | | .27830 | | -1.369 | | 15 | | | | .191 | |
| Cramps-A | | | 1.43750 | .96393 | | .24098 | | | -1.95114 | | | -.92386 | | -5.965 | | 15 | | | | .000 | |
| Cramps-S | | | -.43750 | 1.45917 | | .36479 | | | -1.21503 | | | 34003 | | . 1.199 | | 15 | | | | .249 | |
| Fatigue-A | | | 1.87500 | 1.31022 | | .32755 | | | -2.57316 | | | -1.17684 | | -5.724 | | 15 | | | | .000 | |
| Fatigue-S | | | -.81250 | 1.47054 | | .36764 | | | -1.59610 | | | -.02890 | | -2.210 | | 15 | | | | .043 | |
| breast\_tenderenes-A | | | 2.00000 | 1.31656 | | .32914 | | | -2.70155 | | | -1.29845 | | -6.076 | | 15 | | | | .000 | |
| breast\_tenderenes-S | | | 1.50000 | 1.67332 | | .41833 | | | -2.39165 | | | -.60835 | | -3.586 | | 15 | | | | .003 | |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 10 Paired sample t test of symptoms, negative effect and Behavioral change of primary dysmenorrehea | | | | | | | | | | |
| Parameters Negative effect and Behavioral change (pre-post) | | Paired Differences | | | | | T | df | | Sig. (2-tailed) |
| Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Tensin | A | -2.43750 | 1.20934 | .30233 | -3.08191 | -1.79309 | -8.062 | 15 | | .000 |
| Tension-S | | -.68750 | 1.85180 | .46295 | -1.67426 | .29926 | -1.485 | 15 | .158 | |
| Mood Swing -A | | -.93750 | 1.06262 | .26566 | -1.50373 | -.37127 | -3.529 | 15 | .003 | |
| Mood Swing -S | | -1.00000 | 1.59164 | .39791 | -1.84813 | -.15187 | -2.513 | 15 | .024 | |
| Depression A | | -.75000 | 1.34164 | .33541 | -1.46491 | -.03509 | -2.236 | 15 | .041 | |
| Depression-S | | -.50000 | 1.93218 | .48305 | -1.52959 | .52959 | -1.035 | 15 | .317 | |
| Irritability-A | | -.68750 | 1.66208 | .41552 | -1.57316 | .19816 | -1.655 | 15 | .119 | |
| Irritability-S | | -.56250 | 1.50416 | .37604 | -1.36401 | .23901 | -1.496 | 15 | .155 | |
| School Absent -A | | -.37500 | 1.31022 | .32755 | -1.07316 | .32316 | -1.145 | 15 | .270 | |
| School Absent -S | | -.06250 | 1.80624 | .45156 | -1.02498 | .89998 | -.138 | 15 | .892 | |
| Stay Home -A | | -.25000 | 1.34164 | .33541 | -.96491 | .46491 | -.745 | 15 | .468 | |
| Stay Home S | | -.68750 | 1.13835 | .28459 | -1.29408 | -.08092 | -2.416 | 15 | .029 | |
| Avoid Social Work-A | | -1.56250 | 1.03078 | .25769 | -2.11176 | -1.01324 | -6.063 | 15 | .000 | |
| Avoid Social Work | | -.81250 | 1.68201 | .42050 | -1.70878 | .08378 | -1.932 | 15 | .072 | |
| Vomiting-A | | -1.31250 | 1.01448 | .25362 | -1.85308 | -.77192 | -5.175 | 15 | .000 | |
| Vomiting-S | | -1.81250 | .98107 | .24527 | -2.33528 | -1.28972 | -7.390 | 15 | .000 | |
| Dizziness-A | | -.81250 | 1.55858 | .38964 | -1.64301 | .01801 | -2.085 | 15 | .055 | |
| Dizziness-S | | -.68750 | 1.57982 | .39496 | -1.52933 | .15433 | -1.741 | 15 | .102 | |
| Loneliness-A | | -1.06250 | 1.61116 | .40279 | -1.92103 | -.20397 | -2.638 | 15 | 019 | |
| Loneliness-S | | -.75000 | 1.52753 | .38188 | -1.56396 | .06396 | -1.964 | 15 | .068 | |
| Anxiety –A | | -.75000 | 1.57056 | .39264 | -1.58689 | .08689 | -1.910 | 15 | .075 | |
| Anxiety-S | | -.68750 | 1.62147 | .40537 | -1.55152 | .17652 | -1.696 | 15 | .111 | |

Table 11. Row data of pre and post test for all variables

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | CODE | MS | BA | GP | C | F | BT | V | T | MSW | D | I | SA | SH | AW | L | DI | A |
| 1 | A1 | 1.0 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 4.0 | 1.0 | 1.0 | 1.0 | 1.0 | 3.0 | 1.0 | 3.0 |
| 2 | A2 | 2.0 | 3.0 | 2.0 | 2.0 | 3.0 | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 | 1.0 | 3.0 | 2.0 | 2.0 |
| 3 | A3 | 4.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 1.0 | 4.0 | 1.0 | 3.0 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | 3.0 |
| 4 | A4 | 1.0 | 2.0 | 2.0 | 1.0 | 3.0 | 1.0 | 2.0 | 2.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 | 2.0 | 3. 0 | 2.0 | 1.0 |
| 5 | A5 | 4.0 | 3.0 | 1.0 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | 3.0 | 2.0 | 1.0 | 2.0 | 1.0 | 1.0 | 1.0 | 3.0 | 2.0 |
| 6 | A6 | 4.0 | 4.0 | 3.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 2.0 | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 | 4.0 | 1.0 | 4.0 |
| 7 | A7 | 2.0 | 5. 0 | 3.0 | 1.0 | 1.0 | 3.0 | 2.0 | 1.0 | 2.0 | 2.0 | 3.0 | 1.0 | 1.0 | 1.0 | 1.0 | 3.0 | 2.0 |
| 8 | A8 | 4.0 | 1. 0 | 4.0 | 1.0 | 1.0 | 1. 0 | 2. 0 | 1. 0 | 1. 0 | 3. 0 | 3.0 | 2.0 | 1.0 | 1.0 | 2.0 | 2.0 | 3.0 |
| 9 | A9 | 4.0 | 4.0 | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 | 1.0 | 2.0 | 4.0 | 2.0 | 1.0 | 2.0 | 2.0 | 1.0 | 1.0 | 4.0 |
| 10 | A10 | 4.0 | 2.0 | 1.0 | 3.0 | 3.0 | 1.0 | 2.0 | 2.0 | 2.0 | 4.0 | 1.0 | 2.0 | 1.0 | 1.0 | 2.0 | 3.0 | 3.0 |
| 11 | A11 | 2.0 | 3.0 | 4.0 | 1.0 | 1.0 | 3.0 | 2.0 | 1.0 | 1.0 | 3.0 | 2.0 | 3.0 | 1.0 | 1.0 | 1.0 | 2.0 | 2.0 |
| 12 | A12 | 4.0 | 1.0 | 1.0 | 3.0 | 2.0 | 1.0 | 1.0 | 1.0 | 2.0 | 3.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 |
| 13 | A13 | 4.0 | 5.0 | 3.0 | 1.0 | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 | 3.0 | 2.0 | 1.0 | 1.0 | 1.0 | 2.0 | 1.0 |
| 14 | A14 | 2.0 | 4.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 2.0 | 3.0 | 1.0 | 1.0 | 3.0 | 1.0 | 2.0 | 1.0 | 2.0 |
| 15 | A15 | 1.0 | 4.0 | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 | 3.0 | 1.0 | 1.0 | 2.0 | 2.0 | 1.0 | 1.0 | 1.0 | 4.0 | 1.0 |
| 16 | A16 | 2.0 | 2.0 | 3.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 5.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 |

Table-11 Pre Raw Data of Menstruation Symptom Questionnaire for Aerobic Group

***MS****= Muscle stiffness,* ***BA****=Back ache,* ***GP****= General pain,* ***C****=Cramp,* ***F****=Fatigue,* ***BT****=Breast tenderness,* ***V****=Vomiting,* ***T****=Tension,* ***MSW****=Mood swing,* ***D****=Depression,* ***I****=Irritability,* ***SA****=School absent,* ***SH****=Stay at home,* ***AW****=Avoid social work,* ***L****=Loneliness,* ***D****=Dizzines,* ***A****=Anxiety*

Table-12 Pre Raw Data of menstruation symptom Questionnaire for Stretching(S) Group

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CODE | MS | BA | GP | C | F | BT | V | T | MSW | D | I | SA | SH | AW | L | DI | A |
| S1 | 1.0 | 1.0 | 1.0 | 2.0 | 2.0 | 2.0 | 1.0 | 3.0 | 1.0 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 1.0 |
| S2 | 2.0 | 3.0 | 1.0 | 1.0 | 1.0 | 3.0 | 2.0 | 3.0 | 5.0 | 1.0 | 2.0 | 1.0 | 3.0 | 1.0 | 1.0 | 1.0 | 2.0 |
| S3 | 1.0 | 1.0 | 1.0 | 3.0 | 1.0 | 1.0 | 3.0 | 1.0 | 5.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 3.0 | 1.0 | 3.0 |
| S4 | 3.0 | 4.0 | 1.0 | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 | 1.0 | 3.0 | 3.0 | 1.0 | 3.0 | 2.0 | 1.0 | 2.0 | 1.0 |
| S5 | 2.0 | 2.0 | 2.0 | 2.0 | 1.0 | 4.0 | 2.0 | 3.0 | 1.0 | 4.0 | 4.0 | 1.0 | 1.0 | 1.0 | 2.0 | 1.0 | 2.0 |
| S6 | 4.0 | 3.0 | 1.0 | 1.0 | 1.0 | 1.0 | 3.0 | 1.0 | 5.0 | 1.0 | 3.0 | 1.0 | 2.0 | 1.0 | 3.0 | 2.0 | 2.0 |
| S7 | 3.0 | 2.0 | 2.0 | 1.0 | 2.0 | 1.0 | 1.0 | 2.0 | 3.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 1.0 | 3.0 | 3.0 |
| S8 | 1.0 | 1.0 | 3.0 | 1.0 | 1.0 | 4.0 | 5.0 | 1.0 | 2.0 | 5.0 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| S9 | 2.0 | 3.0 | 4.0 | 2.0 | 1.0 | 1.0 | 2.0 | 1.0 | 4.0 | 2.0 | 5.0 | 1.0 | 2.0 | 1.0 | 4.0 | 2.0 | 2.0 |
| S10 | 4.0 | 2.0 | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 | 1.0 | 3.0 | 2.0 | 5. 0 | 2.0 | 1.0 | 2.0 | 1.0 | 3.0 | 3.0 |
| S11 | 3.0 | 4.0 | 4.0 | 1.0 | 1.0 | 5.0 | 3.0 | 2.0 | 2.0 | 3.0 | 2.0 | 2.0 | 2.0 | 1.0 | 2.0 | 1.0 | 1.0 |
| S12 | 2.0 | 2.0 | 1.0 | 1.0 | 3.0 | 1.0 | 3.0 | 3.0 | 1.0 | 1.0 | 5.0 | 2.0 | 1.0 | 1.0 | 2.0 | 4.0 | 2.0 |
| S13 | 4.0 | 1.0 | 2.0 | 2.0 | 1.0 | 5.0 | 1.0 | 4.0 | 1.0 | 5.0 | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 | 1.0 |
| S14 | 2.0 | 3.0 | 1.0 | 1.0 | 2.0 | 1.0 | 5.0 | 2.0 | 3.0 | 4.0 | 3.0 | 2.0 | 2.0 | 1.0 | 1.0 | 2.0 | 2.0 |
| S15 | 3.0 | 2.0 | 1.0 | 1.0 | 1.0 | 2.0 | 1.0 | 4.0 | 2.0 | 1.0 | 2.0 | 3.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 |
| S16 | 2.0 | 1.0 | 3.0 | 1.0 | 3.0 | 1.0 | 5.0 | 1.0 | 2.0 | 2.0 | 2.0 | 3.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 |

***MS****= Muscle stiffness,* ***BA****=Back ache,* ***GP****= General pain,* ***C****=Cramp,* ***F****=Fatigue,* ***BT****=Breast tenderness,* ***V****=Vomiting,* ***T****=Tension,* ***MSW****=Mood swing,* ***D****=Depression,* ***I****=Irritability,* ***SA****=School absent,* ***SH****=Stay at home,* ***AW****=Avoid social work,* ***L****=Loneliness,* ***D****=Dizziness,* ***A****=Anxiety*

Table 13: post test raw data of Raw Data of menstruation Symptom Questionnaire for Aerobic

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CODE | MS | BA | GP | C | F | BT | V | T | MSW | D | I | SA | SH | AW | L | DI | A |
| P1 | 4.0 | 2.0 | 2.0 | 3.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| P2 | 2.0 | 3.0 | 3.0 | 4.0 | 2.0 | 1.0 | 3.0 | 3.0 | 2.0 | 1.0 | 2.0 | 4.0 | 3.0 | 2.0 | 2.0 | 3.0 | 3.0 |
| P3 | 3.0 | 4.0 | 2.0 | 2.0 | 4.0 | 4.0 | 2.0 | 1.0 | 4.0 | 3.0 | 1.0 | 1.0 | 3.0 | 3.0 | 1.0 | 2.0 | 2.0 |
| P4 | 4.0 | 2.0 | 4.0 | 3.0 | 2.0 | 3.0 | 3.0 | 3.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 3.0 | 3.0 |
| P5 | 2.0 | 3.0 | 2.0 | 3.0 | 3.0 | 2.0 | 5.0 | 2.0 | 3.0 | 4.0 | 1.0 | 3.0 | 4.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| P6 | 4.0 | 2.0 | 3.0 | 3.0 | 4.0 | 5.0 | 3.0 | 3.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 |
| P7 | 4.0 | 4.0 | 4.0 | 2.0 | 3.0 | 4.0 | 5.0 | 2.0 | 4.0 | 4.0 | 3.0 | 3.0 | 1.0 | 2.0 | 1.0 | 3.0 | 4.0 |
| P8 | 4.0 | 3.0 | 3.0 | 3.0 | 4.0 | 3.0 | 4.0 | 4.0 | 2.0 | 5.0 | 1.0 | 1.0 | 3.0 | 4.0 | 2.0 | 4.0 | 3.0 |
| P9 | 5.0 | 3.0 | 3.0 | 4.0 | 3.0 | 5.0 | 3.0 | 2.0 | 2.0 | 4.0 | 5.0 | 1.0 | 4.0 | 2.0 | 3.0 | 4.0 | 2.0 |
| P10 | 4.0 | 5.0 | 5.0 | 2.0 | 5.0 | 3.0 | 5.0 | 4.0 | 3.0 | 3.0 | 1.0 | 2.0 | 3.0 | 4.0 | 3.0 | 1.0 | 1.0 |
| P11 | 3.0 | 2.0 | 2.0 | 4.0 | 4.0 | 3.0 | 3.0 | 1.0 | 4.0 | 5.0 | 3.0 | 1.0 | 1.0 | 1.0 | 4.0 | 3.0 | 4.0 |
| P12 | 5.0 | 5.0 | 5.0 | 4.0 | 3.0 | 5.0 | 5.0 | 2.0 | 4.0 | 1.0 | 2.0 | 2.0 | 4.0 | 3.0 | 3.0 | 5.0 | 3.0 |
| P13 | 4.0 | 3.0 | 1.0 | 2.0 | 3.0 | 3.0 | 4.0 | 5.0 | 2.0 | 5.0 | 4.0 | 2.0 | 1.0 | 2.0 | 1.0 | 2.0 | 3.0 |
| P14 | 3.0 | 4.0 | 3.0 | 3.0 | 2.0 | 3.0 | 5.0 | 2.0 | 3.0 | 1.0 | 1.0 | 1.0 | 5.0 | 1.0 | 2.0 | 5.0 | 4.0 |
| P15 | 4.0 | 3.0 | 2.0 | 2.0 | 4.0 | 4.0 | 3.0 | 2.0 | 3.0 | 4.0 | 4.0 | 1.0 | 3.0 | 3.0 | 5.0 | 3.0 | 4.0 |
| P16 | 2.0 | 5.0 | 2.0 | 3.0 | 3.0 | 5.0 | 5.0 | 2.0 | 2.0 | 1.0 | 1.0 | 1.0 | 4.0 | 2.0 | 4.0 | 2.0 | 4.0 |

***MS****= Muscle stiffness,* ***BA****=Back ache,* ***GP****= General pain,* ***C****=Cramp,* ***F****=Fatigue,* ***BT****=Breast tenderness,* ***V****=Vomiting,* ***T****=Tension,* ***MSW****=Mood swing,* ***D****=Depression,* ***I****=Irritability,* ***SA****=School absent,* ***SH****=Stay at home,* ***AW****=Avoid social work,* ***L****=Loneliness,* ***D****=Dizziness,* ***A****=Anxiety*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CODE | MS | BA | GP | C | F | BT | V | T | MSW | D | I | SA | SH | AW | L | DI | A |
| T1 | 1.0 | 1.0 | 2.0 | 2.0 | 1.0 | 2.0 | 1.0 | 3.0 | 2.0 | 2.0 | 4.0 | 1.0 | 1.0 | 4.0 | 2.0 | 2.0 | 3.0 |
| T2 | 2.0 | 3.0 | 2.0 | 1.0 | 2.0 | 3.0 | 4.0 | 2.0 | 3.0 | 1.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 3.0 | 2.0 |
| T3 | 3.0 | 1.0 | 1.0 | 1.0 | 3.0 | 4.0 | 1.0 | 3.0 | 2.0 | 2.0 | 3.0 | 1.0 | 5.0 | 3.0 | 1.0 | 3.0 | 2.0 |
| T4 | 2.0 | 2.0 | 4.0 | 2.0 | 1.0 | 3.0 | 4.0 | 2.0 | 3.0 | 4.0 | 3.0 | 3.0 | 1.0 | 2.0 | 2.0 | 3.0 | 4.0 |
| T5 | 5.0 | 3.0 | 1.0 | 1.0 | 4.0 | 5.0 | 5.0 | 3.0 | 4.0 | 5.0 | 2.0 | 2.0 | 2.0 | 5.0 | 2.0 | 2.0 | 1.0 |
| T6 | 4.0 | 2.0 | 4.0 | 4.0 | 1.0 | 4.0 | 1.0 | 2.0 | 3.0 | 1.0 | 3.0 | 3.0 | 3.0 | 3.0 | 5.0 | 3.0 | 3.0 |
| T7 | 4.0 | 3.0 | 3.0 | 1.0 | 3.0 | 3.0 | 4.0 | 2.0 | 4.0 | 4.0 | 3.0 | 1.0 | 3.0 | 3.0 | 1.0 | 2.0 | 2.0 |
| T8 | 3.0 | 3.0 | 2.0 | 2.0 | 1.0 | 5.0 | 5.0 | 4.0 | 2.0 | 2.0 | 2.0 | 3.0 | 1.0 | 3.0 | 2.0 | 4.0 | 5.0 |
| T9 | 4.0 | 1.0 | 4.0 | 1.0 | 5.0 | 4.0 | 1.0 | 3.0 | 3.0 | 3.0 | 1.0 | 1.0 | 2.0 | 3.0 | 1.0 | 1.0 | 2.0 |
| T10 | 3.0 | 2.0 | 1.0 | 4.0 | 2.0 | 3.0 | 4.0 | 2.0 | 5.0 | 5.0 | 3.0 | 2.0 | 1.0 | 3.0 | 4.0 | 2.0 | 2.0 |
| T11 | 4.0 | 4.0 | 2.0 | 1.0 | 2.0 | 4.0 | 3.0 | 4.0 | 1.0 | 4.0 | 3.0 | 3.0 | 2.0 | 2.0 | 2.0 | 1.0 | 3.0 |
| T12 | 3.0 | 2.0 | 1.0 | 3.0 | 5.0 | 4.0 | 4.0 | 3.0 | 5.0 | 1.0 | 4.0 | 2.0 | 5.0 | 4.0 | 3.0 | 4.0 | 1.0 |
| T13 | 3.0 | 3.0 | 2.0 | 1.0 | 1.0 | 3.0 | 2.0 | 4.0 | 2.0 | 4.0 | 1.0 | 4.0 | 1.0 | 4.0 | 3.0 | 4.0 | 3.0 |
| T14 | 3.0 | 4.0 | 4.0 | 3.0 | 3.0 | 4.0 | 5.0 | 5.0 | 3.0 | 3.0 | 4.0 | 4.0 | 3.0 | 2.0 | 2.0 | 1.0 | 2.0 |
| T15 | 5.0 | 2.0 | 1.0 | 1.0 | 2.0 | 3.0 | 3.0 | 2.0 | 4.0 | 3.0 | 1.0 | 3.0 | 1.0 | 3.0 | 1.0 | 5.0 | 4.0 |
| T16 | 3.0 | 3.0 | 3.0 | 1.0 | 1.0 | 5.0 | 3.0 | 5.0 | 3.0 | 3.0 | 4.0 | 1.0 | 4.0 | 3.0 | 4.0 | 1.0 | 2.0 |

*Table-* 14 Post test Raw Data of menstruation Symptom Questionnaire for Stretching (T)

***MS****= Muscle stiffness,* ***BA****=Back ache,* ***GP****= General pain,* ***C****=Cramp,* ***F****=Fatigue,* ***BT****=Breast tenderness,* ***V****=Vomiting,* ***T****=Tension,* ***MSW****=Mood swing,* ***D****=Depression,* ***I****=Irritability,* ***SA****=School absent,* ***SH****=Stay at home,* ***AW****=Avoid social work,* ***L****=Loneliness,* ***D****=Dizziness,* ***A****=Anxiety*

.

Table 15. Pre test Raw Data for VAS (T) Group on primary dysmenorrehea

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| NO | CODE | PTA | POA | CODE | PTS | POS |
| 1 | A1 | 6.00 | 4.00 | S1 | 9.00 | 6.00 |
| 2 | A2 | 7.00 | 5.00 | S2 | 8.00 | 6.00 |
| 3 | A3 | 8.00 | 6.00 | S3 | 7.00 | 6.00 |
| 4 | A4 | 9.00 | 3.00 | S4 | 7.00 | 6.00 |
| 5 | A5 | 6.00 | 7.00 | S5 | 8.00 | 4.00 |
| 6 | A6 | 7.00 | 7.00 | S6 | 7.00 | 5.00 |
| 7 | A7 | 7.00 | 6.00 | S7 | 7.00 | 6.00 |
| 8 | A8 | 9.00 | 5.00 | S8 | 7.00 | 5.00 |
| 9 | A9 | 8.00 | 5.00 | S9 | 8.00 | 5.00 |
| 10 | A10 | 6.00 | 6.00 | S10 | 6.00 | 3.00 |
| 11 | A11 | 7.00 | 5.00 | S11 | 7.00 | 5.00 |
| 12 | A12 | 7.00 | 6.00 | S12 | 9.00 | 5.00 |
| 13 | A13 | 6.00 | 6.00 | S13 | 7.00 | 5.00 |
| 14 | A14 | 7.00 | 6.00 | S14 | 8.00 | 5.00 |
| 15 | A15 | 8.00 | 5.00 | S15 | 8.00 | 5.00 |
| 16 | A16 | 8.00 | 5.00 | S16 | 9.00 | 5.00 |

*VAS=Visual Analog Scale, PTA=Pretest Aerobic, POS=Posttest aerobic, PTS=Pretest stretching, POS=Posttest stretching, A=Aerobic, S=Stretching.*

Table 16. Sample size from each department

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Department | Total population in department | Sample size |
| 1 | Biology | 31 | 4 |
| 2 | Physics | 19 | 4 |
| 3 | Chemistry | 30 | 4 |
| 4 | mathematics | 30 | 4 |
| 5 | Statistics | 28 | 4 |
| 6 | Biotechnology | 21 | 4 |
| 7 | Geology | 20 | 4 |
| 8 | Environmental science | 30 | 4 |

Table 17. Pre test Raw Data BMI for Aerobic and Stretching Group on primary dysmenorrehea

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NO | Age(year) | | Weight(kg) | | Height(m) | | BMI(Kg/m2 | |
| AG | SG | AG | SG | AG | SG | AG | SG |
| 1 | 18 | 19 | 50 | 52 | 1.55 | 1.58 | 20.81165 | 21.64412 |
| 2 | 18 | 18 | 54 | 58 | 1.6 | 1.62 | 21.09375 | 22.65625 |
| 3 | 19 | 19 | 55 | 55 | 1.6 | 1.6 | 21.48438 | 21.48438 |
| 4 | 19 | 18 | 57 | 49 | 1.62 | 1.62 | 21.71925 | 18.67093 |
| 5 | 20 | 18 | 49 | 53 | 1.55 | 1.6 | 20.39542 | 22.06035 |
| 6 | 20 | 18 | 52 | 52 | 1.6 | 1.65 | 20.3125 | 20.3125 |
| 7 | 18 | 18 | 52 | 62 | 1.56 | 1.65 | 21.36752 | 25.47666 |
| 8 | 18 | 19 | 50 | 48 | 1.6 | 1.65 | 19.53125 | 18.75 |
| 9 | 18 | 19 | 49 | 48 | 1.56 | 1.52 | 20.13478 | 19.72387 |
| 10 | 18 | 19 | 48 | 47 | 1.53 | 1.53 | 20.50493 | 20.07775 |
| 11 | 18 | 20 | 50 | 51 | 1.55 | 1.55 | 20.81165 | 21.22789 |
| 12 | 21 | 20 | 55 | 55 | 1.61 | 1.55 | 21.21832 | 21.21832 |
| 13 | 19 | 21 | 50 | 58 | 1.58 | 1.6 | 20.02884 | 23.23346 |
| 14 | 20 | 19 | 55 | 55 | 1.6 | 1.68 | 21.48438 | 21.48438 |
| 15 | 18 | 18 | 64 | 67 | 1.7 | 1.6 | 22.14533 | 23.18339 |
| 16 | 18 | 19 | 55 | 67 | 1.68 | 1.68 | 19.48006 | 23.73025 |

Table 18.Description of Body Mass Index

|  |  |
| --- | --- |
| **BMI** | |
| <18.5 | Underweight |
| 18.5 to 24.9 | Healthy |
| 25 to 29.9 | Overweight |
| 30 to 34.9 | Grade 1 obesity |
| 35 to 39.9 | Grade 2 obesity |
| >=40 | Grade 3 (Morbid obesity |

\***source**: American College of Sports Medicine. ACSM's Guidelines for Exercise Testing and Prescription, 7th Edition. Lippincott Williams and Wilkins: Philadelphia; 2006.