ANNEXURE –I

QUESTIONNAIRE

I. SOCIOECONOMIC PROFILE:

1. Name : 

2. Gender : □ Boy  □ Girl

3. Age : 

4. Class studying : 

5. Father’s Name : 

6. Mother’s Name : 

7. Ethnic Group

   7.1. Caste : □ OC/FC  □ BC  □ MBC  □ SC/ST

   7.2. Religion : □ Hindu / Christian / Muslim / Others

8. Family Type : □ Joint family  □ Living with both parent
                 □ Living with one parent

                              □ Rs.5001 – 10,000  □ Above 10,000

10. Educational level of parents: □ Secondary only  □ Higher secondary only
    □ Graduate  □ Post graduate
          □ Professional

Life Style Pattern

Smoking, Drinking And Dieting Pattern

11. Do you smoke cigarettes?  Yes / No

12. Are you tasted any alcohol?  Yes / No

13. Have you ever dieted?  Yes / No
14. Are you consuming soft drinks? Yes/ no

15. Frequency of soft drinks (alcoholic and non – alcoholic) consumption

<table>
<thead>
<tr>
<th>S. No</th>
<th>Drinks</th>
<th>Frequency soft drinks consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Daily</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non –Alcoholic</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Coffee</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Tea</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Boost</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Complan</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Bourn vita</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Horlicks</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Rasna</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Milk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alcoholic</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Coca-Cola</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Pepsi</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Fanta</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Miranda</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Seven-up</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Limca</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Thumps up</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Sprit</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Mountain dew</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Appy Fizz</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Tion</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Maaza</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Frooti</td>
<td></td>
</tr>
</tbody>
</table>

**Physical activity**

16. Over the past 7 days, how many days were you physically active?

☐ One day  ☐ 2 – 4 days  ☐ 4 – 6 days  ☐ all days

17. How many hours or time spent for the following activities at your home?

<table>
<thead>
<tr>
<th>S.No</th>
<th>Activities at home</th>
<th>Time/ hour spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Daily routine work (brushing, toileting, bathing and other personal work)</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Reading</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Writing</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Eating – Break fast</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dinner</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Recreation activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Watching TV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Singing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dancing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Playing musical instruments</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Playing with friends</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Sleeping</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Traveling to school to home</td>
<td></td>
</tr>
</tbody>
</table>
II. DIETARY PATTERN

i) Snack food consumption pattern:

19. Give the correct answer about your frequency of snack foods consumption listed in the table

<table>
<thead>
<tr>
<th>S.No</th>
<th>Items</th>
<th>Frequency of fast foods consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Daily</td>
</tr>
<tr>
<td>1.</td>
<td>Biscuits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marie gold</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crack – jack</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Little hearts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Britannia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sun feast</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Chocolates and bars</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coffee bites</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lacto king</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loly pop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 – star</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kit – kat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Munch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dairy milk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perk</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Ice cream</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cornet to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chaco bar</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vanilla</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strawberry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chocolate</td>
<td></td>
</tr>
</tbody>
</table>

20. Give the correct answer about your frequency of fast foods consumption listed in the table

<table>
<thead>
<tr>
<th>Items</th>
<th>Frequency of fast foods consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Daily</td>
</tr>
<tr>
<td>Foods</td>
<td></td>
</tr>
<tr>
<td>Pizza</td>
<td></td>
</tr>
<tr>
<td>Burger</td>
<td></td>
</tr>
<tr>
<td>Tanduri</td>
<td></td>
</tr>
<tr>
<td>Fried rice</td>
<td></td>
</tr>
<tr>
<td>Noodles</td>
<td></td>
</tr>
<tr>
<td>Pav bhaji</td>
<td></td>
</tr>
<tr>
<td>Panipori</td>
<td></td>
</tr>
<tr>
<td>Bhel pori</td>
<td></td>
</tr>
<tr>
<td>Dhokla</td>
<td></td>
</tr>
<tr>
<td>Chaat</td>
<td></td>
</tr>
<tr>
<td>Sandwich</td>
<td></td>
</tr>
</tbody>
</table>
III) BREAK FAST PATTERN:

21. Are you having breakfast regularly? Yes / No

22. Reason for skipping breakfast?
   a) Lack of time b) Did not like to eat early c) No appetite d) Overslept

23. Mention it, how often do you skip breakfast?

<table>
<thead>
<tr>
<th>S.No</th>
<th>Breakfast Foods</th>
<th>Frequency of Skipping Breakfast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Daily</td>
</tr>
<tr>
<td>1</td>
<td>Idli</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Dosa</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Chapati</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pongal</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Bread toast with jam</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Rice</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Sandwich</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Uppma</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Noodles</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Sevai</td>
<td></td>
</tr>
</tbody>
</table>

IV) NUTRITIONAL STATUS

24. 24 hours recall method (for 3 consecutive days)

<table>
<thead>
<tr>
<th>Time</th>
<th>Food items</th>
<th>Ingredients(in quantity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early morning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morning (Breakfast)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid morning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dinner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bed - time</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

25. Anthropometric measurements:
   Height _____________ cm
   Weight _____________ Kg
   Body mass index ______ kg/m²
   Body fat percentage _____________ %
PROCEDURE FOR ESTIMATION OF ENERGY VALUE

Caloric Content

Caloric conversion information on the label for fat, carbohydrates, and Protein is optional. Calories can be expressed in numerous ways. A "calorie" which is the standard for measurement of the energy value of substances and to express the body's energy requirement, is the amount of heat required to raise the temperature of 1 g of water to 1°C [1 calorie = 4.184 joules].

The unit used nutritional work is "Calorie" or "kilo-calorie" kcal], which equals 1000 calories. The term calorie is used to express caloric content. The FDA regulations specify five methods by which caloric content may be calculated, one of which uses bomb calorimetry.

1. Specific Atwater factors for Calories per gram of protein, total carbohydrates, and total fat.

2. The general factor of 4, 4, and 9 Calories per gram of protein, total carbohydrate, and total fat, respectively.

3. The general factor of 4, 4, and 9 Calories per gram of protein, total carbohydrates, less the amount of insoluble dietary fiber, and total fat, respectively.

4. Data for specific food factors for particular foods or ingredients approved by the FDA.

5. Bomb calorimetry data subtracting 1.25 Calories per gram protein to correct for incomplete digestibility.

FSIS [Food Safety and Inspection Service] allows only the calculation procedures 1-4 above, and not the use of bomb calorimeter for caloric content.
ESTIMATION OF PROTEIN BY LOWERY’S METHOD

Aim

To estimate the amount of protein in the developed breakfast bars

Principle

The blue colour developed by the reduction of phosphomolybdic, phosphotungstic components in the folin cie calteau reagent by the amino acids tyrosine and tryptophan present and the colour is developed by the burette reaction of protein with the alkaline cupric tartarate are measured in the lowery’s method.

Reagents

- 2% sodium carbonate in 0.1N sodium hydroxide (Reagent A).
- 0.5% copper sulphate solution in 1% sodium potassium tartarate (Reagent B).
- Alkaline copper solution mix 50ml or reagent A with 1ml of reagent B just prior to use (Reagent C).
- Folin cie calteau reagent (Reagent D): Dilute 1 volume of folin cie calteau phenol reagent (2.0 N) with equal value of distilled water just before to use.
- Stock standard solution: weight accurately 50mg of bovine serum albumin (fraction) and dissolved in distilled water and made up to 50ml in a standard flask.
- Working standard solution: 10ml of stock solution is made up to 50ml with distilled water in a standard flask (1 ml of this solution contains 200µg of protein).
**Procedure**

- Pipette out 0.1, 0.2, 0.3, 0.4 and 0.5 ml of the working standard solution into a series of test tubes. This corresponds to 40, 80, 120, 160 and 200 μg of protein.

- Pipette out 0.5 ml of the sample solution in two other test tubes.

- Made up the volume to 0.5 ml in all the test tubes. A tube with 0.5 ml of water serves as the blank.

- Add 2.5 ml of reagent C to each tube including the blank mix well and allow to stand for 10 minutes.

- Then add 0.25 ml of reagent D mix well and allow to stand for 30 minutes. Blue colour is developed. Take the reading at 600 nm.

**Extraction of Protein from Sample**

Weight out 100 mg of sample and precipitated the portion in the sample by adding 3 ml of 10% trichloro acetic acid. Centrifuge the solution for 10 minutes, the supernatant should be discard and dissolve the precipitate in 3 ml of 2N sodium hydroxide that dissolved solution is made up to 100 ml standard flask with distilled water.
ESTIMATION OF FAT BY SOXHLET METHOD

Aim
To determine the percentage of fat present in the developed breakfast bars

Principle
Ether extraction of crude fat in vegetable product is carried out in a continuous extractor. An apparatus in which ether after dissolving a portion of the fat in the food sample and discharging it into the extraction flask. Steps in the process being repeated automatically and continuously until the extraction is complete. The ether gradually condenses into extraction tube containing the food sample, until it rises to the top of siphon when it is discharged in the extraction flask.

Procedure
The soxhlet flask is weighted for consecutive concordant weight (0.005 difference was allowed).

The moisture free sample of 5g is transferred into the extraction thimble. The thimble is put into the extractor, which is fixed into the soxhlet flask. Pour ether into the extraction till it siphon, once into the flask. Pour ether again into the extractor till the thimble is soaked the ether. The entire setup is kept over the electric mantle and the extractor is connected to the condenses consisting of spiral coil around which water flows continuously. The thimble and contents are allowed to soak in ether for 24 hours. The nose of the condenser is always plugged by moistened cotton. The temperature is maintained at 60°C. The condenses is trued on so that the water flows continuously through the condenser. The evaporated ether would rise up but owing to condenser arrangement fall back into the extractor is free fro any yellow color indicating the presence of fat. The soxhlet flask is then disconnected and ether in flask is fully evaporated. The flask was weighted again for consecutive concordant weigh. By the difference in weight, the fat content may be calculated.

Calculation
\[
\text{Crude fat or ether extract} = \frac{\text{Weight of fat} \times 100}{\text{Weight of Sample}}
\]
DETERMINATION OF TOTAL CARBOHYDRATE BY ANTHRONE METHOD

Aim

To determine the amount carbohydrate present in the developed breakfast bars.

Carbohydrate is the important components of storage and structural materials in the plants. They exist as free sugar and polysaccharides. The basic units of carbohydrates are the monosaccharide which cannot be split by hydrolysis into more simple sugars. The carbohydrates content can be measured by hydrolyzing the polysaccharides into simple sugar by acid hydrolysis and estimating the resultant monosaccharide.

Principle

Carbohydrates are first hydrolyzed into simple sugars using dilute hydrochloric acid. The hot acidic medium glucose is dehydrated to hydroxymethyl fufural. This compound forms with anthrone a green colour product with an absorption maximum at 630nm.

Reagents

- 2.5N HCL.
- Anthrone reagent: Dissolve 200mg anthrone in 100ml of ice cold 95% H₂SO₄ prepare fresh before use.
- Standard glucose stock: Dissolve 100mg in 100ml water.
- Working standard: 10ml of stock diluted to 100ml with distilled water. Store in refrigerator after adding a few drops of toluene.
Procedure

- Weigh 100mg of the sample into a boiling tube.

- Hydrolyze by Deeping it in a boiling water bath for three hours with 5ml of 2.5 N Hcl and cool to room temperature.

- Neutralize it with solid sodium carbonate until the effervescence ceases.

- Make up the volume to 100ml and centrifuge.

- Collect the supernatant and table 0.5 ml and 1ml aliquots for analysis.

- Prepare the standards by taking 0, 0.2, 0.4, 0.8 and 1ml of the working standard ‘0’ serves as blank.

- Make up the volume to 1ml in all test tubes including the sample tubes by adding distilled water.

- Then add 4ml of anthrone reagent.

- Heat for eight minutes in a boiling water bath.

- Cool rapidly and react the green to dark green colour at 630 nm.

- Draw a standard graph by plotting concentration of the standard on the X-axis versus absorbance on the Y-axis.

- From the graph calculate the amount of carbohydrate present in the sample tube.
ESTIMATION OF IRON BY WONG’S METHOD

Aim
To estimate the amount of iron present in the given sample

Principle
The food sample is oxidized by ignition and net digestion to form ash; Iron in the ash is in the ferric state. It reacts with potassium thiocyanate, which is red in color. Intensity of the colour produced which is the measure of concentration of iron present in the ash solution. It is determined calorimetrically using a standard iron solution.

Reagents

- **Stock iron solution**
  Dissolve 70.2 mg of crystalline ferrous ammonium sulphate and added 5ml of concentrated sulfuric acid and warmed slightly. Transferred in to a 100ml standard flask and diluted to the mark and mixed well. 1ml of solution contains 0.1mg of ferric iron.

- **Working standard solution**
  Prepare a working standard by diluting stock standard to 10 times such that 1ml contain 10γ of iron (i.e.) 10ml of stock standard is made-up to 100ml with distilled water. Potassium per sulphate solution standard 8g of potassium per sulphate is dissolved in 100ml of distilled water is a standard flask.

- **30% Sulphuric acid**
  Dilute 30ml of concentrated sulphuric acid in 70ml of distilled water.

- **3N Potassium thiocynate solution**
  Dissolved 148 potassium thiocyanate in water and dilute it to 500ml. Filter, if turbid and add 20ml pure acetone to improve their keeping quality.
Preparation of Sample

Preparation of Ash Solution

The ash is moistened with a small amount of distilled water (0.5-1 ml) and 1 ml of concentrated hydrochloric acid is added to it. The moisture is evaporated to dryness on a boiling water bath. Another 5 ml of concentrated hydrochloric acid is added again and the solution is evaporated to dryness before. 4 ml of concentrated hydrochloric acid and a few ml of water are added and the solution warmed over a boiling water bath and filtered into a 100 ml standard flask using whatman No.40 filter paper. After cooling, the volume is made up to 100 ml and suitable aliquots are used for the estimation of iron.

Procedure

1. Take aliquots of working standard solution 1, 2, 3, 4 and 5 ml corresponding to 10, 20, 30, 40 and 50 γ of iron in a series of test tubes.

2. Take 2 ml of unknown solution in duplicate both processed and unprocessed.

3. Add 1 ml saturated potassium per sulphate and 1 ml of 30% sulfuric acid to all the test tubes.

4. Make up the solution in all the test tubes to 8.5 ml with distilled water. As 1.5 ml of 3N potassium thiocyanate to all test tubes for the development of colour.

5. A blank was prepared simultaneously by adding the entire reagent except the standard. Allow the colour to develop for about 20 minutes and read the intensity of colour at 530 nm in a colorimeter.

Result

The final concordant results were recorded.
ESTIMATION OF CALCIUM

Aim
To determine the amount of calcium present in the given sample

Principle
Calcium present in milk is precipitated as calcium oxalate by the addition of ammonium oxalate. The precipitate is washed and dissolved in sufficient amount of 1N sulphuric acid and titrated against Potassium Permanganate.

Reagents
- **4% Ammonia**
  Dissolved 4ml of strong ammonia in 96ml of water.
- **0.01N Potassium permanganate**
  316 mg of Potassium permanganate is dissolved in 1000ml of dissolved water.
- **4% Ammonium oxalate**
  4g of Ammonium oxalate is dissolved in 100ml of distilled water.
- **0.01N Oxalic Acid**
  Weighed 630mg of oxalic acid and dissolved in 1000ml of distilled water.
- **Calcium standard**
  62.5mg of calcium carbonate is dissolved in 3ml of concentrated hydrochloric acid and made up in 250ml in a standard flask. 1ml of the standard solution contains 0.1mg of calcium.
- **1N Sulphuric acid**
  28ml of concentrated sulphuric acid was mixed with 927 ml of distilled water.

Preparation of Sample

**Standardization of Potassium Permanganate:**
5ml of 0.01 oxalic acid was taken in a conical flask. To this 5ml of 6N sulphuric acid was added warmed to about 70ºC and titrated against potassium permanganate solution till pale pink colour appear and remains.
Method:

2ml of diluted sample [both processed unprocessed] and standards were taken in duplicate in centrifuge tube. 1ml of ammonium oxalate was added to each tube. The solution was mixed and allowed to stand for 30 minutes with shaking at regular intervals. Test tubes were centrifuged and supernatant was discarded. They were kept inverted for 5minutes over a filter paper. The mouth of the tubes was wiped and 3ml of 4% ammonium was added along the sides of the test tubes. The precipitate was mixed well with ammonia and then centrifuged. Supernatant was discarded and 2ml of 1N sulphuric acid was added to each test tube and warmed in a boiling water bath. When the temperature of the solution was 70ºc (When the bubbles begin to appear) the tubes were removed and titrated against with 2ml of 1N sulphuric acid and titrated as above. The difference between the two-titer value [sample and blank] gives the volume of potassium permanganate required to titrate oxalic acid to form calcium oxalate.

Result

The result of the sample was noted.
ESTIMATION OF ASCORBIC ACID

Aim
To estimate the amount of ascorbic acid resent in the given sample

Reagents

1. Glacial acetic acid

2. 2.6 dichrolophenol indophenol dye
   Weight out accurately 40mg of the dye and dissolve in 100ml of distilled water. 1ml of this solution is equivalent to 0.2mg of ascorbic acid.

3. Standard ascorbate
   Dissolve 40g of pure ascorbate in 100ml of 10% acetate.

Procedure
   Diluted 5ml of standard ascorbate to 50ml with 10% acetate. Titrate 0.5ml of the dye against this solution. 0.5ml should be required to decolorize.

Technique
   Pipette out 0.5ml of the dye into a test tube add 1ml of glacial acetate running the sample slowly with constant shaking until red colour has been discharged. Noted the amount of sample required.

Result
   The amount of ascorbic acid present in the sample is noted.
ESTIMATION OF PHOSPHORUS

Aim
To estimate the amount of phosphorus present in the sample

Reagents

Molybdate solution I
Dissolve 25g of reagent grade ammonium molybdate in about 200ml of water. In a 1 litre volumetric flask, 500ml of 10n sulphuric acid was added. The molybdate solution was added and was diluted with water to 1 litre. This solution stable in definitely when stored in brown bottle.

Molybdate solution II
Dissolve 25g of reagent grade ammonium molybdate in about 200ml of water. In 1 litre volumetric flask 300ml of 10N sulphuric acid was added and was diluted with water to 1 litre. This solution is stable indefinitely.

Ammonium naphthol sulphuric acid

Stock standard phosphorus solution
35.1mg of pure potassium dihydrogen phosphate is weighed and dissolved in water added 10ml of 10N sulphuric acid and made up to 100ml with. 3ml of this solution contains 0.4mg phosphorus.

Working standard
Dilute this stock to 10-100ml. 1ml of this solution contains 3 lambda of phosphorus.

Procedure
5ml of sample was taken and diluted to 100ml with water. 0.5ml of this solution was taken in two test tubes. 1ml of molybdate II and 0.4ml of 1, 2, 4 aminonaphthol was added and made up to 10ml with distilled water. For standard 1, 2, 3, 4 and 5ml of working standard solution and 1ml of ammonium molybdate I. 0.4ml of aminonaphthol sulphonic acid was added and made up to 10ml with distilled water. All the test tubes containing 10ml of this solution were mixed well and allowed to stand for 15mts. simultaneously a blank was prepared by mixing 8.6ml of water, 0.4ml of aminonaphthol sulphonic acid and 1ml of ammonium molybdate I. the colour developed was read in a colorimeter using a filter of wave length 660nm.

Results
The amount of phosphorus present in the sample was noted.
ANNEXURE - III
ACADEMIC PERFORMANCE SCALES

1. ARITHMETIC SCALE

The arithmetic scale consist of

a. Number sense
b. Estimation and Computation
c. Algebra
d. Geometry
e. Measurements
f. Statistics and probability
g. Problem solving
# ARITHMETIC SCALE

<table>
<thead>
<tr>
<th>S. No</th>
<th>a) Number Sense</th>
<th>b) Estimation and Computation</th>
<th>c) Algebra</th>
<th>d) Geometry</th>
<th>e) Measurement</th>
<th>f) Statistics and Probability</th>
<th>g) Problem Solving</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>How many apples?</td>
<td>6+2 =?</td>
<td>Which number does not fit? 2,4,5,6,8,10</td>
<td>Which shape is the same size and shape (congruent)?</td>
<td>Who is shortest?</td>
<td>Liz = 2 candy</td>
<td>Alanso 8 pieces of gum. Gloria gives him 3 pieces. How many gums does he have?</td>
</tr>
<tr>
<td></td>
<td>A. 8</td>
<td>B. 5</td>
<td>C. 6</td>
<td>D. 4</td>
<td>E. 7</td>
<td>1, 2, 3, 4, 5</td>
<td>A. 4</td>
</tr>
<tr>
<td>2.</td>
<td>Which shows 1/2 of a pizzaa?</td>
<td>63 +34 =?</td>
<td>--- + 7 = 13</td>
<td>Which of this a triangle?</td>
<td>Who read the most books?</td>
<td>Books read</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. 1</td>
<td>B. 2</td>
<td>C. 3</td>
<td>D. 4</td>
<td>E. 5</td>
<td>A. 37</td>
<td>B. 97</td>
</tr>
<tr>
<td></td>
<td>A. 11</td>
<td>B. 18</td>
<td>C. 9</td>
<td>D. 10</td>
<td>E. 6</td>
<td>A. 5cm</td>
<td>B. 6cm</td>
</tr>
</tbody>
</table>
3. 68 equals
   A. 60+8
   B. 60+80
   C. 6+8
   D. 600+8
   E. 6+80

   99-56=?
   A. 34
   B. 155
   C. 53
   D. 60
   E. 42

   14 ---- 6 ---- 8 ------
   A. +
   B. –
   C. ×
   D. ÷
   E. >

   Which makes us to think of a circle?
   A. block
   B. pen
   C. football ground
   D. door
   E. bicycle wheel

   What is the area of figure?
   A. 18 square unit
   B. 16 square unit
   C. 6 square unit
   D. 20 square units
   E. 5 square unit

   Students council election results
   Ann  16
   Mark  20
   Sue   17

   How many votes did Mark get?
   A. 20
   B. 16
   C. 22
   D. 17
   E. 25

   Ten students are playing football after school. They need five more. If you want to know how many of them playing in and all what method do you follow?
   A. simplify
   B. subtract
   C. add
   D. multiply
   E. divide

   Round 68 to the nearest tens place.
   A. 78
   B. 70
   C. 60
   D. 80
   E. 100

   23 ×3 =?
   A. 56
   B. 70
   C. 60
   D. 80
   E. 100

   52 ---- 12 ----
   A. 30
   B. 32
   C. 40
   D. 41
   E. 32

   Which is the one point DE?
   A. P
   B. A
   C. G
   D. H
   E. F

   Ram has 11 coins, and it has to be multiplied. How much money he has?
   A. 10
   B. 22
   C. 33
   D. 44
   E. 50

   What is the percentage in the center?
   A. 12%
   B. 33%
   C. 23%
   D. 52%
   E. 14%

   The children’s eat 8 pieces of pizza. Pizza cuts into 12 pieces. Which sentence tells you how many pieces left?
   A. 12 – 8 = 4
   B. 8 + 12 = 20
   C. 8 + 4 = 12
   D. 20 – 8 = 12
   E. 20 + 4 = 16

   Suzana is making fruit salad. 2 banana, 3 apples, 25 grapes, 1 pears and she spent Rs 113.85 what information you do not need to solve the problem?
   A. 2 banana
   B. 3 apples
   C. 25 grapes
   D. 1 pears
   E. Rs 113.85

   How many dozen doughnuts?
   A. 3
   B. 24
   C. 2 1/2
   D. 2
   E. 4

   5/7 – 3/7 =?
   A. 8/7
   B. 2
   C. 2/7
   D. 0
   E. 7

   21+6+----- =?
   A. 1, 4 and 5
   B. 2, 4 and 5
   C. 4 and 5
   D. 1 and 4
   E. 2, 3 and 4
6. What is 6/12 in simplest form?
   A. ½  
   B. 12/24  
   C. 2/4  
   D. 1/6  
   E. 1/12

0.32÷ 8=?
   A. 4.3  
   B. 0.15  
   C. 0.04  
   D. 280  
   E. 43.75

Which point of graph shows coordinates (9,8) ?
   A. A  
   B. B  
   C. C  
   D. D  
   E. E

How many sets of parallel lines in the figure?
   A. 1  
   B. 0  
   C. 2  
   D. 5  
   E. 3

Select the best estimate for a new pencil?
   A. 8cm  
   B. 18m  
   C. 18cm  
   D. 18mm  
   E. 8m

Maria is 5 years older than her brother. Next year she will be 14 years. How old her brother?
   A. 8  
   B. 9  
   C. 10  
   D. 18  
   E. 9

7. What symbol for the box?
   A. <  
   B. >  
   C. =  
   D. 3  
   E. 6

Which is the correct symbol for the box?
   A. 7298×632  
   B. 7000×600  
   C. 7298.4×632.9  
   D. 7290×600  
   E. 8000×600

If 6n=102, n equals
   A. 12  
   B. 17  
   C. 108  
   D. 196  
   E. 612

What type of transformation is shown?
   A. translation  
   B. rotation  
   C. reflection  
   D. symmetry  
   E. congruent

How much more of the dog food solid is dry than canned
   A. 40%  
   B. 30%  
   C. 33%  
   D. 43%  
   E. 70%

Which of this is a diameter of a circle?
   A. r  
   B. rs  
   C. qt  
   D. lm  
   E. <art

8. What is the Greatest common factor of 54 and 72?
   A. 9  
   B. 18  
   C. 1  
   D. 2  
   E. 6

Evaluate gh-b if g = 4, h = 9, b = 12
   A. +13  
   B. -1  
   C. 42  
   D. 1  
   E. -13

Which of this is a diameter of a circle?
   A. r  
   B. rs  
   C. qt  
   D. lm  
   E. <art

What is the Greatest common factor of 54 and 72?
   A. 9  
   B. 18  
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   E. 6

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Which of this is a diameter of a circle?
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What is the Greatest common factor of 54 and 72?
   A. 9  
   B. 18  
   C. 1  
   D. 2  
   E. 6
<table>
<thead>
<tr>
<th>9.</th>
<th>What is 21/8 written as a decimal? What is 162% of 32?</th>
<th>Math problems with solutions.</th>
</tr>
</thead>
</table>
| A. 2.25 | 1. 8 is what % of 32? | A. $\frac{1}{4}$
B. $\frac{1}{4}$
C. $\frac{20}{100}$
D. $\frac{25}{100}$
E. 2.56% |
| B. 2.1 | X | Y |
| C. 2.125 | -3 | 11 |
| D. 2.13 | 1 | 7 |
| E. 2.5 | 0 | 5 |
| | 1 | - |
| | 5 | - |
| Y = -2x + 5 | A. 4 |
| | B. 3 
| | C. 1 
| | D. 0 
| | E. -1 |
| Which is the missing value of Y? | Which of these has a rectangle base and three triangle faces? | Use the formula $C = \pi d$ and $\pi = 3.14$. Find the circumstances of the circle nearest inch. |
| A. cube | A. 157 inch |
| B. triangle prism | B. 150 inch |
| C. rectangular prism | C. 1570 inch |
| D. triangular pyramid | D. 53.14 inch |
| E. triangular pyramid | E. 46.86 inch |
| D. | The diameter of sphere A is twice the size of the sphere B. What is the ratio of the sphere A to that of spheres B? | 3. \text{cm} |
| E. | The value of $x$ would make these pentagons similar? | A. 8 |
| F. | What value of $x$ would make these pentagons similar? | B. 2 |
| G. | Which of these has a rectangle base and three triangle faces? | C. 4 |
| H. | Use the formula $C = \pi d$ and $\pi = 3.14$. Find the circumstances of the circle nearest inch. | D. 0.5 |
| I. | Which is the missing value of Y? | E. -4 |

<table>
<thead>
<tr>
<th>10.</th>
<th>43,000 equals:</th>
<th>Calculate the surface of the rectangular solid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. $4.3 \times 10^5$</td>
<td>31/6 = (-3 3/8)</td>
<td>A. $79 \text{ cm}^2$</td>
</tr>
<tr>
<td>B. $4.3 \times 10^4$</td>
<td>A. 8.13/24</td>
<td></td>
</tr>
<tr>
<td>C. $4.3 \times 10^3$</td>
<td>B. 4.1/7</td>
<td></td>
</tr>
<tr>
<td>D. $4.3 \times 10^2$</td>
<td>C. 1.19/24</td>
<td></td>
</tr>
<tr>
<td>E. $4.3 \times 10^0$</td>
<td>D. 17/16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E. -17.7/16</td>
<td></td>
</tr>
<tr>
<td>Factor $X^2 - 5x - 36$</td>
<td>Using the pythagorean theorem $a^2 + b^2 = c^2$. a = 9, b = 12 then c?</td>
<td>A. 8</td>
</tr>
<tr>
<td>A. $(x-6)(x-6)$</td>
<td>B. $(x - 9)(x - 4)$</td>
<td></td>
</tr>
<tr>
<td>B. $(x + 6)(x - 6)$</td>
<td>C. $(x - 36)(x + 1)$</td>
<td></td>
</tr>
<tr>
<td>C. $(x + 9)(x + 4)$</td>
<td>D. $(x - 9)(x + 4)$</td>
<td></td>
</tr>
<tr>
<td>D. $(x + 6)(x + 6)$</td>
<td>E. $(x + 6)(x + 6)$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Calculate the surface of the rectangular solid.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. 79 cm$^2$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. 110 cm$^2$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. 120 cm$^2$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D. 128 cm$^2$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E. 158 cm$^2$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If the average of five numbers is 50 and four of the numbers are 25, 75, 30 and 70 what is the fifth number?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. 75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. 50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. 30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D. 20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E. 10</td>
<td></td>
</tr>
<tr>
<td>One jean is Rs. 1500. How many Rs. For 50 jeans?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>What is 162% written as a fraction?</td>
<td>Simplify $5^4$.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>A. 162/10</td>
<td>2x+4</td>
<td>4+3-9-10-15 =?</td>
</tr>
<tr>
<td>B. 162/1000</td>
<td>2x+4 = 3x-2</td>
<td>A. 12</td>
</tr>
<tr>
<td>C. 162/1000</td>
<td>2x+1</td>
<td>B. -10</td>
</tr>
<tr>
<td>D. 162/1000</td>
<td>2</td>
<td>C. -9</td>
</tr>
<tr>
<td>E. 162</td>
<td>1</td>
<td>D. 8</td>
</tr>
<tr>
<td></td>
<td>1/2</td>
<td>E. 35</td>
</tr>
</tbody>
</table>
2. CONCEPT AND PROCESSES SCALE

The concept and processes scale consist of

a. Unifying Concepts of Science
b. Scientific Inquiry
c. Life Sciences
d. Earth /space science
e. Physical science
## CONCEPT AND PROCESSES

<table>
<thead>
<tr>
<th>S. No</th>
<th>a) Unifying Concepts of Science</th>
<th>b) Scientific Inquiry</th>
<th>c) Life Sciences</th>
<th>d) Earth /space science</th>
<th>e) Physical science</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What is the most finding causes of plant being wilted?</td>
<td>While walking on the beach, you find a great rock. You really want to bring the rock to school, but it is too big to move. You decide to write about the rock in your log. Choose the best group of words to describe your rock.</td>
<td>The arrow points to the A. stem. B. leaf. C. flower. D. root. E. seed</td>
<td>Earth is shaped most like A. an egg B. a round ball C. a pancake D. a block E. a tree</td>
<td>Which is solid? A. rock B. air C. water D. milk E. oxygen</td>
</tr>
<tr>
<td>2</td>
<td>In this drawing, wires and bulbs are a examples of an electrical</td>
<td>A rock is put into a pail that has some water in it. Before the rock is put into the pail, the water is at the five-liter line. After the rock is added, the water rises to the six-liter line. The space taken up by the rock is</td>
<td>A predator A. hunts other animals for food. B. will only eat plants. C. cannot be prey for other animals. D. will only eat parasite E. is a warm blooded animal</td>
<td>When it is raining, which must be true A. it is spring B. the sun is shining C. the wind is blowing D. there are clouds in the sky E. it is warm outside</td>
<td>Which is an example of melting? A. stirring some sugar in water until you cannot see the sugar B. heating a pan of water until the water is all gone C. heating a block of ice turns to water D. cooling water in the freezer until the water becomes solid</td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td>Answer Options</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td></td>
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</tr>
</tbody>
</table>
| 3 | The weather forecast for the day was 30% chance of a rain. What would you expect? | A. it will definitely rain  
B. it is likely to rain  
C. there is an equal chance rain or no rain |
|   | Someone said that if you mix salt and sugar with water and let the mixture stand, you get saltwater taffy - a kind of candy. Which would be the best way for you to test the idea? | A. Insects with similar mouth parts will have similar diets  
B. Insects use sharp mouth parts for protection  
C. Bigger insects have bigger |
|   | The butterfly life cycle is called of | A. egg, pupa, larva  
B. larva, egg, pupa  
C. egg, larva, pupa |
|   | During winter your part of the earth is | A. tilting towards the sun  
B. not tilting at all  
C. Tilting away from the sun |
|   | In a magnet which side attracts each? | A. NS  
B. SS  
C. NN |
| 4 | A container of water has three objects in it. Object A is moving down. Object B is at rest, and Object C is moving up. Which object is in equilibrium at this time? | A. object A  
B. object B  
C. object C  
D. object A and C  
E. object A, B and C |
|   | Density is, by definition, the ratio of mass to volume (D = M/V). If a sample of material has a measured density of 6.0 grams/cm³ and you then heat the sample until its volume has increased, the measured density of the sample will be | A. grams/cm³  
B. less than 6.0 grams/cm³  
C. 6.0 grams/cm³  
D. more than 6.0 grams/cm³  
E. More information is needed in order to determine an answer. |
|   | The respiratory system helps an animal | A. circulate blood  
B. hear sounds  
C. obtain oxygen  
D. obtain protein  
E. fight diseases |
|   | As shown in the drawing two identical paper bags (X and Y) are fastened upside down to a balance. What will probably happen after the hot plate below Y is turned on? | A. bag X will rise as Y falls  
B. Bag Y will rise as X falls  
C. Neither of the bags will move  
D. Drop of water will form on the outside of bag Y  
E. Bag X will catch on fire. |
|   | Which moves more faster? | A. bicycle  
B. Car  
C. Two wheeler  
D. Bus  
E. lorry |
A ticket-purchasing line for a concert has 50 people in it when ticket sales begin. You decide to wait for a while before getting in line so that the line will be shorter. Much to your surprise, the line still has 50 people in it one hour later.

Since ticket sales were going on throughout the hour, the most probable explanation for the length of the line staying the same is:
A. It takes more than one hour to sell one ticket.
B. A cause and effect relationship is present
C. Ticket purchasing is an example of a cyclic phenomenon.
D. The line has reached equilibrium.
E. This is an example of a field causing no change.

Based on the above graph, which prediction could be made about conditions in the year 2000?
A. There will be no more room on this planet.
B. Food will be in critical short supply.
C. The population level will reach 7,000,000,000.
D. Population level will take a sharp decrease because of awareness.
E. Population level will stabilize at 5,000,000,000.

Photosynthesis takes place in the
A. chloroplasts
B. epidermis
C. guard cells
D. stomates
E. veins

Suppose the earth were in the same path as it now but traveling at half its present speed around the sun. This would cause the
A. days to be twice as long
B. days to be half as long
C. year to be twice as long
D. year to be half as long
E. year to be the same length

A mixture can be defined as a substance that can be separated into parts by physical means such as filter. Which observation would indicate the substance being studied is a mixture?
A. it separate into layers after 24 hours
B. it breaks into four pieces when hit with a hammer
C. it turns black and gives off smoke when it burns
D. three different sized crystals can be seen using a hand lens
E. When it is cut in half both parts look the same.

Mary recorded the following data for moonrise for five consecutive days:

<table>
<thead>
<tr>
<th></th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moon rise</td>
<td>6.29pm</td>
<td>7.20pm</td>
<td>8.11pm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9.02pm</td>
<td>9.53pm</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

At what time would you predict the moon rise on Sunday?
A. 10:04
B. 10:44
C. 11:44
D. 11:35
E. 11:04

In guinea pigs fur colour is dependent on only one pair of genes and black is dominant over white. If no mutation occur what will happen if a purebred black guinea pig is crossed with a white guinea pig?
A. ½ of the offspring will be black; ½ will be white
B. ¾ of the offspring will be black; ¼ will be white
C. 9/16 of the offspring will be black; 7/16 will be white
D. all of the offspring will be black
E. all of the offspring will be white.

If a mineral sample contains large crystals geological think that the mineral probably
A. was formed in a volcano
B. contains a valuable metal
C. cooled instantly under water
D. has cleavage in three directions
E. solidified slowly from hot liquid

Which is a liquid?
A. water
B. sugar
C. mixture
D. gel
E. emulsion
<table>
<thead>
<tr>
<th>7</th>
<th>Which is the best example of a situation where a person experiences a temperature gradient?</th>
<th>Different types of insects have different kinds of mouth parts. Mouth part types may relate to the insect’s diet. Which would be a testable hypothesis to help explain this?</th>
<th>When a cell containing 10 chromosomes divide by mitosis each new daughter cell will contain</th>
<th>What is the correct order that a water drop takes through the water cycle?</th>
<th>The pH of a solution which is basic could be</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Hiking up the side of a mountain.</td>
<td>A. Insect have similar mouth parts will have similar diets</td>
<td>A. 5 chromosomes</td>
<td>A. precipitation, condensation, evaporation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Walking outside from an air conditioned house.</td>
<td>B. Insects use sharp mouth parts for protection.</td>
<td>B. 15 chromosomes</td>
<td>B. condensation, evaporation, precipitation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Diving into a cold lake on a cool day.</td>
<td>C. Bigger insects have bigger mouth parts.</td>
<td>C. 20 chromosomes</td>
<td>C. precipitation, evaporation, condensation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Stepping from a sunny area into the shade of a tree.</td>
<td>C. Climate affects the insects’ diet.</td>
<td>D. 30 chromosomes</td>
<td>D. evaporation, precipitation, condensation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Jumping into a swimming pool on a hot day.</td>
<td>D. tropical climates have sucking mouth parts</td>
<td>E. none of these</td>
<td>E. all of the above</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8</th>
<th>Which is not an example of evolutionary change?</th>
<th>You want compare the height of the waterfall other waterfalls in the area. Which would be the best observation for this purpose?</th>
<th>Which statement did Darwin not accept in forming his theories?</th>
<th>Which grouping of element is most abundant in the earth crust?</th>
<th>When an acid combined with a base the resulting substance will be</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Decrease over time in the tail length of a species of tropical bird</td>
<td>A. It is about ½ the size of your house</td>
<td>A. acquired characteristics can be passed on to offspring</td>
<td>A. iron, oxygen, sodium</td>
<td>A. base</td>
<td></td>
</tr>
<tr>
<td>B. Increase over time in a person’s shoe size</td>
<td>B. It is 5 trees tall. Each tree is about 3 meters high.</td>
<td>B. organism tend to produce more offspring than the environment can support</td>
<td>B. Oxygen. Silicon, hydrogen</td>
<td>B. mixture</td>
<td></td>
</tr>
<tr>
<td>C. Increase over time in the size of airports</td>
<td>C. It takes 16 minutes to climb from the bottom to the top</td>
<td>C. Spices of today are modified descendants of those found on the earth in previous times</td>
<td>C. Aluminium, silicon, oxygen</td>
<td>C. salt and water</td>
<td></td>
</tr>
<tr>
<td>D. Decrease over time in the price of cell phones</td>
<td>D. The splash of the water at the bottom of the fall is 1 meter high.</td>
<td>D. There is a tendency for the best adapted individuals to survive and reproduce</td>
<td>D. Potassium, silicon, magnesium</td>
<td>D. metal</td>
<td></td>
</tr>
<tr>
<td>E. Increase over time in the amount of memory in computers</td>
<td>E. Your name echoes 7 times from the top.</td>
<td>E. Variations is characteristic of all living things.</td>
<td>E. Sodium, iron, carbon</td>
<td>E. nonmetal</td>
<td></td>
</tr>
</tbody>
</table>
### 9 The causes of plant being witted?
1. dirt
2. not enough water
3. not enough sun light
4. People standing near by

While walking on the beach, you find a great rock. You really want to bring the rock to school, but it is too big to move. You decide to write about the rock in your log. Choose the best group of words to describe your rock.

A. old, round, gray, funny purple, tall, happy, wet hard, smooth, well-rounded, large young, happy, lonely, windy

### 10 Bulbs are a examples of an electrical

A. evaluation
B. scale
C. probability
D. system
E. theory

A rock is put into a pail that has some water in it. Before the rock is put into the pail, the water is at the five-liter line. After the rock is added, the water rises to the six-liter line. The space taken up by the rock is

A. 1/2 liter.  
B. 1 liter  
C. 2 liters  
D. 3 liters.  
E. 4 liters.

### 11 The weather forecast for the day was 30% chance of a rain. What would you expect?

A. it will definitely rain  
B. it is likely to rain  
C. there is a equal chance rain or no rain  
D. it is not likely to rain  
E. it will defiantly not rain

Someone said that if you mix salt and sugar with water and let the mixture stand, you get saltwater taffy - a kind of candy. Which would be the best way for you to test the idea?

A. Insects with similar mouth parts will have similar diets  
B. Insects use sharp mouth parts for protection.  
C. Bigger insects have bigger mouth parts.  
D. Climate affects the insects’ diet.

### Plant contains the followings

A. chlorophil  
B. xanthophil  
C. antioxidant  
D. colour

### Earth is shaped most like

A. an egg  
B. a round ball  
C. a pancake  
D. a block  
E. a tree

### Which is solid?

A. rock  
B. air  
C. water  
D. milk  
E. oxygen

### A predator

A. hunts other animals for food.  
B. will only eat plants.  
C. cannot be prey for other animals.  
D. will only eat parasites  
E. is a warm blooded animal

### When it is raining, which must be true

A. it is spring  
B. the sun is shining  
C. the wind is blowing  
D. there are clouds in the sky  
E. it is warm outside

### Which is an example of melting?

A. ice placed in the room temperature  
B. butter melts in the pan  
C. cooling water in the freezer until the water becomes solid  
D. drops water running down a cold glass

### The butterfly life cycle is called of

A. egg, pupa, larva  
B. larva, egg, pupa  
C. egg, larva, pupa  
D. pupa, larva, egg.  
E. larva, pupa, egg.

### During winter your part of the earth is

A. tilting towards the sun  
B. not tilting at all.  
C. Tilting away from the sun  
D. Getting direct sunlight  
E. Getting no sunlight

### in a magnate which side attracts each?

A. NS  
B. SS  
C. NN  
D. N  
E. S
3. WRITING SCALE

The writing scale consist of

a. Composing /writing process

b. Composition structure

c. Basic grammar and usage

d. Capitalization
<table>
<thead>
<tr>
<th>S.No</th>
<th>a) Composing /writing process</th>
<th>b) Composition structure</th>
<th>c) Basic grammar and usage</th>
<th>d) Capitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>My dad rides a ---- bike.</td>
<td>Once there was a little elf who wanted to fly.</td>
<td>Choose the missing word The dog ---- in the house</td>
<td>Which sentence has the capital letter in the right place?</td>
</tr>
</tbody>
</table>
|      | Which two words can we put in the blank to make the sentence more interesting? | This sentence might be used to tell about something you saw last night | A. am  
B. is  
C. are  
D. were | A. my Mom ran to the school  
B. my mom ran to the School  
C. my mom Ran to the school  
D. My mom ran to the school |
|      | A. blue hat  
B. gold car  
C. good, soft  
D. new, green | B. being a funny make ~believe story  
C. thank aunt Mary for a birthday present  
D. tell about a trip to a farm | |
| 2.   | Which of the following would be a subheading in an outline about cars? | “time to go,” my father said “everyone get out of----” which word will best finish the poem? | Choose the correct pronoun for the sentence ----------- forgot to bring my book? | My teacher gave the note to mrs. Begay to take home.  
Which word needs a capital letters? |
|      | A. tires  
B. boots  
C. sunflower  
D. cats | A. red  
B. bed  
C. school  
D. town | A. me  
B. Carlos  
C. Him  
D. I | A. teacher  
B. note  
C. mrs  
D. home |
| 3.   | Which is a complete sentence? | Read the sentences. You are invited to a birthday party foe Jesse. It will be held at 1402 pine street from 2-4pm on Wednesday, June 25th. These sentences would be used to write a fairy tale  
A. down the street  
B. the dog  
C. the dog ran  
D. dog the street | Choose the best words to complete the sentence Greg is -------his father, George  
A. tallest than  
B. taller from  
C. taller than  
D. tall than | Uncle bob helped me build a tree house  
Which underlined word or words should be capitalized? |
|      | A. down the street  
B. the dog  
C. the dog ran  
D. dog the street | A. fairytale  
B. party invitation  
C. letter  
D. book report | A. tallest than  
B. taller from  
C. taller than  
D. tall than | A. uncle bob  
B. helped  
C. build  
D. tree house |
4. You are writing about a vacation you just had. How will you write it so the reader can picture what you saw?
   A. read comic books in the car as we drove
   B. the mountains were high and white with snow
   C. we ate a lot of good stuff and saw many things
   D. the highway was bumpy and I got sick

   Soft gray clouds roll in. Large raindrops fall from the dark sky. White shells wash in with the waves while rain pounds the surf.

   Which genre is this passage?
   A. short story
   B. poem
   C. nonfiction
   D. autobiography

   The students wrote a report—-------
   Abraham Lingon, our 16th president

   Which preposition would best complete the prepositional phrase?
   A. in
   B. from
   C. about
   D. with

   Which book title is capitalized correctly?
   A. The Fastest Runner
   B. the Fastest Runner
   C. the fastest runner
   D. the fastest Runner

5. Since Amy forgot her books, she returned home, which caused her to be late for school. Which is another way to write this sentence?
   A. amy for got her books since she returned home, which caused her to be late for school
   B. amy returned home since she for got her books which caused her to be late for school
   C. amy for got her school since she returned home which caused her to late for books
   D. amy for got her home which caused her to be late for school since she returned her books.

   How would you develop an idea into a poem?
   A. state the idea give examples or definitions
   B. use words in rhythmic patterns to create images
   C. tell what happened in the order it happened
   D. state your opinion and support it with facts or reasons

   Choose the missing word. The sun seems to rise—each day than it did the day before
   A. early
   B. more early
   C. earlier
   D. most early

   Famous African artist paintings were displayed along with native American wall hangings in the museum.

   Which words should be capitalized?
   A. african, native, museum
   B. african, native, American
   C. artist, native, American
   D. artist, American, museum
6. She loved War and Peace the most of all the books she owned. Which shows another way to revise this sentence so that meaning is clear and unchanged?
   A. of all the books she owned she loved war and peace the most
   B. war and peace the most of all the books she owned she loved
   C. she owned War and peace the most of all books
   D. of all the books she owned the most War and peace she loved.

   If you write about the marsupials of Australia, which would you probably write?
   A. a formal essay
   B. an informal essay
   C. a movie review
   D. a research report

   Which one of the sentence is written in past tense?
   A. the students must read chapter 2 for homework
   B. I read the end of the novel last night
   C. I have been reading a novel a week
   D. Greg seems to be making progress

   Which sentence has the words capitalized correctly?
   A. He said, “The tide is coming In”
   B. He said, “The tide is coming In”
   C. He said, “the tide is coming in”
   D. He said, “the tide is coming in”

7. Your class just finished studying about rivers. Your teacher has assigned you to write a research paper that further explores rivers. Which of the following would be the best research questions?
   A. What is your favorite river?
   B. How are the nile and Amazon river different
   C. Where is the world’s longest river?
   D. How many times has the nile river flooded?

   These sentences form a paragraph. Which is the topic sentence?
   A. painting the window frames will take twice as much time as painting the walls.
   B. A good brush and an extension ladder are necessary
   C. The most time-consuming job in painting a house is painting the trim
   D. The person who thinks the job is half done when the walls are finished is in for a surprise.

   Which sentence is not correct?
   A. the hike took us the most farthest we had been from camp
   B. this project required less work than anyone had anticipated
   C. the patient said she felt worse in the morning than at night
   D. we will have to work further than we were told.

   Which title is capitalized correctly?
   A. the Legend Of sleepy Hollow
   B. Stopping by the woods on a snowy evening
   C. The blind men and The Elephant
   D. Fairy Tales of India
<table>
<thead>
<tr>
<th>8.</th>
<th>The boy rode on his bike and races down the street.</th>
<th>What does the conclusion to a report do?</th>
<th>Which of the following is not an adverbal clause?</th>
<th>Which sentence is not capitalized correctly?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which kind of error is in the sentence?</td>
<td>A. sentence fragment</td>
<td>A. states what you plan to discuss in the writing</td>
<td>A. after we went to the movie</td>
<td>A. who is the present director of the FBI?</td>
</tr>
<tr>
<td>B. run on sentence</td>
<td>B. lists the source used</td>
<td>B. after school last night</td>
<td>B. My grandmother told me about life during the Depression</td>
<td></td>
</tr>
<tr>
<td>C. nonparallel</td>
<td>C. focuses upon a specific supporting detail</td>
<td>C. after we climbed the mountain</td>
<td>C. We climbed Pikes Peak one summer</td>
<td></td>
</tr>
<tr>
<td>D. faulty tense</td>
<td>D. leaves the reader with a clear understanding of the report</td>
<td>D. after we completed our unit exam</td>
<td>D. The ship was traveling Southeast at ten knots.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9.</th>
<th>The purpose of a thesis statement is to</th>
<th>Which of these sentences has correct parallel structure?</th>
<th>Which sentence shows clear pronoun–antecedent agreement?</th>
<th>In which sentence should the underlined word not be capitalized?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. entertain the audience</td>
<td>A. Susan likes baking chocolate chip cookies, to read and visiting with her friends</td>
<td>A. we unpacked our books from the boxes and then returned them to the office</td>
<td>A. Veronica likes to drink English tea with sugar</td>
<td></td>
</tr>
<tr>
<td>B. support the topic with examples, quotations and facts</td>
<td>B. Ron selected a hamburger fries and had a chocolate milkshake for lunch today.</td>
<td>B. as soon as the monkey left their cages, the janitor cleaned them</td>
<td>B. Jeri’s favorite subject is Geometry</td>
<td></td>
</tr>
<tr>
<td>C. provide background information on the topic</td>
<td>C. Andrea walks to school every day, rides her bike, and plays with her puppy</td>
<td>C. right after the principal sent letters to the teachers, she became alarmed</td>
<td>C. Fred asked, “when do we eat lunch”?</td>
<td></td>
</tr>
<tr>
<td>D. announce the main idea of the paper</td>
<td>D. she enjoys her job and that she is very happy</td>
<td>D. the students and teachers left the building when the fire alarm sounded in their ears.</td>
<td>D. Chard Island is a vacation resort in the Atlantic Ocean.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>You are writing about a vacation you just had. How will you write it so the reader can picture what you saw?</td>
<td>If you write about the marsupials of India, which would you probably write?</td>
<td>Choose the missing word. The sun seems to set----each day than it did the day end</td>
<td>Which sentence has the words capitalized correctly?</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>A.</td>
<td>read comic books in the car as we drove</td>
<td>A. a formal essay</td>
<td>A. night</td>
<td>A. She said, “Tide is coming In”</td>
</tr>
<tr>
<td>B.</td>
<td>the mountains were high and white with snow</td>
<td>B. an informal essay</td>
<td>B. earlier</td>
<td>B. she said, “The tide is coming In”</td>
</tr>
<tr>
<td>C.</td>
<td>we ate a lot of good stuff and saw many things</td>
<td>C. a movie review</td>
<td>C. evening</td>
<td>C. she said, “the tide is coming in”</td>
</tr>
<tr>
<td>D.</td>
<td>the highway was bumpy and I got sick</td>
<td>D. a research report</td>
<td></td>
<td>D. she said, ‘the tide is coming in’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11.</th>
<th>My dad going to buy ------ bike. Which two words can we put in the blank to make the sentence more interesting?</th>
<th>Read the sentences. You are invited to a birthday party foe Jesse. It will be held at 1402 pine street from 2-4pm on Wednesday, June 25th. These sentences would be used to write a</th>
<th>Choose the best words to complete the sentence</th>
<th>Which book title is capitalized correctly?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>orange hat</td>
<td>A. fairy tale</td>
<td>Greg is -------his father, George</td>
<td>A. the Fastest Runner</td>
</tr>
<tr>
<td>B.</td>
<td>gold car</td>
<td>B. party invitation</td>
<td>A. smaller than</td>
<td>B. the Fastest Runner</td>
</tr>
<tr>
<td>C.</td>
<td>good, soft</td>
<td>C. letter</td>
<td>B. smaller from</td>
<td>C. the fastest runner</td>
</tr>
<tr>
<td>D.</td>
<td>ash, green</td>
<td>D. book report</td>
<td>C. smaller than</td>
<td>D. the fastest Runner</td>
</tr>
</tbody>
</table>
4. READING SCALE

The reading scale consist of

a. Word Recognition and Vocabulary

b. Reading comprehension-literal

c. Reading comprehension-Inferential/interpretive

d. Reading comprehension evaluation

e. Literary response and analysis
# READING SCALE

<table>
<thead>
<tr>
<th>S. No</th>
<th>a) Word Recognition and Vocabulary</th>
<th>b) Reading comprehension - literal</th>
<th>c) Reading comprehension - Inferential/interpretive</th>
<th>d) Reading comprehension evaluation</th>
<th>e) Literary response and analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The girls is sitting at her</td>
<td>Ryan likes to play ball. He</td>
<td>Mother was getting ready for Sandy’s surprise</td>
<td>Which is not a tool?</td>
<td>Before the children went</td>
</tr>
<tr>
<td></td>
<td>A. plano</td>
<td>likes his pet dog. His favorite</td>
<td>tomorrow, she had baked a cake and invited all</td>
<td>A. hammer</td>
<td>outside to play, their father</td>
</tr>
<tr>
<td></td>
<td>B. bed</td>
<td>toy is a truck. He is a little</td>
<td>of Sandy’s friends. Now all she needed seven</td>
<td>B. wrench</td>
<td>said “Be sure to wear your</td>
</tr>
<tr>
<td></td>
<td>C. desk</td>
<td>boy.</td>
<td>candles for the cake.</td>
<td>C. plier</td>
<td>mittens, warm jackets, hats</td>
</tr>
<tr>
<td></td>
<td>D. book</td>
<td>What is he?</td>
<td>Tomorrow would be</td>
<td>D. chair</td>
<td>and boots”.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A. a dog</td>
<td>A. Sandy’s first day at school</td>
<td></td>
<td>This is part of a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. a girl</td>
<td>B. Sandy’s seventh birthday</td>
<td></td>
<td>A. poem</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. a boy</td>
<td>C. a good day to work in the yard</td>
<td></td>
<td>B. story</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D. a ball</td>
<td>D. mother’s birthday</td>
<td></td>
<td>C. song</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D. lettersz</td>
</tr>
<tr>
<td>2.</td>
<td>Juan was very blue when his happy</td>
<td>This bug spray can be used on</td>
<td>Making mud pies is fun. Find some nice sticky</td>
<td>Which item is a vegetable?</td>
<td>John went to visit his</td>
</tr>
<tr>
<td></td>
<td>was missing. In this sentence, the</td>
<td>your grass. You can use it on</td>
<td>muds. Shape it into little pies. Set the pies</td>
<td>A. carrot</td>
<td>grandma. He saw her cows,</td>
</tr>
<tr>
<td></td>
<td>word blue means</td>
<td>your flowers, too. It can even</td>
<td>in the sun to dry out.</td>
<td>B. Puzzle</td>
<td>horses and pigs. He helped</td>
</tr>
<tr>
<td></td>
<td>A. cold</td>
<td>be used on your trees, but do</td>
<td>This will work best on</td>
<td>C. Hot dog</td>
<td>his grandma pick apples.</td>
</tr>
<tr>
<td></td>
<td>B. sky</td>
<td>not use it where your pets go.</td>
<td>A. a sunny day</td>
<td>D. swing</td>
<td>Jon is at a</td>
</tr>
<tr>
<td></td>
<td>C. sad</td>
<td>The label says to keep this</td>
<td>B. a rainy day</td>
<td></td>
<td>A. school</td>
</tr>
<tr>
<td></td>
<td>D. dog</td>
<td>bug spray away from</td>
<td>C. a snowy day</td>
<td></td>
<td>B. farm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A. trees</td>
<td>D. a cloudy day</td>
<td></td>
<td>C. zoo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. flowers</td>
<td></td>
<td></td>
<td>D. circus</td>
</tr>
</tbody>
</table>
3. At last, the children got to school. They were happy to see their teacher. The engine on the school bus had broken and was smoking. Another bus had to bring the students to school.
   In the paragraph, engine means
   A. lunch  
   B. camera  
   C. truck  
   D. motor

   Jose lives near the store and his friend Ben lives several miles away. Ben asked Jose the shortest way to his home without going by the school. Jose told him, “go two blocks south, six blocks west, and then three blocks south. My house is on the corner, number 8701.”
   After walking six blocks west, which direction should Ben go?
   A. north  
   B. east  
   C. south  
   D. west

   Miss Hill’s class was painting a big picture to put on the walls in the hall. Paintings were all spread out on the floor. Suddenly there was a loud noise. It was fire drill!
   What probably happened next?
   A. the children went right outside, and some paintings were stepped on.  
   B. The other classes waited to leave until the paintings were moved.  
   C. The fire was called off.  
   D. Miss Hill’s class finished the paintings before they went outside.

   Creamy smooth beauty drew skin cream gives your skin a radiant glow.
   This ad claims that the product will make us
   A. happier  
   B. healthier  
   C. better looking  
   D. safer

   Jim and John went outside for recess. Jim took a basketball with him. John wanted to play with the ball too. Jim did not want to share the ball. They both began to argue. Finally John shoved Jim down and took the ball away from him.
   What is described in the paragraph?
   A. the setting  
   B. the problem  
   C. the solution  
   D. the main character.

4. Sara has a new red velvet bonnet to wear on her in the music program.
   The word bonnet probably means
   A. dress  
   B. hat  
   C. play  
   D. green

   I can always count on seeing a lineup of sparrows on the telephone line outside my window. The sparrows have become my friends through the summer-I have fed them and they have sung me songs. Which title tells the main idea of this story?
   A. My Friend the sparrows  
   B. Sparrows Are Fun  
   C. What sparrows Do  
   D. Sparrows on the Line

   Making bricks is easy. First you scrape clay and mud into a ball. Then put the clay and mud into small boxes to give it a brick-like shape. Then you set the blocks of mud and clay in the sun to bake. After the blocks of mud and clay are set in the sun,
   a. their shape changes  
   b. they turn to dust  
   c. they dry and harden  
   d. they begin to get softer.

   Read the breakfast cereal ingredients
   PUFFO, Ingredients: Puffed corn Corn sweetener Sugar Salt GRAIN-O, Ingredients: Toasted wheat, Rolled oats sesame seeds salt BIG KID Ingredients: Rolled oats rolled barley Rolled wheat, Kay is trying to eat less salt. She will probably eat
   A. any of these cereals  
   B. PUFFO  
   C. GRAIN-O  
   D. BIG KID

   Kay is trying to eat less salt. She will probably eat
   Read the breakfast cereal ingredients
   PUFFO, Ingredients: Puffed corn Corn sweetener Sugar Salt GRAIN-O, Ingredients: Toasted wheat, Rolled oats sesame seeds salt BIG KID Ingredients: Rolled oats rolled barley Rolled wheat, Kay is trying to eat less salt. She will probably eat
   A. any of these cereals  
   B. PUFFO  
   C. GRAIN-O  
   D. BIG KID

   Mary Ann worked all afternoon to clean the house. She folded the cloths and put her little brother’s toys away. She washed and put away all of the dirty dishes in the sink and her mother said that she proud of her daughter.
   What word best describes how Mary Ann feels?
   A. tired  
   B. hungry  
   C. sleepy  
   D. happy
5. The words road, rode and rowed have their meanings listed below. Choose the word meaning that does not go with one of these words.

<table>
<thead>
<tr>
<th>A. the past tense of ride</th>
<th>B. a machine that looks like a human</th>
<th>C. a broad trail</th>
<th>D. to propel a boat with oars.</th>
</tr>
</thead>
<tbody>
<tr>
<td>All live in fresh water rivers</td>
<td>All have the ability to produce electric current</td>
<td>All have the ability to harm humans</td>
<td>They have a way to communicate that is different from all other animals.</td>
</tr>
</tbody>
</table>

What do all these fish have in common?

| A. A. all live in fresh water rivers | B. B. all have the ability to produce electric current | C. C. all have the ability to harm humans | D. D. they have a way to communicate that is different from all other animals. |

The following directions tell how to fix a punctured tire inner tube. Which step in the direct suggest that the leak in the tube may be a very small hole and hard to find?

| A. A. remove the fire from the rim of the wheel | B. B. pull out the inner tube and put air in it | C. C. put the inner tube in waterrub glue all round the hole and put on a patch that is much bigger than the hole. |

If you were writing an essay that argued that summer is a better season than winter, which fact would you include?

| A. A. winter snow allows people to ski | B. B. summer heat cause dehydrated | C. C. biking and skating trails are clear of snow in the summer | D. D. winter temperature can be often being warm and pleasant. |

The President Physical fitness Award can be earned by presented to students who meet the goals for these seven activities; 30-yrds dash, 50-yard dash, 600-yard endurance run, standing jump, sit-ups, pull-ups or arm hands, and softball throw events. What is the main idea of the passage?

| A. A. you must be 10 years old to participate | B. B. you must meet goals to earn this award | C. C. fitness out of 100 students fail | D. D. there are 7 activities in the physical fitness test. |

Once the flower buds are formed, it doesn’t matter if the pant is kept indoors or in deep shape. Full sun tends to fade the flowers faster while cool temperatures prolong their staying power. Although a light frost won’t harm most mums, play it safe and bring them indoors if a cold snap threatens. In the passage, the phrase “full sun” means

| A. A. no shade | B. B. light half of the day | C. C. deep shade | D. D. cool temperatures |

Some people don’t like to use computers. They think that they are too hard to use and they break down too often. Don’t they realize that computers save us time and efforts? What is the underlying assumption in this paragraph?

| A. A. everyone should use and appreciate computers | B. B. most computers don’t break down | C. C. people are breaking the computers | D. D. Computers can help educate students. |

Juan watched the sparkles dancing on the river. He loved the bright sun on the water and the feel of the soft breeze on his face. The sky above was a brilliant blue. What a good day! This passage seems to be part of a

<p>| A. A. poem | B. joke | C. report | D. story |</p>
<table>
<thead>
<tr>
<th>7.</th>
<th>If the prefix “poly” means many then which of these words is a polysyllable?</th>
</tr>
</thead>
</table>
|    | A. princess  
|    | B. sculpture  
|    | C. personality  
|    | D. conscience  |
|   | Read the label from a prescription. Medicine Center (+91) 7502243657  
|   | No.2211, 9-6 pm., closed Sunday, Dr.C.Smith, Two refills, For: doug Jones  
|   | Directions: take 2 capsules with milk now, then 1 capsules 4 times a day for six  
|   | days. When should Doug drink milk?  
|    | A. with the first two capsules to wash then down  
|    | B. 2-3 hours after a meal after he has taken.  
|    | C. at least four times a day  |
|   | The 1965 voting rights law was an outgrowth of the protest demonstrations organized by African Americans to draw attention to discriminatory voter registration practice in national elections. The Attorney General also had the right to take legal action deemed necessary to eliminate any equivalent of the poll tax.  
|   | Which words best describe the authors’ purpose?  
|    | A. to inform readers about the voting rights law  
|    | B. to persuade people to register and vote  
|    | C. to inspire readers to work for civil rights  
|    | D. to entertain readers  |
|   | Mrs. Smith who has taught junior high school math for the past 30 years, received a certificate of appreciation honoring her for her years of service.  
|   | Which statement is the most objective, fair, clear and accurate?  
|    | A. she is the best teacher in junior high school  
|    | B. math is a difficult subject to teach  
|    | C. she should be appreciated for her long career  
|    | D. she was recognized for her years of service.  |
|   | Just the clock struck midnight, Greg was awakened by a sound coming from outside his window. He jumped out of bed to inquire about the sound. As he approached the window he saw Robot GB-47 landing his spacecraft. The bright green lights from the spacecraft anti–gravity boosters caused Greg to cry out in excitement. What does the author portray in this paragraph?  
|    | A. a science fiction setting  
|    | B. a historical fiction setting  
|    | C. a tall tale setting  
|    | D. a mystery setting  |
8. The proud athlete spurned any offer of assistance. What does spurned mean?
   A. condemned  
   B. rejected with disdain  
   C. withheld  
   D. reluctantly turned down

   The following precautions are listed in the operating manual for a small stereo FM radios
   A. power only with three size AA batteries  
   B. do not leave the set in a location near heat sources  
   C. indoor radio reception may be difficult or nosier. Try listening near a window  
   D. avoid listening at high levels in situations where hearing outside sounds must not be impaired.

   The opening paragraph of Spencer Heinz “Cityscape” column from the times, October 10, 1989. But the park was mostly empty. The boom box summer was gone. The author wants us to think that
   A. early fall is a directory time of year  
   B. summer is a better season than fall  
   C. fall is a time of wonderful weather  
   D. fall is quieter than summer in the park.

   We mold our character through our living acts. As the year roll on, the accomplishments of yesteryear should be crystallized in a crowning tribute, symbolizing one’s life in respected simplicity. One of our memorials, selected while you live, will imperishably preserve your personality and continue the cherished ideals of your family name because the permanency of this inimitable, blue-gray granite is guaranteed.

   The print Strom on the great bridge is a beautifully balanced and evocated work of the great hiroshige (1791-1858)...about the bridge, bands of muted blue green angle up and away to define the sky and trees along the far shore...the composition is a celebration of triangular patterns...at first glance a simple picture, storm on the great bridge has underlying grace and complexity that compel and fascinate the viewer long after the work has become familiar.

   The ocean has many things people need. It is a storing place for water, acting like a huge tank. Fish are the most important food found in the ocean. And the top of the ocean floor suppliers management diamonds.

   Contrary to popular belief, not all cats are loners. One of the most famous examples was the female cat rosy, who saved her kittens from a burning building. It was an old, deserted warehouse and she and her offspring were living in an abandoned locker. When the building began to burn, dozens of people witnessed her carrying her babies out one by one. They were ater adopted by a kind vet who treated rosy’s burn and nursed the kittens back to health.
<table>
<thead>
<tr>
<th>Choose an antonym for imperishably</th>
<th>What does the writer find compelling about the picture?</th>
<th>B. The ocean is the most important supplier of our basic resources</th>
<th>What stereotype does the author expect the readers to have about cats?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. invulnerable</td>
<td>A. Strom and bridge picture</td>
<td>C. Human welfare is linked to the ocean as a supplier of our needs</td>
<td>A. they are afraid of fire</td>
</tr>
<tr>
<td>B. permanently</td>
<td>B. Birds in the picture</td>
<td>D. Our basic industries dependent upon the ocean as their main supplier.</td>
<td>B. they are often adopted</td>
</tr>
<tr>
<td>C. extinguishable</td>
<td>C. Flowers</td>
<td></td>
<td>C. they love kittens</td>
</tr>
<tr>
<td>D. indestructibly</td>
<td>D. Animals picture</td>
<td></td>
<td>D. they prefer to live by themselves.</td>
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</tbody>
</table>

| 10. At last, the children got to school. They were happy to see their teacher. The engine on the school bus had broken and was smoking. Another bus had to bring the students to school. For whom to see the childrens were happy | The sparrows have become my friends through the summer-I have fed them and they have sung me songs. Which title tells the main idea of this story? In which season the sparrow comes | Making bricks is easy. First you scrape clay and mud into a ball. Then put the clay and mud into small boxes to give it a brick-like shape. Then you set the blocks of mud and clay in the sun to bake. After the blocks of mud and clay are set in the sun, | Read the advertisement Creamy smooth beauty drew skin cream gives your skin a radiant glow. This ad claims that the product will make us |
| A. friends                        | A. winter                                             | A. their shape changes                                        | A. happier                                                      |
| B. teacher                        | B. summer                                             | B. they turn to dust                                          | B. healthier                                                    |
| C. bus                            | C. rainy                                              | C. they dry and harden                                        | C. better looking                                               |
| D. school                         | D. blossom                                            | D. they begin to get softer.                                  | D. safer                                                        |

<table>
<thead>
<tr>
<th>John went to visit his grandma. He saw her cows, horses and pigs. He helped his grandma pick apples. A. Jon is at a</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Jon is at a</td>
<td>B. school</td>
<td>C. farm</td>
<td>D. zoo</td>
</tr>
<tr>
<td>B. school</td>
<td></td>
<td></td>
<td>E. circus</td>
</tr>
</tbody>
</table>
11. The words road, rode and rowed have their meanings listed below. Choose the word meaning that does not go with one of these words.
   A. the past tense of ride
   B. a machine that looks like a human
   C. a broad trail
   D. to propel a boat with oars.

What do all these fish have in common?
   A. all live in fresh water rivers
   B. all have the ability to produce electric current
   C. all have the ability to harm humans
   D. they have a way to communicate that is different from all other animals.

The following directions tell how to fix a punctured tire inner tube. Which step in the direct suggest that the leak in the tube may be a very small hole and hard to find?
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If you were writing an essay that argued that summer is a better season than winter, which fact would you include?
   A. winter snow allows people to ski
   B. summer heat cause many people to become dehydrated
   C. biking and skating trails are clear of snow in the summer
   D. winter temperature can be often be warm and pleasant.

Tina’s arm was tired of turning the jump rope. Would Carrie ever miss?
   “100!” Carrie puffed, one hundred one, one hundred two…” peppers! Yelled

What was Carrie's problem here?
   A. she is not good jumping
   B. she cannot count past 100
   C. Tina stole her jump rope
   D. Tina treated her unfairly.
ANNEXURE - IV

NUTRITIONAL KNOWLEDGE ATTITUDE QUESTIONNAIRE

1. Which nutrient is needed for growth?
   a) Calcium and Iron
   b) Vitamin D and Magnesium
   c) Carbohydrate and Potassium
   d) Potassium and Magnesium

2. ______________ is the major carbohydrate needed for brain refreshment
   a) Glucose
   b) Dextrose
   c) Cellulose
   d) Sucrose

3. A good source of vitamin-A is
   a) Carrots
   b) Potatoes
   c) Green leafy vegetables
   d) Mango

4. Ragi is rich in
   a) Calcium
   b) Minerals
   c) Phosphorus
   d) Sodium

5. A good source of vitamin-c is
   a) Citrus fruits
   b) Banana
   c) Vegetables
   d) Nuts
6. Which fruit contains high amount of Carbohydrate?
   a) Banana
   b) Grape
   c) Amla
   d) Orange

7. The regular breakfast consumption improve the body’s
   a) Energy
   b) Protein
   c) Nutrient
   d) Fat

8. Which is the best time for the consumption of breakfast?
   a) 7.30am
   b) 8.00am
   c) 8.30am
   d) 9.00am

9. Regular breakfast consumption will improve
   a) Cognitive ability
   b) Singing ability
   c) Playing ability
   d) Physical activity

10. Skipping of breakfast will make you
    a) Slim
    b) Increase weight
    c) Overweight
    d) Decrease weight

11. Snack food habits with
    a) Friends
    b) Parents
    c) Grand parents
    d) Watching TV
12. Snack food habits increase your
   a) Activity
   b) Appetite
   c) Health
   d) Memory

13. Which base sacks is best for health
   a) Chips
   b) Popcorn
   c) Fruit & vegetable based
   d) All the above

14. Fast food habits increase your
   a) Physical activity
   b) Health problems
   c) Memory status
   d) Body weight

15. Fast food is
   a) Good food
   b) Bad food
   c) Cheap food
   d) Excellent food

16. The preparation of food is healthy, if it is prepared in
   a) Restaurant
   b) Home
   c) Road side
   d) All the above

17. Which kind of media affects the foods selection choices?
   a) TV
   b) Paper
   c) Radio
   d) All the above
18. Media mainly expressed which food habits?
   a) Snack food
   b) Healthy food
   c) Ready to eat food
   d) Drinks

19. Which type of drinks expressed by media?
   a) Soft drinks
   b) Pepsi
   c) Cola
   d) Drinking water

20. What is the purpose of advertisements?
   a) Giving information
   b) To attract consumers
   c) To sale product

21. Which age group is mainly attracted by media?
   a) Adolescents
   b) Old age
   c) Middle age

22. One of the healthiest snacks?
   a) Milk shakes
   b) Chips
   c) Roti
   d) Popcorn

23. List out one of healthy drinks?
   a) Fruit juices
   b) Soft drinks
   c) Fat milk
24. Watching TV will boost you to pick healthy foods?
   a) Yes
   b) No
   c) Occasionally
   d) Never

25. For doing regular activities which is mainly needed by the body?
   a) Energy
   b) Dancing
   c) Jogging
   d) Sleeping
**QUESTINNAIRE FOR ATTITUDE PRACTICES**

For each question, please circle the number that best describes your answer

**SA** = Strongly agree

**A** = Agree

**U** = Undecided

**D** = Disagree

**SD** = Strongly disagree

<table>
<thead>
<tr>
<th>S.No</th>
<th>Questions</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Breakfast is the important meal of the day</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
<td>The nutrients are essential to maintain good health</td>
<td></td>
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<td>3.</td>
<td>Carbohydrates are not easily digested as protein and fat</td>
<td></td>
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<td>4.</td>
<td>Skipping the breakfast is a one of the best method to reduce the weight</td>
<td></td>
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<tr>
<td>5.</td>
<td>Media is a good source for choosing healthy foods</td>
<td></td>
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<tr>
<td>6.</td>
<td>Fast foods are a healthier foods than normal foods</td>
<td></td>
<td></td>
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<tr>
<td>7.</td>
<td>Regular breakfast consumption will improve the cognitive performance</td>
<td></td>
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<tr>
<td>8.</td>
<td>Snack foods provide 1/3rd requirement of all the nutrients</td>
<td></td>
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<tr>
<td>9.</td>
<td>Media will create false impress on food choices</td>
<td></td>
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<tr>
<td>10.</td>
<td>Nutrients can be destroyed when it is over cooked</td>
<td></td>
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</tbody>
</table>
QUESTIONNAIRE FOR DIETARY PRACTICES

1. Do you having your meals daily?
   a) yes   b) no

2. Are consuming snack foods regularly?
   a) yes   b) no

3. Do you consume fast foods?
   a) yes   b) no

4. Do you think that fast food consumption is the best food practice?
   a) yes   b) no

5. Did you practice to have healthy foods?
   a) yes   b) no

6. Are consuming the milk daily?
   a) yes   b) no

7. Are you involving any extra curricular activities in school?
   a) yes   b) no

8. Do you consume pulses regularly?
   a) yes   b) no

9. Will you have the practice of eating fruits (one fruit) daily?
   a) yes   b) no

10. Do you consume 6-8 glass of water daily?
    a) yes   b) no
ANNXEURE - V

POWER POINT EDUCATION FOR NUTRITION EDUCATION
BREAKFAST

J. Bhuvaneswari
Ph.D scholar
Department of Food Science
Periyar University, Salem-11
About the education

The education material formulated under five headings

- Nutritional requirements of adolescents
- Health benefits of breakfast
- Role of snacking behavior
- Health hazards of fast foods
- Role of media on food preferences
Adolescence (from Latin: *adolescere* meaning "to grow up") is a transitional stage of physical and mental human development generally occurring between puberty and legal adulthood (age of majority), but largely characterized as beginning and ending with the teenage stage.
ADOLESCENCE

- Adolescence is a period of rapid physical, emotional, intellectual, and social maturation. To support this growth, teenagers need extra calories, calcium, and iron, and sufficient protein.
- Teenage eating habits are influenced less by
  - Parents and Family
  - More by peers
  - Media messages
  - Body image issues
Nutritional requirements of adolescents

• Physical growth and mental development are rapid, boys' voices change, girls start having periods, and most teenagers have to face taking public examinations for the first time.

• **Nutritional Needs of Boys**
  - Very active adolescent boys may consume up to 4,000 calories a day. Do not avoid vegetables and whole grains.
Nutritional Needs of Girls

- Adolescence in girls starts earlier, with the main growth spurt usually occurring between 11 and 16 years.
- They usually consume fewer calories, and are therefore even more prone to nutritional deficiencies.
- When their monthly periods start, girls need more iron as well as calcium and zinc.
- More vegetables and fruits to included to avoid the losses during periods.
Per day Nutrients Requirements

**Nutritional Content of a Well-Balanced Diet Function in the Body**

- **Carbohydrates** (330 g daily)  
  Main source of energy; fiber confers many health benefits.

- **Protein** (100 g daily)  
  Major structural building blocks.

- **Fat** (75 g daily)  
  Energy storage; synthesis and repair of cell parts.

- **Water** (2000 g daily)  
  Solvent; lubricant; medium for transport and temperature regulation.

- **Vitamins** (<300 mg daily)  
  Enable chemical reactions in the body.

- **Minerals** (5-10 g daily)  
  Aid enzyme function; electrical balance; generate nerve impulses; bone structure.
Food pyramid

- Red meat, butter
  - Use sparingly
- White rice, white bread, white pasta; potatoes, soda, and sweets
- Dairy or calcium supplement, 1-2 times/day
- Fish, poultry, eggs, 0–2 times/day
- Nuts, legumes, 1–3 times/day
- Vegetables (in abundance)
- Fruits, 2–3 times/day
- Whole grain foods (at most meals)
- Plant oils (olive, canola, soy, corn, sunflower, peanut, and other vegetable oils)

Daily exercise and weight control

Multiple vitamins for most

Alcohol in moderation (if appropriate)
Function of various food components

✓ Proteins are of greatest importance in nutrition. Proteins are required for bodybuilding and help in repair and maintenance of body tissues.
✓ Fats are high-energy foods and a source of energy. They also make the food more palatable and provide fat-soluble vitamins.
✓ Carbohydrates form the major component of most diets and are the main source of energy.
✓ Vitamins and minerals are required in small quantities. They do not yield energy but enable the body to use other nutrients and also play an important role in growth, repair and regulation of vital body functions.
✓ Requirements for iron and calcium are particularly increased in adolescence. Calcium needs during adolescence are greater than they are in either childhood or adulthood because of rapid increase in lean body mass and skeletal growth.
✓ Zinc is especially important in adolescence because of its role in growth and sexual maturation. Some sources of zinc are grains, nuts, meat, cheese and milk.
Breakfast literally means ‘breaking the fast’ after sleeping at night time. Most people do not eat for up to 12 hours between the time of their dinner and breakfast on the following day – during this time their energy levels fall. The first meal of the day is the most important because it supplies the body and brain with the necessary nutrients after a night’s sleep.
South Indian breakfast

White Idli’s, Crispy Vadai, Sambar & Chutney’s

Ghee Pongal, Sambar & Chutney

Masala Dosai, Sambar & Chutney’s

Fluffy Poori’s, Potato Sabji & Chutney’s

Paratha’s, Veg Kuruma, Onion Raitha (Yogurt with raw onions, green chillies)

Idili’s soaked in a bowl of Sambar
Reasons for Skipping Breakfast

• Why Do Kids Skip Breakfast?
  – Busy schedules in the morning
  – Lack of role model in parents

• Why Do Teens & Adults Skip Breakfast?
  – Lack of time
  – Not hungry
  – Weight management
Problems with Skipping Breakfast

- Higher mean BMI
- High BMI in adolescents and adults
- Nutrients missed at breakfast are rarely made up for during the day
Why is Breakfast so important?

- The breakfast is the most important meal of the day because it provides us with energy, makes us feel happier and enables us to do better work because we will concentrate more.
Key reasons why breakfast should be made a priority for every child

Breakfast equals better behavior
Children who skip breakfast are more tired, irritable, or restless by late morning. These symptoms lead to aggressive behavior that causes children to get in trouble in school.

Breakfast leads to higher test scores
A study published in 1998 in the *Archives of Pediatrics and Adolescent Medicine* showed significantly higher math test scores after children ate breakfast.

Eating breakfast led to better class attendance
Children who eat breakfast are absent from school fewer days. They also spend less time in the nurse's office complaining of stomach pains.

More nutritious intake by eating breakfast
Breakfast eaters generally meet vitamin and mineral requirements for prevention of deficiencies. They consume more fiber, vitamin C, calcium and folic acid. Unfortunately, children who miss breakfast do not make up for lost nutrients later in the day.

Eating breakfast helps weight control
Eating breakfast helps to establish a normal eating pattern. Eating regular meals and snacks is a key to maintaining a healthy weight throughout life.
Start Your Day The Right Way

- Have a healthy breakfast to replenish your body's energy supply on waking up.
- Keep your blood sugar levels stable with healthy breakfast foods.
- Don't skip breakfast, or you will end up binge eating during the day.
- Instead of empty calories, have nutritious breakfast which includes proteins, low fat dairy, whole grains, fruits and vegetables.
- Low Glycemic Load carbohydrates for breakfast will break down into sugar slowly and will keep you satisfied until mid morning.
- Protein for breakfast will keep your hunger at bay.
- Make time for breakfast. Get up 15 minutes earlier - it's well worth the effort!
Healthy Breakfast Foods

Healthy breakfast foods are broken down slowly into sugar and therefore keep blood sugar levels stable. The inclusion of protein at breakfast will also keep you feeling full for longer.

• Cereal
  whole grain cereal, with low fat milk. Add some freshly chopped fruit to it if you like. Bran cereals are high in fiber and will help you feel fuller for longer. Fruits such as kiwi fruit, apples or berries add a fresh, sharp taste to cereals.

• Eggs.
  Have an egg for breakfast - poached, boiled or scrambled for a high protein meal. If you have the time, make an omelette, with fresh vegetables such as zucchini, mushrooms and tomatoes.
• **Oats**
  instant oat porridge is an excellent quick way to have a healthy breakfast. Instant oats come in a variety of flavours, and can be jazzed up with flaxseeds, berries, nuts and honey for a delicious breakfast ready in five minutes.

• **Whole Grain Toast**
  2 slices of toast spread with low fat dairy spread or cottage cheese makes for a simple way to start the day. If you have sweet tooth, you can have honey or jam with your toast. Have some sliced grapefruit on the side.

• **Smoked Fish**
  Try some smoked salmon or cod with a slice of whole grain toast, or a wholegrain roll. Add some grilled tomatoes or cottage cheese for flavour. The high protein content and healthy fats in this meal will keep your appetite under control.
• **Fruit Smoothie**
  A simple, fast and nutritious way to start the day is to make your own fruit smoothie, by blending non fat milk with two of your favorite fruits. Try a mix of frozen raspberries and banana, or orange juice and blackberries for example.

• **Protein Shake** For an instant and filling breakfast, have a protein shake. Add fruit or yoghurt to your shake for extra flavour.

• **Muffins**
  While most ready made muffins are high in fat and calories, you can bake your own muffins on the weekend, with whole meal or bran flour for a healthy breakfast treat.

• **Baked Beans**
  These are high in protein and low in glycemic load, and are a fantastic way to start the day. Have baked beans on whole grain toast for a healthy and filling breakfast.
The Importance of Breakfast

• Brain Food
• Improves performance in studies
• Improves physical activities
• Does not contribute to overweight
• Keeps you healthy

• Eating breakfast is beneficial for both the body and the mind in several ways:
  • People who eat breakfast consume more essential nutrients which are necessary for a healthy body and lifestyle
  • People who eat breakfast tend to be slimmer than those who skip breakfast
  • Eating breakfast contributes to cognitive performance - it improves concentration.
Eating Breakfast Matters

- **School Performance**
  - More positive attitude towards school
  - Less likely to be tardy
  - Less likely to miss class
  - Improved math & reading scores
  - Fewer reported discipline problems
How Can Breakfast Improve Learning?

- Breakfast provides energy for the brain
- Breakfast skipping impairs attention & memory
- Breakfast improved alertness
- Missing breakfast interferes with cognition and learning
Health Benefits

- Eat more vitamins and minerals
- Have better concentration and productivity throughout the morning
- Control your weight
- Have lower cholesterol, which may reduce your risk of heart disease
- Meet the daily recommended nutrient requirements
- Have better problem-solving skills and increased alertness
Breakfast Improves Academic Achievement and Behavior

Eating a nutritious breakfast helps students achieve the classroom goals that you've set for them. National studies consistently confirm that breakfast helps kids concentrate, think, behave and learn.

Eating breakfast:
- Improves children's classroom performance, including better test scores and grades
- Increases children's ability to focus and concentrate on school work
- Decreases behavior problems, tardiness and visits to the school nurse
- Increases attendance rates
Good eating habits

• Maintain hygienic habits
• Eat slowly, chew properly
• Avoid TV viewing or reading while you eat
• Small frequent meals
• Never skip meals, specially breakfast
• Don’t overeat
Role of snacking behaviour

• Adolescents tend to eat differently to how they did as children. Research shows that adolescents snack frequently, especially in their leisure time often with friends or watching TV.

• After-school activities, part time jobs and an active social life means adolescents are not always able to sit down for three meals a day or be home for snacks. There can be an increase in meal skipping particularly breakfast, snacking throughout the day, and more eating away from home.

• As appetite is likely to increase and be changeable from day to day and opportunities to eat vary it is important to make sure that there is good quality, wholesome and filling snacks available to provide the extra energy and nutrients adolescents need. It is also important that adolescents know how to choose healthy snacks when eating away from home.
Tips for Healthy Snacking

• Think about the timing of snacks. If the snack will be replacing a meal that is going to be missed provide more substantial foods that include some protein such as chicken, tuna or egg or milk based drinks. (see snacks as meals ideas). If hungry before dinner is ready provide raw vegetables while they wait.

• Think about where snacks are consumed. At home, snacks should ideally be consumed sitting down and not eaten while doing other things. Teenagers commonly eat watching TV so provide more fruit and vegetable based snacks at this time.
Tips for Healthy Snacking

• Parents/care providers can be good role models for their teenagers and their friends by eating nutritious snacks themselves and by making these snacks readily available.

• Keep a selection of healthy snacks easily available in the fridge or pantry such as milk, yoghurt, chopped fruit, nuts, bread and breakfast cereal. Top up the fruit bowl with in season fruit.

• Encourage adolescents to prepare healthy snacks such as milk shakes, smoothies, wraps, toasted sandwiches, popcorn, eggs, whole meal muffin or pita bread pizzas.

• Encourage drinking water rather than drinking large serves of fruit juice or sugar sweetened drinks.
Do healthy snacks exist?

Yes, and in plenty.

- Snacks like fresh fruits, sprouted beans and nuts are nutritious and healthy.
- Avoid energy dense snacks like burgers.
- "Empty calories" – High sugar drinks
- Aerated drinks interfere with bone density and can damage teeth
Fast Food Facts

• Fast food is food from a take-out restaurant that is quick, convenient, and usually cheap.
• Fast food is usually high in fat, calories, cholesterol, and sodium.
• Too much fast food can lead to health problems such as high blood pressure, heart disease, and obesity.
• What is fast food and why is it so popular?
• Fast food refers to food that can be prepared and served quickly. Fast food restaurants usually have a walk up counter or drive-thru window where you order and pick up your food.
• **Is fast food bad?**
  - Fast food is high in sodium, saturated fat, *trans* fat, and cholesterol, eating too much over a long period of time can lead to health problems such as high blood pressure, heart disease, and obesity. Fast food also lacks many of the nutrients, vitamins, and minerals our bodies need.

• **Is some fast food healthier than others?**
  - Many fast food chains are changing their menus so there are more healthy options to choose from. For example, some chains no longer serve foods with *trans* fat, and many have menu items that contain fruits and vegetables.
Why is Fast Food unhealthy?

• High in calorie, fat, sodium and low in fiber which can cause
  Obesity, Hypertension, Heart diseases, Diabetes, Cancer etc.

• Contains preservatives

• Choose low-calorie and low-fat meals, snacks and desserts

• Have low fat or skim milk drinks.
Creating healthy habits in your children

• Prepare for school the night before by preparing the next day's clothes, lunch and backpack.
• Set the alarm for 15 minutes earlier to allow more time for breakfast.
• Say no to TV, video games and computers in the morning.
• Choose foods that require little preparation such as fresh and canned fruits, milk, yogurt, cheese, cottage cheese, hard-boiled eggs, whole grain cereals or instant oatmeal.
• Eat on the run with celery stuffed with peanut butter or cream cheese, dried fruits, string cheese, juice boxes, milk cartons, or breakfast bars.
• For those with little hunger in the morning, offer juice, milk or a fruit smoothie made with skim milk and fruit.
• For those who dislike breakfast foods, offer something non-traditional like cold pizza or leftover chicken.
How the Media Influences Children's Food Choices

- Kids today are bombarded with marketing everywhere they go. They see advertisements on the radio, TV and the Internet, in magazines, on school buses, and even in the classroom through news programs produced for schools. Most of the food advertisements are for fast foods, breakfast cereals, snacks and candies that are high in sugar, salt and fat and nutritionally inadequate.
PHYSICAL ACTIVITY:
Why is it important?

“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”
PHYSICAL ACTIVITY

- **Daily Chores**: walking, climbing stairs, cycling, household activities, etc.

- **Exercise**: planned & structured subset of leisure time physical activity undertaken for improving or maintaining physical fitness.
  
  30-60 minutes every day

- **Sports**: involves competition. It may become an occupation.
PEOPLE WHO SKIP BREAKFAST PAY A HIGH PRICE

• Breakfast skippers are less productive and less efficient than those who eat breakfast.
• Skipping breakfast impairs memory and mental performance.
• Children who regularly eat breakfast think faster and clearer, solve problems more easily and are less likely to be fidgety and irritable in the day.
• So the message is loud and clear to be particular about breakfast.
How can parents help their children to withstand food advertising? Here are some ideas

• Limit TV watching to fewer than 2 hours per day. Children under 2 do not benefit, and may be harmed by any television viewing.
• Consider allowing younger children to watch only prerecorded television programs or videos, and fast-forward through any advertising.
• For older kids, watch television with them whenever possible and discuss advertising gimmicks.
• Keep TVs and computers out of children's bedrooms and in family living areas where you can monitor use.
• Schedule your child for after school programs and events to help them to stay busy and away from TV.
• Be a good role model for making healthy food choices. Offer a selection of healthy, low fat and low sugar foods. Help your children to read food labels and discuss good choices with them.
• Support legislative efforts to improve school nutrition and discourage media influences on children's food choices.
Conclusions

- The power point presentation improved the eating habits among the adolescents. All the participated adolescents were gained more nutritional knowledge and they want to follow this in their daily day to day life.