

HOLIDAY HOMEWORK \*ART & CRAFT\*

1. One Landscape with water / acrylic colour on ivory sheet.

(Size minimum A4)

2. One creative Painting with acrylic colour on ivory sheet.

( Size minimum A4)

3. One craft work with waste material like old newspaper, clothes, plastic bottles and bags, waste wood and any other types of waste materials.

4. One painting on warli art with acrylic colour on ivory sheet. (Size minimum A4)

\*\*\*BEST OF LUCK AND ENJOY THE HOLIDAY \*\*\*

#### COMPUTER HOME WORK CLASS 8<sup>th</sup>

1. Make a chart on various symbols used in flow chart.
2. Remembering the work has been done for like Time line, and  
Its use of animation.
3. E- commerce
4. Algorithm

## HOLIDAYS' HOMEWORK (AUTUMN BREAK)

### CLASS:8 MATHS

#### Questions for Practice: ALGEBRAIC EXPRESSIONS

Q1 Consider two algebraic expressions:  $4x^2 - 5xy + 7y^2$  and  $-3x^2 + 2xy - 9y^2$ . Find the sum and difference of these two algebraic expressions.

Q2. Multiply the following pair of binomials:  $4x - 3y$  and  $2x + 5y$

Q3. Find the product of two trinomials:  $x^2 - 2x + 1$  and  $x^2 - 4x - 3$

Q4. Multiply the following:  $(x^2 + 2x + 1)(x + 1)$

Q5. Simplify  $(a + b)(2a - 3b + c) - (2a - 3b)c$

Q6. Simplify the expression:  $2(x - y) + 3(x^2 - y^2) - (x^2 - 2xy + y^2)$  and find its value when  $x = -1$  and  $y = 2$ .

Q7. Evaluate the product:  $(2x + y)(x^2 - xy + y^2)$

Q8. Multiply the trinomials:  $(x + 2y + 3z)(x - 2y - 3z)$

#### Q.9 CASE STUDY

In a small town, there is a group of students from 'Creative Minds' school. The Mathematics teacher, Mr. Sharma, has given students a challenge to find the total area of three unique gardens A, B, and C, and to compare these three gardens to determine which one has the largest area. To complete this challenge, the students need to apply their knowledge of algebraic expressions and their skills of addition, subtraction, multiplication, and simplification. The area of each garden is represented as follows: Garden A:  $(x^2 + 3x)$  sq. meters Garden B:  $(2x^2 - 7x)$  sq. meters Garden C:  $(x^2 + 5x + 8)$  sq. Meters

Question (i): Find the sum of algebraic expressions representing the area of Garden A and Garden B.

Question (ii): Find the product of the area of Garden A and Garden B.

Question (iii): Find the product of the areas of the three gardens.

#### Questions for Practice: EXPONENTS AND POWERS

Q1. Simplify :  $3^{-7} \div 3^{-10} \times 3^{-5}$

Q2. Find the value of:  $(3^0 + 4^{-1}) \times 2^2$

Q3. Find the value of:  $(3^{-1} \times 4^{-1}) \div 2^{-2}$

Q4. Find m so that  $(-3)^{m+1} \times (-3)^5 = (-3)^7$

Q5. Simplify and express in exponential form:  $(2^5 \div 2^8)^5 \times 2^{-5}$

Q6. Find the value of m for which  $2^m \div 2^{-2} = 2^5$

Q7. Simplify :  $5^{-7} \div 5^{-10} \times 5^{-5}$

अवकाश गृहकार्य

सत्र 2023-24

कक्षा आठ

वर्षिय हदी

प्रश्न 1 तीस वलिम शब्द लखिए

प्रश्न 2 बीस शब्दों के तीन तीन पर्यायवाची शब्द लखिए

प्रश्न 3 कारक की परभाषा लखिए तथा कारक के भेद उदाहरण सहित लखिए।

प्रश्न 4 द्वंद समास की परभाषा लखिए तथा दस उदाहरण लखिए।

प्रश्न 5 हदी छात्र प्रतज्ञा याद करे।

प्रश्न 6

प्रश्न 7 नमिन में से किसी एक पर सौ शब्दों में नबिंध लखिए।

1 डजिटल इंडिया

2 दशहरा

3 राजभाषा हदी

## कक्षा - VIII संस्कृत

- 1.संस्कृत प्रतजिज्ञा लखिए एवं याद भी करें । -
- 2.संस्कृत में 1 से 100 तक संस्कृत गनिती लखिए तथा याद करें।
- 3.नमिन्लखिति धातुओं के रूप लट् ,लङ् ,लृट् लकार में लखिों -  
वद ,क्रीड ,धाव् ,गम् ,वस् ,पठ ,भू ,खाद, हस् ,चर्
4. बालक एवं बालकिा शब्दरूप लखिए।
5. कम् शब्दरूप तीनों लगिो (पुर्ल्लन्गि, स्त्रीलङ्गि, नपुन्सकलङ्गि) में लखिों ।
- 6.नमिन् धातुओं की सहायता से दस दस वाक्य लखिए  
(चल, हस,खेल,खाद,गाय, गच्छ,लखि,नृत्य,वद)  
प्रथमपुरुषः - बालकः पठति(एकवचनम्) बालकौ पठतः(द्वविचनम्) बालकाः  
पठन्ति(बहुवचनम्)
- 7.नमिन् धातुओं की सहायता से दस दस वाक्य लखिए  
(चल, हस,खेल,खाद,गाय, गच्छ,लखि,नृत्य,वद)  
जैसे - अहं पठामि (एकवचनम्)  
आवां पठावः। (द्वविचनम्)  
वयं पठामः । (बहुवचनम्)

**CHAPTER - 10**  
**Reaching the Age of Adolescence**  
**ADOLESCENCE (THE NEWYORK TIMES)**

**How to Help Teenagers Embrace Stress**

**TEXT-1**

Stretching beyond familiar limits doesn't always feel good, but growing and learning — the keys to school and much of life — can't happen any other way.

**By Lisa Damour** Sept. 19, 2018

Now that the school year is in full swing, many young people are feeling the weight of academic demands. But how *much* strain students experience may depend less on their workloads and more on how they think about the very nature of stress.

Stress doesn't deserve its bad rap. Psychologists agree that while chronic or traumatic stress can be toxic, garden-variety stress — such as the kind that comes with taking a big test — is typically a normal and healthy part of life. In a 2013 article in the *Journal of Personality and Social Psychology* on stress mind-sets, the researchers Alia J. Crum, Peter Salovey and Shawn Achor noted that the human stress response, in and of itself, can put “the brain and body in an optimal position to perform.”

But the conventional wisdom is that stress does harm and so, accordingly, we should aim to reduce, prevent or avoid it. Not surprisingly, this negative slant on stress can shape parenting and also leave teenagers feeling stressed about being stressed.

To reframe how we think about a phenomenon that has been roundly, and wrongly, pathologized, we should appreciate that healthy stress is inevitable when we operate at the edge of our abilities. Stretching beyond familiar limits doesn't always feel good, but growing and learning — the keys to school and much of life — can't happen any other way.

According to Jeremy P. Jamieson, an associate professor of psychology at the University of Rochester who studies how stress impacts emotions and performance, “Avoiding stress doesn't work and is often not possible. To achieve and grow, we have to get outside our comfort zones and approach challenges.

Stress is also known to have an inoculating effect. Research shows that people who overcome difficult life circumstances go on to enjoy higher-than-average levels of resilience. In short, achieving mastery in trying situations builds emotional strength and psychological durability.

Happily, studies also find that it's not hard to convert people to the stress-is-enhancing perspective. To do this in my own work with adolescents, I liken the demands of school to a strength-training program. Everyone understands that lifting weights to the point of discomfort is the only way to build muscle; the process of developing intellectual ability, including the ability to manage the stress that comes with it, works just the same way.

But what if taking a positive view of stress isn't enough to offer students the relief they need? Indeed, plenty of students now suffer from too much of what should be a good thing. Those carrying punishing course loads cannot lighten their burdens simply by appreciating the benefits of stress. Yet the problem for students with outsized academic demands is rarely that they can't do the work. It's that they never have time to recover.

Students should be taxed by school. And they should have enough time to restore themselves so that they can make the most of the academic workouts that will keep coming their way. It's not a problem for teenagers to

feel stretched by all that we ask of them, and even better if they can view stress as a healthy, if often uncomfortable, sign of growth.

#### QUESTION 1.1

“All kind of stress is harmful.” Do you agree with this statement? Justify.

Ans

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#### QUESTION 1.2

Handling stress successfully, makes one more resilient. Construct your views to develop this idea.

Ans

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### TEXT-2

How students themselves regard stress — whether they see it as positive or negative — has powerful downstream effects. Studies find that when faced with steep intellectual tasks, individuals with a stress-is-enhancing outlook outperform those with a stress-is-debilitating one.

Further, appreciating that stress is a useful human reaction actually changes how the body operates under pressure. Research participants who believed that the physical manifestations of stress (such as having a rapid heartbeat) actually *prepared* them to address challenges went on, under demanding conditions, to release higher levels of a stress-buffering hormone and to have a more adaptive cardiovascular response than those who held a negative view of stress.

Three years ago, Centennial High School in Circle Pines, Minn., changed its schedule to include a near daily program called a LEAP hour, for Lunch, Energize, Achieve, Participate, described by the principal, Tom Breuning, as big-kid recess. Students choose how to spend their time. They can, for example, shoot baskets, play cards, exercise, color, meet with teachers or join the Pinterest club which, Mr. Breuning delightedly reports, “is especially popular with our football players.”

Mackenna Stoterau, age 17, a varsity ice hockey goalie, often uses the time to study with friends so that she has less homework to tackle after practice. “But if we’re all feeling super stressed,” she said, “we sit around and talk and hang out for a while.”

#### QUESTION 1.3

Analyse how social support can buffer against stress and shape brain activity?

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#### QUESTION 1.4

Predict the immediate physical and psychological effect of stress.

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#### QUESTION 1.5.1

Which one among the following can’t be regarded as stress buster?

A) Exercise and Yoga

- B) Collaborate and cooperate
  - C) Avoiding challenging task
  - D) Planning and time management
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QUESTION 1.5.2

Which of the following are the basic sources of stress?

- A) The environment
  - B) Social Stressors
  - C) Physiological
  - D) Thoughts
  - E) All the above
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### Nutritional needs for Adolescents

(Training and Resource materials,AEP.NCERT)

- Health is a state of complete physical, mental and social well being and not merely the absence of disease or illness
- Being a stage of rapid growth and development, adolescents need a carefully planned diet to so that they remain healthy
- Balanced diet means inclusion of proteins, carbohydrates, fats, vitamins in requisite proportions
- Every region has locally available nutritious food items. These should be identified and consumed as part of our daily meals. For example, the millet Ragi is a very rich source of calcium and is easily available across many parts of India
- Packed and junk food may be tasty, but should never replace the regular meal as they do not have adequate nutritional value
- Drastic diet plans and slimming medication can be harmful, unless prescribed by a qualified professional (nutritionist, doctor) for health reasons. Advertisements that promote girls as being thin and boys as being tall and muscular can mislead young people into making unhealthy eating choices
- Healthy eating habits include:
  - Eating slowly, chewing properly
  - Avoiding TV viewing or reading while eating
  - Eating a balanced meal that contains different food groups in adequate proportions
  - Eating moderate proportions at proper intervals
  - Never skipping meals and nor overeating
  - Drinking sufficient water (8 to10 glasses per day)

QUESTION 2.1

How the nutritional need of Adolescents differs from other children? Explain.

Ans

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QUESTION 2.2

Analyse how nutrition and disease are related to one another? Your opinion must be backed by fact.

Ans

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QUESTION 2.3

Adolescent girls often suffer from anaemia. Discuss the probable reason for it.



Ans

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#### QUESTION 2.4.1

Find the correct option

Foods containing starch and carbohydrates are important because

- A) They help you grow
- B) They stop you getting overweight
- C) They are easy to cook
- D) They give you energy and fill you up.

Ans

#### QUESTION 2.4.2

\_\_\_\_\_ Provide more than double the energy provided by carbohydrates and proteins in human body.

- A) Vitamins
- B) Fats
- C) Minerals
- D) Starch

How do you think , the media influences the eating habits of young people? Share one example of such.

Ans

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### **Smoking is bad for your health!**

Smoking cigarettes “has been identified as the most important source of preventable morbidity and premature mortality worldwide” (Smoking 101 Fact Sheet). Smoking is probably worse for you than you think. For example, 438,000 Americans die from smoking-related diseases annually.

#### **Here are some facts about smoking from the American Lung Association:**

- Cigarette smoke contains over 4,800 chemicals, 69 of which are known to cause cancer. Smoking is directly responsible for approximately 90 percent of lung cancer deaths and approximately 80-90 percent of COPD (emphysema and chronic bronchitis)
- Males tend to have significantly higher rates of smoking prevalence than females. In 2005, 23.9 percent of males currently smoked compared to 18.1 percent of females
- Each day, nearly 6,000 children under 18 years of age start smoking; of these, nearly 2,000 will become regular smokers. That is almost 800,000 annually
- Approximately 90 percent of smokers begin smoking before the age of 21
- If current tobacco use patterns persist, an estimated 6.4 million children will die prematurely from a smoking-related disease
- Tobacco use in adolescence is associated with a range of health-compromising behaviours, including being involved in fights, carrying weapons, engaging in high-risk sexual behaviour and using alcohol and other drugs

In addition, secondhand smoke is very bad for you. Secondhand smoke “is a mixture of the smoke given off by the burning end of a cigarette, pipe, or cigar and the smoke exhaled from the lungs of smokers” (Secondhand Smoke Fact Sheet).

**Here are some facts about second-hand smoke from the American Lung Association (to shock those who do not believe that their smoking does not affect others):**

- Secondhand smoke has been classified by the Environmental Protection Agency (EPA) as a known cause of cancer in humans (Group A carcinogen)
- Secondhand smoke exposure causes disease and premature death in children and adults who do not smoke. Secondhand smoke contains hundreds of chemicals known to be toxic or carcinogenic, including formaldehyde, benzene, vinyl chloride, arsenic ammonia, and hydrogen cyanide
  - Formaldehyde: irritating gas usually in liquid form used as a disinfectant and preservative
  - Benzene – flammable, toxic liquid, used for motor fuel
  - Vinyl chloride – flammable carcinogen, used to make vinyl resins
  - Hydrogen cyanide – poisonous (usually gaseous) compound that smells like bitter almonds
- Secondhand smoke causes approximately 3,400 lung cancer deaths and 46,000 heart disease deaths in adult non-smokers in the United States each year
- The current Surgeon General’s Report concluded that scientific evidence indicates that there is no risk-free level of exposure to secondhand smoke. Short exposures to second hand smoke can cause blood platelets to become stickier, damage the lining of blood vessels, decrease coronary flow velocity reserves, and reduce heart rate variability, potential increasing the risk of heart attack just like that of the smokers.

These facts are indisputable, and because of this, many cities around the United States have banned smoking in public places. Many college campuses have also banned smoking including Miami University of Ohio. President Hodge passed a smoking ban in 2008.

Sources  
[my.clevelandclinic.org](http://my.clevelandclinic.org)  
**American Lung Association Smoking 101 Fact Sheet**

QUESTION 3.1

Is it harmful if someone around you is smoking? Justify.

Ans

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QUESTION 3.2

The deadly effect of smoking is well established but why do companies make cigarettes?

Highlight any two plausible reason behind it.

Ans

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### QUESTION 3.3

Think rationally to explain why people keep smoking after they start.

Ans

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### QUESTION 3.4

Investigate scientifically how smoking increases the chance of heart attack. List two possible reasons behind it.

Ans

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### QUESTION 3.5

Read each statement carefully and categorise them as fact or myth

- A) E-cigarettes are not harmful as cigarettes.
- B) Smoking helps to get rid of stress.
- C) Cigarette smoke is carcinogenic in nature.
- D) Many smokers live into very long age, so it can't be that harmful.

Ans

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### Table for HIV Prevalence by state

#### Percentage HIV Positive in the AGE Group 15-49

State	Women Percentage HIV positive	Men Percentage HIV positive	Women and Men Percentage HIV positive
Andhra Pradesh	0.75	1.22	0.97
Karnataka	0.54	0.85	0.69
Maharashtra	0.48	0.77	0.62
Manipur	0.76	1.59	1.13
Tamil Nadu	0.39	0.27	0.34
Uttar Pradesh	0.05	0.10	0.07

Source: NFHS-3 (First National Family Health Survey-3)

### QUESTION 4.1

Which one of the above listed state has the highest percentage of HIV positive persons? What could be the possible reason behind high percentage of HIV infection?

Ans

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QUESTION 4.2

Which state shows the lowest percentage of HIV infected persons? Can this state be regarded as HIV infection safe or there may be some other reason behind such low prevalence of HIV infection?

Ans

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QUESTION 4.3

HIV has the potential to alter to alter the ratio of women to men as so many affected by HIV ate women. One reason may be women with HIV also tend to die earlier than men. Predict another possible reason for it.

Ans

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QUESTION 4.4

- i) India is a country with low HIV prevalence but how could account for the fact that it has the third largest number of people living with HIV/AIDS.
- ii) How HIV/AIDS has its effect on economic growth of a country?

Ans

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QUESTION 4.5 Tick the appropriate box

	Strongly Agree	Agree	Not Agree	Disagree	Strongly Disagree
(A) Adolescents are vulnerable toward HIV infections					

(B) School has no role in prevention of HIV/AIDS					

## CHANGES DURING ADOLESCENCE

It is marked by changes that are not only physical but also psychological, social and emotional. These changes prepare adolescents adult roles and responsibilities. They are normal part of growing up and they should be adopted.

Hormonal changes initiate the physical changes in the body. The female hormone estrogen is mainly responsible for the changes in females and the male hormone testosterone is mainly responsible for changes in males. These hormones are produced by the pituitary gland.

### ADOLESCENCE

Changes in body are normal, natural and healthy. They are an essential part of human growth and development.

During puberty the body grows faster than at any other time and the growth spurt occurs relatively later in boys than girls. As the pace of these changes varies in every individual, young people need to be reassured that there is nothing to worry in case these changes occur earlier or later among peers.

**QUESTION 5.1**  
Some adolescent boys while growing taller often look so

lanky and awkward. Find out the possible reason behind it.

Ans

### QUESTION 5.2

Your best friend Akash is upset now a days as he is experiencing acne or pimples on his face. How could you convince him that having pimples in this age is very common by giving proper scientific explanation?

Ans

### QUESTION 5.3

Fill in the blanks with suitable option

- (A) When girls mature, they begin producing mature egg (ova) cells about once a month. When boys mature, they begin producing sperm cells \_\_\_\_\_.  
(i) Once a year  
(ii) Continuously  
(iii) Once a month  
(iv) One time only
- (B) Ovaries produce hormones throughout the month, but once in each menstrual cycle, a female's ovaries produce \_\_\_\_\_.  
(i) a period  
(ii) cramps or aches  
(iii) a pregnancy  
(iv) an egg or ovum

#### QUESTION 5.4

Mention these statements as fact or myth

- (A) Girls should not take part in sports activities in her period days.  
(B) Bigger size of penis means more capacity to produce sperms

Ans

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#### QUESTION 5.5

One of the significant developments during adolescence among boys is the cracking or breaking of their voice. How could you account for this change?

Ans

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### ITEM 6. INCREASING OBESITY IN INDIA AND NUTRITION

A set of cohort studies from India have been attempting to follow up new born babies till they are young adults and study the implications of low or high weights at birth and in early childhood for later life. Both are associated with increased insulin resistance as well as obesity during adulthood (Bhargava et al 2004; Sachdev et al 2005). The underlying processes of adiposity (higher body fat in thin infants), higher probability of infections, insulin resistance and micronutrient imbalance through epigenetic programming in early maternal and foetal under nutrition leading to obesity, diabetes and heart diseases have also been reported (Yajnik 2004). The cohort studies from Pune reflect on the role of maternal under and over nutrition arguing that Both, maternal-foetal under nutrition and over nutrition are associated with increased adiposity and insulin resistance in the children ... Improving nutritional status of the young generation (especially that of young women in reproductive age) offers a potential for intergenerational prevention of NCDs. (Yajnik 2016)

The “double burden of malnutrition,” which is largely perceived as a combination of two separate problems—under nutrition and obesity—is not really so in the Indian context. The latter, which is perceived as a new epidemic of transitional societies with its associated NCDs over and above widespread under nutrition, is actually rooted in the former to a large extent. To break this link between the two, India needs a comprehensive strategy for health and food security. The longstanding strategy of cheap carbohydrate-based food to meet

calorie adequacy (which was no doubt crucial) must evolve to ensuring energy and nutrient adequacy (calorie, protein and micronutrients). Ensuring food sufficiency of that sort has to go hand in hand with measures to increase awareness regarding overweight/obesity, its associated risk with NCDs, and the role of diets. There is an urgent need for a comprehensive nutrition policy. The existing food programmes need strengthening and overhaul. It is time that the public distribution system includes pulses, vegetables and coarse-cereals and not just wheat and rice. Anganwadi and school meals should include variety like eggs and milk, and the district healthcare infrastructure with its community health, primary health and sub-health centers must be equipped with necessary resources to tackle all malnutrition-related morbidities.

(Interpretations and Implications of Increasing Obesity in India by Sourindra Mohan Ghosh, Research scholar &ImranaQadeer,Distinguished Professor, Council for Social Development, Delhi Economic and Political Weekly,Journal » Vol. 55, Issue No. 1, 04 Jan 2020 (/journal/2020/1)

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**QUESTION 6.1.**

There is a need of comprehensive nutritional policy for India , because

- i)) More undernourished children are there. ii) More obesity is found among children
- iii) Children are not getting food in rural India. iv) Children of urban India are getting more food than rural India.
- a) i  
b) i & ii  
c) iii  
d) iv

Ans

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**QUESTION 6.2.**

How can be Malnutrition related with the obesity?

Ans

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**QUESTION 6.3.**

Why can more tinned food, chips leads to higher probability of diabetes?

Ans

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Table -1

Sl.No.	DIET PLAN	TYPE
1.	Same foods that your hunter-gatherer ancestors ate before agriculture developed.	PALEO DIET
2.	Restricts all animal products (Meat & Dairy Product)	VEGAN DIET
3.	Limiting carb intake to 20–150 grams per day.	LOW CARB DIET
4.	Restricts your consumption of fat to under 10% of daily calories.	ULTRA LOW FAT DIET

(Healthline, 9 Popular Weight Loss Diets Reviewed Written by Adda Bjarnadottir, MS, RDN (Ice) on January 3, 2019)

QUESTION 6.4.

Which of the above mentioned diet is most suitable for rural Indian obese person economically, ethically and environmentally?

Ans

QUESTION 6.5.

The Metric BMI formula is  $\text{Weight(Kg)} / (\text{Height in meter})^2$

Ram is studying in class VIII . His weight is 45 Kg and height is 4.5ft. Akbar is also studying in class VIII . His weight is 75 Kg and height is 5 ft. Both of them are living in hostel and getting equal facilities. Calculate the BMI of both the students. Who is obese and why though they are now living under condition?

Ans



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## SST HHW

### Class-8

1. Make a project on culture and festivals of Andhra Pradesh.
2. Prepare a scrap book on Constitution of India.
3. Make major centers of British rule on a political map of India.
4. Read about any freedom fighter of India and write about in your notebook
5. Prepare 20 questions on Andhra Pradesh state
6. Make 10 MCQ from every chapter that has been completed after half-yearly exams
7. Write difficult words found in social science book in your notebook