### **HOLIDAY HOMEWORK**

### For Class – XI (English)

### Write each of the following questions in 100-120 words.

- 1. Explain the reasons of changing relationship between the grandmother and the author.
- 2. Sketch the character of the grandmother.
- 3. Discuss the values highlighted in the chapter *The Portrait of a Lady*.
- 4. Identify the poetic devices used in the poem *A Photograph* and discuss their meanings.
- 5. Human life is short-lived in contrast to nature. Comment on the statement in the light of the poem *A Photograph*.
- 6. Can the act of stealing be ever justified? Give your views in the context of reading of *The Summer of the Beautiful White Horse*.

# DAV PUBLIC SCHOOL, C.S. PUR-21 PHYSICS (SIGNIFICANT FIGURE & DIMENSIONS) CLASS – XI HOLIDAY ASSIGNMENT

- 1. The number of significant figures in 0.06900 is
- a) 5 b) 4 c) 2 d) 3
- 2. The sum of the numbers 436.32, 227.2 and 0.301 in appropriate significant figures is
- a) 663.821 b) 664 c)663.8 d)663.82
- 3. The mass and volume of a body are 4.237 g and 2.5 cm<sup>3</sup>, respectively. The density of the material of the body in correct significant figures is
- a) 1.6048 g cm<sup>-3</sup> b)1.69 g cm<sup>-3</sup> c)1.7 gcm<sup>-3</sup> d)1.695 g cm<sup>-3</sup>
- 4. The numbers 2.745 and 2.735 on rounding off to 3 significant figures will give
- a) 2.75 and 2.74 b) 2.74 and 2.73 c)2.75 and 2.73 d) 2.74 and 2.74
- 5. The length breadth and thickness of a rectangular sheet of metal are 4.234 m,1.005 m and 2.01 cm respectively. Give the area and volume of the sheet to correct significant figures.
- 6. The mass of a box measured by a grocer's balance is 2.3 kg. Two gold pieces of masses 20.15 g and 20.17 g are added to the box. What is (a) the total mass of the box (b) the difference in the masses of the pieces to correct significant figures?
- 7. Round off the following numbers as indicated
- i) 18.35 upto 3 digits ii) 143.45 upto 4 digits
- iii)18967 upto 3 digits iv) 12.653 upto 3 digits
- v)248337 upto 3 digits vi)321.135 upto 5 digits

vii) $101.55 \times 10^6$  upto 4 digits viii)  $31.325 \times 10^{-5}$  upto 4 digits

- 8. Solve the following and express the result to an appropriate number of significant figures
- i) Add 62g,4.33 g and 17.456 g.
- ii) Subtract 63.54 kg from 187.2 kg
- iii) 75.5 x125.5 x 0.51
- iv)  $\frac{2.13 \times 24.78}{458.2}$
- $v) \quad \frac{2.51 \times 10^{-4} \times 1.81 \times 10^7}{}$

0.446

- 9. Each side for a cube is measured to be 7.203 m. What are the total surface area and the volume of the cube to appropriate significant figures?
- 10. The length and the radius of a cylinder measured with slide calipers are found to be 4.54 cm and 1.75 cm respectively. Calculate the volume of the cylinder.
- 11. 5.74 g of a substance occupies 1.2 cm<sup>3</sup>. Express its density keeping significant figures in view.
- 12. Subtract  $2.5 \times 10^4$  from  $3.9 \times 10^5$  with due regard to significant figures.

- 13. Which of the following pairs of physical quantities does not have same dimensional formula?
- a) Work and torque b) angular momentum and Planck's constant
- c) Tension and surface tension d) Impulse and linear momentum
- 14. On the basis of dimensions, decide which of the following relations for the displacement of a particle undergoing simple harmonic motion is not correct:
- a)  $y = a \sin 2\pi t / T$  b)  $y = a \sin vt$
- c)  $y = \frac{a}{T} \sin\left(\frac{t}{a}\right)$  d)  $y = a\sqrt{2} \left(\sin\frac{2\pi t}{T}\cos\frac{2\pi t}{T}\right)$
- 15. If P, Q, R are physical quantities, having different dimensions, which of the following combinations can never be a meaningful quantity?
- a) (P-Q)/R b) PQ-R c) PQ/R d)  $(PR-Q^2)/R$  d) (R+Q)/P
- **16.** Photon is quantum of radiation with energy E =hv, where v is frequency and h is Planck's constant. The dimensions of h are the same as that of
- a) Linear impulse b) Angular impulse c) Linear momentum d) Angular momentum
- 17. If the unit of force is 100 N, unit of length is 10 m and unit of time is 100 s, what is the unit of mass in this system of units?
- 18. Give an example of
- a) A physical quantity which has a unit but no dimensions.
- b) A physical quantity which has neither unit nor dimensions.
- c) A constant which has a unit.
- d) A constant which has no unit
- 19. The displacement of a progressive wave is represented by  $y = A \sin(\omega t kx)$ , where x is distance and t is time. Write the dimensional formula of (i)  $\omega$  and (ii) k.
- 20. A new system of units is proposed in which unit of mass is  $\alpha kg$ , unit of length  $\beta$ m and unit of time  $\gamma$  s. How much will 5 J measure in this new system?
- 21. A new unit of length is chosen such that the speed of light in vacuum is unity. What is the distance between the sun and the Earth in terms of the new unit of light takes 8 min and 20 s to cover this distance?
- 22. A calorie is a unit of heat or energy and it equals about 4.2 J where 1 J=1 kg m<sup>2</sup> s<sup>-2</sup>. Suppose we employ a system of units in which the unit of mass equals  $\alpha$  kg, the unit of length equals  $\beta$  m, the unit of time is  $\gamma$  s. Show that a calorie has a magnitude 4.2  $\alpha^{-1}\beta^{-2}\gamma^2$  in terms of the new units.
- 23. Find the dimensions of a/b in the equation  $F = a\sqrt{x} + bt^2$ , where F is force, X is distance and t is time.
- 24. The Vander Wall's equation for a gas is  $\left(p + \frac{a}{V^2}\right)(V b) = RT$  Determine the dimensions of a and b. Hence write the SI units of a and b.
- 25. If force (F), length (L) and time (T) are chosen as the fundamental quantities, then what would be the dimensional formula for density?
- 26. In the expression  $P = El^2m^{-5}G^{-2}$ ; E, m, l and G denote energy, mass angular momentum and gravitational constant, respectively. Show that P is a dimensionless quantity.

## **HOLIDAY HOME WORK**

CLASS – XI (CHEMISTRY)

### **NCERT EXERCISE & EXEMPLAR OF**

- 1. Basic Concepts of Chemistry
- 2. Assignment 1 and 2

## **HOLIDAY HOME WORK**

### XI MATHEMATICS

## NCERT (SETS):

Exe: 1.1, Exe: 1.2, Exe: 1.3, Exe: 1.4, Exe: 1.5, Exe: 1.6,

Miscellaneous Exercise (Chapter-1)

## NCERT Exemplar (SETS):

Exe: 1.3

## D.A.V. PUBLIC SCHOOL, CHANDRASEKHARPUR, BBSR-21

## Holiday assignment Class XI- Biology

### **NCERT Questions of**

- 1. The living World
- 2. Animal Kingdom.

### **NCERT Exemplar Questions of**

- 1. The living World
- 2. Animal Kingdom.

## D.A.V PUBLC SCHOOL CHANDRASEKHARPUR. BHUBANESWAR HOLIDAY HOME WORK-2018 (P.E) STD-XI.

- 1. Define Physical Education according to Brownell.
- 2. What is aim of Physical Education?
- 3. What is health related career in PE?
- 4. Define soft skill in PE.
- 5. Outline the objectives of PE.
- 6. Briefly discuss the changing trends in PE.
- 7. Explain in detail the coaching career in PE.
- 8. Discuss the health related & administrative related career inn deal.
- 9. Write a short note on career in book writing, sports photography and sports industry.
- 10. Describe the various physical education courses available in India.

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### DAV PUBLIC SCHOOL, CSPUR, BBSR-21 HOLIDAY HOMEWORK( CLASS XI ) COMPUTER SCIENCE

- 1) What are the major strength and weaknesses of a computer?
- 2) Why is binary language often termed as machine language? Why is machine language needed?
- 3) What is the difference between OCR and OMR?
- 4) What are the two categories of printers? Which type of printer is more speedy
- 5) What is the difference between RAM and ROM?
- 6) What are various categories of software?
- 7) What are various types of Operating System?
- 8) What is application software? Why are its types?
- 9) How is compiler different from interpreter?
- 10) What are the differences between hardware, software and firmware?
- 11) Give examples of each system software and application software. Explain the function of each type.
- 12) What are the types of computers? How do they differ?
- 13) Write the full forms of the following terms VDU, LCD, DMP, CRT, CD-RW, DVD.
- 14) What functions are performed by the control unit ?can you call it the control centre of the computer system ? why ?
- 15) Distinguish between CPU and ALU.
- 16) What role dose memory play in the functioning of computer system?
- 17) What is a bit? What is binary cord?
- 18) Define each of the following: (a) nibble (b) byte (c) kilobyte (d)megabyte (e) gigabyte (f) terabyte.
- 19) What is the meaning of the term volatile primary memory? What can be done to over com the problems of volatility?
- 20) Distinguish between internal and external memory.
- 21) What are the software classifications? Discuss their functioning in brief.
- 22) What are the four different types of computers based on their working methods?
- 23) What do you understand by the term 'super computer? Give the name of a super computer installed in India.
- 24) How are digital, analog and hybrid computers different form one another?
- 25) What is Booting?
- 26) Explain different types of booting.
- 27) Differentiate between source cord and object cord.
- 28) What are different OS type? Give examples.
- 29) What are Device Drives?
- 30) Discuss the importance of backup tool.
- 31) How are Disk Defragmenter and Disk cleanup tools different?
- 32) Explain the concept of virtual storage.
- 33) What are open source based software?
- 34) Compare and Contrast
  - (i) Free software and open source software
  - (ii) Proprietory software and free software
  - (iii) Freeware and shareware
  - (iv) Freeware and Free software.

### DAV PUBLIC SCHOOL, CHANDRASEKHARPUR BBSR-21 CLASS – XI ECONOMICS ASSIGNMENT -1

### **Production Possibility Curve**

### NCERT QUESTIONS

- 1. Discuss the central problems of an economy.
- 2. What is production curve?
- 3. What do you understand by positive economic analysis?
- 4. What do you understand by normative economic analysis?
- 5. Distinguish between microeconomics and macroeconomics.

#### HOTS

- 1. "An economy always produces on, but not inside a PPC" defend or refute
- 2. "Massive unemployment will shift the PPC to the left", defend or refute.
- 3. A lot of people died and many factories were destroyed in an earthquake.
- 4. Draw a PPC to represent the following it:
  - i) underemployment of resources
  - ii) Growth of resources
  - iii) Fuller utilization of resources
- 5. Explain how the following problems of an economy be solved with the help of price mechanism.
- 6. How do the following economic changes affect production possibility curve of an economy?

### **BOARD QUESTIONS**

- 1. Production in an economy is below its potential due to unemployment. Government starts employment generation schemes. Explain its effects using production possibilities curve.
- 2. Explain the meaning of opportunity cost with the help of production possibility schedule.
- 3. With the help of suitable example the problem of "for whom to produce".
- 4. Define opportunity cost.
- 5. Why does an economic problem arise? Explain.
- 6. Explain the problem "what to produce".
- 7. Unemployment is reduced due to measures taken by the government. State its economic value in the context of production possibilities frontier.
- 8. The government has started promoting foreign capital. What is its economic value in the context of PPC?
- 9. Why is PPC concave?
- 10. Explain with the help of an example how the rotation of ppc only for x commodity and only for y commodity takes place.
- 11. Unemployment is reduced due to the measure taken by the government. State its economic value in the context of PPC.
- 12. The government has started promoting foreign capital. What is its economic value in the context of PPF?
- 13. Large number of technical training institutions have been started by the government. State its economic value in the context of PPF.
- 14. What will be the impact of recently launched 'Clean India Mission' on the PPC of the economy and why?
- 15. What will be the impact of large scale outflow of foreign capital on PPC of the economy and why?
- 16. What will be the impact of 'Make in India' appeal to foreign investors by the Prime Minister of India, on the PPC and why?
- 17. A lot of people die and many factories are destroyed because of severe earthquake in the country. How will it affect country's PPC

### DAV PUBLIC SCHOOL, CHANDRASEKHARPUR BBSR-21 CLASS – XI ECONOMICS ASSIGNMENT -2 CONSUMER'S EQUILIBRIUM

- 1. what is utility? Discuss the different measures used to measure utility.
- 2. State the condition of consumers equilibrium.
- 3. what price the consumer is ready to pay for a commodity in a state of his equilibrium?
- 4. How will you, as a consumer, react to the situation when Px falls and your state of equilibrium is disturbed for the consumption of Good-X?
- 5. Ice cream sells for Rs.20. Saurish who likes ice-cream, has already consumed 4. His marginal utility of one rupee is 4. Should he consume more ice cream or stop the consumption.
- 6. Shaswat has Rs. 88 with him. He intended to purchase good X and Y with his money. The market price of X and Y per unit is Rs.8. the marginal utility schedule of good X and Y is given below. Find out how many units of X and Y should Shaswat so that he will get maximum satisfaction.
- 7. How is equilibrium of the consumer affected when MUm happens to rise, and Px is constant?
- 8. Once a consumer reaches the point of equilibrium he would not like to change his allocation of expenditure even if price of one commodity changes. Do you agree?
- 9. One the consumption of 10 units of a commodity, a consumer finds that rupee worth of Mux has exceeded the marginal utility of money. Should he not reduce the consumption of X so that he strikes an equilibrium? Give reason in support in your answer.
- 10. Starting from the initial situation of consumers equilibrium the
- 11. What happens when :  $\underbrace{MUx}_{Px} > \underbrace{MUy}_{Py}$ ?
- 12. Explain the law of diminishing marginal utility with the help of a total utility schedule.
- 13. Explain the conditions of consumers equilibrium under utility analysis.
- 14. Explain the conditions of consumers equilibrium using indifference curve analysis.
- 15. By spending his entire income only on two goods X and Y a consumer finds that  $\frac{MUx}{Px} > \frac{MUy}{Py}$
- 16. A consumer consumes only two goods A and B and is in equilibrium. Show that when price of Good –B falls, demand for B rises. Answer this question with the help of utility analysis.
- 17. Given the price of a good, how will a consumer decide as to how much quantity of that good to buy? Use utility analysis.
- 18. A consumer consumes only two goods X & Y. Marginal utilities of X and Y are 3 & 4 respectively. Price of X and Y are 24 per unit each. Is consumer in equilibrium? What will be further reaction of the consumer? Give reasons.
- 19. Suppose a consumer can afford to buy 6 units of good X and 8 units of good Y if he spends her entire income. The prices of two goods are Rs. 6 and Rs. 8 respectively. How much is the consumer income?
- 20. Difference between ordinal utility and cardinal utility.

## **HOLIDAY HOME WORK**

## **CLASS -XI (Commerce)**

### **ACCOUNTANCY-**

- 1. Complete all the numerical s regarding Accounting equations & theoretical questions of 1<sup>st</sup> chapter from NCERT text book & T.S.Grewal.
- 2. Prepare a note on various accounting terms.

### **BUSINESS STUDIES**

- 1. Answer all the exercise questions from NCERT book of those chapters which were taught in the class.
- 2. Prepare a project on "*Startup India Standup India*". (with minimum of 15 pages )