

DAV International School, Amritsar

Holiday Homework

Class XI & XII (2018-19)

Dear Parents

It's that time of the year again, those golden summer vacation days, when you can have some cherished time at hand to spend with your adorable children. Being in a board class, the students are under constant pressure & anxiety. They keep on juggling between school, tuitions, tests, projects, assignments etc. Now is the time when you can give them a refreshing change from their hectic schedule. But, simultaneously, make sure that they utilize these holidays in a balanced way by devoting equal time to their studies as well. To ensure this, we are giving them Holiday Homework of each subject which is mandatory to be done as per the instructions given.

Wishing you & the children a fun-filled and productive Summer Break.

Regards

Anjana Gupta

Principal

Instructions:

1. Students are required to do the assignments / holiday homework in their respective subject notebooks.
2. HHW is to be submitted on July 7, 2018. In case of late submission of work or incomplete work, the marks of final Board Practical Exams will be affected.
3. There will be Monday Tests in the month of July according to the syllabus and date sheet given.

Subject: ENGLISH CORE
Class XI (2018-19)

1. Note- making of the chapters, The Portrait of a lady & The summer of beautiful white horse. Notes should be prepared for each chapter separately. Use proper abbreviations. (No restriction of main and sub points & skip summary writing)
2. Do the following from the poems: A Photograph; Father to Son
 - Theme of the poems
 - Literary devices
 - Justification of the titles of the poems
3. Do the following Character sketches in 120-150 words:
 - Grandmother
 - Mourad
 - Aram
 - Uncle Khosrove
4. Do the given Reading Comprehension & integrated grammar sheets, paste and solve them in your English notebook.
- 5. Do the following Notice Writing questions:**
 - a. Your school is planning to organize a 'Clean Up' day where all students will help to clean up the school premises. This event will not only spruce up the campus; it will bring students together with a sense of ownership and common purpose. Write a notice informing students about this activity. You are Amit/ Amita, President Student Council of your school. Write the notice in 50 words or less. Use a date, time, and meeting place of your choice.
 - b. Ram Lakhani is the Head Boy of Bhavan Vidyalaya, Chandigarh. He and some other students of the school are touched by the plight of the poor and the destitute in the state-run homes, and wish to make a difference in their lives by lessening their sufferings. They decide to raise funds for this purpose. Write a notice, not exceeding 50 words, making an appeal for generous donations.
- 6. Do the following Job Applications questions:**
 - a. You are Varun/Varuna, a resident of M-204, Block-C, Dilshad Garden, MBA from Amity University, Delhi. You come across an advertisement in Times of India published by ICICI Bank, New Delhi. Write an application for the post of Business development Manager giving your complete bio-data.
 - b. You are Vani/Varun, a resident of M-204, Block-C, Dilshad Garden, Delhi. You come across an advertisement in Times of India for the post of Dance Teacher at Delhi Public School, Delhi, giving your complete bio-data.

Note: Do the complete work in your English notebooks

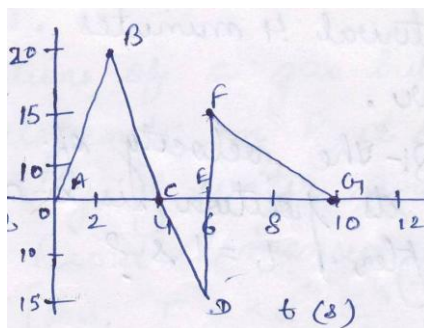
Subject: Physics

Class XI (2018-19)

Chapters

Units and Measurement and Kinematics

1. Given that the period T of oscillations of a gas bubble from an explosion under water depends on P , d and E , where $P \rightarrow$ pressure, $d \rightarrow$ density of water and $E \rightarrow$ total energy of explosion. Find dimensionally a relation for T . [IIT81, HOTS]
2. The time period of oscillation of a simple pendulum in an experiment is recorded as 2.56 s, 2.56 s, 2.70 s, 2.58 s and 2.45 s respectively. Find the time period, absolute error in each observation and percentage error. [FAQ]
3. If 500g be the unit of mass, 50s the unit of time and acceleration due to gravity (980 cms^{-2}) be the unit of acceleration, find what will be the new unit of energy?
4. A body moving with uniform acceleration describe 20 m in 2nd second and 30 m in 4th second of its motion. Calculate the distance moved by it in 6th second. [TYPICAL Eg]
5. A ball is thrown upwards with a speed of 100 ms^{-1} . Show that the ball hits the ground with the same speed after returning from the highest point. Take $g = 10 \text{ ms}^{-2}$.
6. Find the ratio of the distances travelled by a freely falling body in first, second and third second of its fall. [FAQ]
7. The relation between t and distance x is given by $t = Ax^2 + Bx$, where A and B are constants. What is the acceleration? [AIEE 05]
8. A boy walks 5 m towards east and then turns at an angle of 60° to the north of the east and walks 5m. Calculate net displacement of the boy. Also find the direction of the net displacement.
9. What is the angle b/w 2N force and 3N force so that their resultant is 4N ?
10. If $\vec{A} = -2\hat{i} + \hat{j} - 3\hat{k}$ and $\vec{B} = 5\hat{i} + 2\hat{j} - \hat{k}$; then find $(\vec{A} + \vec{B}) \cdot (\vec{A} - \vec{B})$. [EAMCET,89]
11. A bullet fired at an angle of 15° with the horizontal hits the ground 3km away. Can we hit a target a distance of 7km by adjusting its angle of projection?
12. The vel-time graph of a particle moving in a straight line is shown in figure. Find the distance travelled by the particle in the time interval $t = 0$ and $t = 10\text{s}$. [DELHI 09]



13. A stone falls freely from rest and the total distance covered by it in last second of its motion equals the distance covered by it the first 3 s of its motion. How long the stone will remain in the air. [CENTRAL SCHOOL 08]
14. A balloon starts rising from the ground with an acceleration of 1.25 m/s^2 . After 8 s, a stone is released from the balloon. Find the time taken by the stone to reach the ground after its release. (Take $g = 10 \text{ m/s}^2$).
15. A particle located at $x = 0$ and $t = 0$ starts moving along the positive x – direction with a velocity ' v ' that varies as $v = \sqrt{x}$. How the displacement of the particle vary with time?

Subject: Chemistry

Class XI (2018-19)

Chapter

Some basic concepts in chemistry

1. Calculate the number of atoms in each of the following:

(a) 52 g of He

(b) 52 moles of Ar

2. Calculate the total number of electrons present in one mole of methane.

3. Calculate the number of electrons which will together weigh one gram.

Chapter- Structure of atom

4. How many electrons in an atom may have the following quantum numbers?

(a) $n = 4, m, = -\frac{1}{2}$ (b) $n = 3, L = 0$

5.

(a) State Hund's Rule.

(b) What will be the wavelength of ball of mass 0.1 kg moving with a velocity 10^{14} . Calculate the number of electrons which will together weigh one gram. ms^{-1} ?

6. The mass of an electron 9.1×10^{-31} kg. If its kinetic energy 3.0×10^{-25} J, calculate its wavelength.

7. The energy associated with Bohr's first orbit is -2.18×10^{-18} J atom^{-1} . What the energy associated with fifth orbit?

8. What is the main difference between electromagnetic waves theory and Planck's quantum theory.

9. Why is energy of electron negative?

10. Which orbital non-directional?

Chapter- Periodic classification of elements

11. How many unpaired electrons are present in N(7)?

12. Write the IUPAC name and symbol for the element with atomic number 120.

13. Give a brief account for the following:

(a) Oxygen has lesser first I.E than Nitrogen

(b) Fluorine has less negative electron gain enthalpy than chlorine.

14. What is meant by Lanthanoids and Actinoids?

15. Why do noble gases have bigger atomic size than halogen?

Subject: Mathematics
Class XI Commerce (2018-19)

Chapters:- Trigonometric Functions, P.M.I., Complex Numbers & Quadratic Equations and Linear inequalities

1. Prove that: $\sin 10^\circ \sin 30^\circ \sin 50^\circ \sin 70^\circ = 1/16$
2. Evaluate: $\tan 75^\circ + \cot 75^\circ$
3. Draw the graph of $y = \tan x$, where $-180^\circ < x < 180^\circ$
4. Prove that: $\tan 13A - \tan 9A - \tan 4A = \tan 13A \tan 9A \tan 4A$
5. Prove that: $\cos 5x = 16 \cos^5 x - 20 \cos^3 x + 5 \cos x$
6. Find the general Solution of $\tan x + \tan 2x + \tan 3x = 0$
7. Prove that: $\cos x \cos 2x \cos 4x \cos 8x = \frac{\sin 16x}{16 \sin x}$
8. In Triangle ABC, prove that: $\cos 2A + \cos 2B - \cos 2C = 1 - 4 \sin A \sin B \cos C$
9. By using Principle of mathematical induction prove the following statements for all natural numbers
 - (a) $10^{2n-1} + 1$ is divisible by 11
 - (b) $\sin x + \sin 2x + \sin 3x + \dots + \sin nx = \frac{\sin \left(\frac{nx+x}{2} \right) \sin \left(\frac{nx}{2} \right)}{\sin (x/2)}$
 - (c) Prove that sum of cubes of three consecutive natural numbers is divisible by 9.
 - (d) Prove that 3^{2n} when divided by 8 leaves the remainder equal to one.
 - (e) Prove that $\frac{1}{1.2.3} + \frac{1}{2.3.4} + \dots + \frac{1}{n(n+1)(n+2)} = \frac{n+3}{4(n+1)(n+2)}$
14. The length of a rectangle is three times the breadth if minimum perimeter of rectangle is 160cm then find the minimum breadth of rectangle
15. A solution of 9% acid is to be diluted by adding 3% acid solution to it. The Resulting mixture is to be more than 5% but less than 7% acid. If there is 460 litres of 9% solution, how many litres of 3% solution will have to be diluted.
16. Solve graphically

$$\begin{aligned} 2x + y &\leq 12 \\ x + y &\leq 7 \\ x + 2y &\leq 10 \\ x, y &\geq 0 \end{aligned}$$

Subject: Mathematics(Non-Medical)

Class XI (2018-19)

Chapters:- Trigonometric Functions, P.M.I., Complex Numbers & Quadratic Equations and Linear inequalities

1. Prove that: $\sin 10^\circ \sin 30^\circ \sin 50^\circ \sin 70^\circ = 1/16$
2. Evaluate: $\tan 75^\circ + \cot 75^\circ$
3. Draw the graph of $y = \tan x$, where $-180^\circ < x < 180^\circ$
4. Prove that: $\tan 13A - \tan 9A - \tan 4A = \tan 13A \tan 9A \tan 4A$
5. Prove that: $\cos 5x = 16 \cos^5 x - 20 \cos^3 x + 5 \cos x$
6. Find the general Solution of $\tan x + \tan 2x + \tan 3x = 0$
7. Prove that: $\cos x \cos 2x \cos 4x \cos 8x = \frac{\sin 16x}{16 \sin x}$
8. In Triangle ABC, prove that: $\cos 2A + \cos 2B - \cos 2C = 1 - 4 \sin A \sin B \cos C$
9. By using Principle of mathematical induction prove the following statements for all natural numbers
 - (c) $10^{2n-1} + 1$ is divisible by 11
 - (d) $\sin x + \sin 2x + \sin 3x + \dots + \sin nx = \frac{\sin \left(\frac{n+1}{2} x \right) \sin \left(\frac{nx}{2} \right)}{\sin \left(\frac{x}{2} \right)}$
- (c) Prove that sum of cubes of three consecutive natural numbers is divisible by 9.
- (d) Prove that 3^{2n} when divided by 8 leaves the remainder equal to one.
- (e) Prove that $\frac{1}{1.2.3} + \frac{1}{2.3.4} + \dots + \frac{1}{n(n+1)(n+2)} = \frac{n+3}{4(n+1)(n+2)}$
10. if $z = \frac{(1+i)(i+2)}{(1-i)(2-i)}$ then find
 - (a) Additive inverse of z
 - (b) Multiplicative inverse of z
 - (c) Modulus of z
 - (d) Conjugate of z
11. If $z = -2 - 3^{1/2} i$, find the value of $2z^4 + 5z^3 + 7z^2 - z + 41$
12. Find the square roots of following complex numbers.
 - (a) $z = 8 + 6i$
 - (b) $z = i$
 - (c) $z = 3 + 4i$
13. Represent the following complex numbers in polar form
 - (a) $z = -2 - 2i(3)^{1/2}$
 - (b) $z = -16/1 + i(3)^{1/2}$
14. The length of a rectangle is three times the breadth if minimum perimeter of rectangle is 160cm then find the minimum breadth of rectangle
15. A solution of 9% acid is to be diluted by adding 3% acid solution to it. The Resulting mixture is to be more than 5% but less than 7% acid. If there is 460 litres of 9% solution, how many litres of 3% solution will have to be diluted.
16. Solve graphically
$$\begin{aligned} 2x + y &\leq 12 \\ x + y &\leq 7 \\ x + 2y &\leq 10 \\ x, y &\geq 0 \end{aligned}$$

Subject: Accountancy
Class XI (2018-19)

Chapter Introduction to Accounting, Basics Terminology, Accounting Concepts & Conventions and Accounting Standards, Accounting Equation

1. What is accounting?
2. Explain the term accounting cycle.
3. Explain the objectives of accounting.
4. What is accountancy?
5. What is book-keeping?
6. What are the sub-fields of accounting?
7. Explain the various users of accounting information?
8. What are the uses of accounting?
9. What are the limitations of accounting?
10. What are the qualitative characteristics of accounting information?
11. What do you mean by liability?
12. Explain various types of liabilities.
13. What do you mean by non-current & current liabilities?
14. What do you mean by Assets?
15. What do you mean by current assets?
16. Show the accounting equation on the basis of following transactions and prepare a balance sheet on the basis of last equation:
 - (a) Mohan commenced business with cash Rs.20,000 , goods Rs. 1,80,000.
 - (b) Purchased goods for cash Rs. 10,000 subject to trade discount@10%
 - (c) Purchased goods on credit Rs. 1,20,000
 - (d) Sold $\frac{3}{4}$ of total goods at a profit of 10% on cost out of which $\frac{1}{3}$ rd of the amount received in cash.
 - (e) Outstanding salaries amounted Rs. 5000
 - (f) Amount paid to creditors Rs. 42500 in full settlement of Rs. 43000.
17. Show the accounting equation on the basis of following transactions and prepare a balance sheet on the basis of last equation:
 - (i) Commenced business with cash Rs. 40000
 - (ii) Goods bought from M/s. Kapoor & Bros. amounted Rs.50,000
 - (iii) Goods sold to Ravi Rs. 49500
 - (iv) Paid rent in cash Rs. 10000
 - (v) Goods distributed as free samples costing Rs. 5000
 - (vi) Salary outstanding Rs. 6000
 - (vii) Ravi who owed us is declared insolvent and 70 paise in a rupee is received from his estate
 - (viii) Paid Life insurance premium by cash Rs. 3000
18. Explain Revenue Recognition concept.
19. What do you understand by accounting standards? Give any two points of difference between accounting standards and IFRS. Why do we need accounting standards?
20. "Everything a firm owns, it also owes out to somebody". Name and explain the accounting concept highlighted in the above statement.

Subject: Political Science
Class XI (2018-19)

1. What is the need and importance of constitution?
2. What is meant by the term 'secular'? Is India a secular state?
3. Describe the composition and working of the constituent assembly of India?
4. Identify any two sources of the Indian Constitution. Describe in brief the provisions which have been taken from these sources?
5. What is meant by writ of certiorari?
6. What are the main differences between Fundamental Rights and Directive Principle
7. Discuss the following terms: Mid-term election; Bye-election.
8. Why electoral reforms are necessary in India?
9. Explain the working of the single transferable vote system
10. What is the method of appointment tenure and procedure of removal of Chief Election Commissioner of India?
11. What do you mean by collective responsibility of the Council of Ministers?
12. Discuss the powers and functions of the Prime Minister as well as the President.
13. Explain the role of bureaucracy in India and how the officers of bureaucracy appointed.
14. Differentiate between Government Bill and Private Member Bill.
15. Mention two motions which Parliament of India can adopt to control the government.
16. What is understood by vote of no-confidence?
17. Why is India called a sovereign state?
18. Describe India as a republic nation.
19. Write a short note on Supreme Court's power of Judicial Review.
20. What do you mean by promulgation?

Subject: Business Studies

Class XI (2018-19)

Chapter – 1 (Nature and Purpose of Business)

&

Chapter – 2 (Forms of Business Organizations)

- Q1) If a person sells his/her domestic T. V. set at a profit, will it be considered as a business? Give reason.(1)
- Q2) Swati is the only owner of her restaurant. Name this form of business organization. (1)
- Q3) ABC Ltd. is planting trees on the roadside which objective it is to trying to achieve. (1)
- Q4) How many members must be there in a joint family to carry on Hindu Undivided Family Business? (1)
- Q5) Name a person who contributes capital, participates in the business but whose identity is not disclosed to outsiders? (1)
- Q6) Name the Act which governs the partnership and company form of business. (1)
- Q7) Name the two systems which governs the membership in Joint Hindu Family Business. (1)
- Q8) Give meaning of unlimited liability of members in partnership form of business. (1)
- Q9) If registration is optional, why do partnership firm willingly go through this legal formality and get themselves registered? Explain. (3)
- Q10) How will you identify that a particular company is a private company or a public company? Give two examples of each of Private Company and Public Company. (3)
- Q11) Mr. Aman wants to set up a Business Organization. He has two main expectations from the Business Organizations (i) Limited Liability and (ii) Continuity. What form of Business Organization is suitable to Mr. Aman? Give reason in support of your answer. (3)
- Q12) Why Commerce is considered as backbone of Industry and Trade? Explain. (3)
- Q13) Indu bought a readymade dress for Rs. 5000. Her friend liked the design of dress very much, so Indu sold the same dress to her friend for Rs. 5500 and made a profit of Rs. 500. After completing her studies Indu opened a shop of selling readymade dresses for girls.
- (a) Can transaction between Indu and her friend be termed as business?
- (b) State the features related to 'a'.
- (c) Can the sale of dresses on her shop be called as business? (3)
- Q14) The business assets of a firm are worth Rs. 2 lacs but the debt remain unpaid are worth Rs. 3 Lacs. What course of action can be creditors take in the following cases?
- (a) The organization is Sole Proprietorship Firm.
- (b) The organization is Partnership Firm with A and B, two partners sharing profit equally. (4)
- Q15) Can a minor be partner in a partnership firm? Discuss his status in the form of organization. (4)
- Q16) It is said to be an artificial person create by law, having a separate entity with perpetual succession and common seal? What is it? Elaborate the above highlighted features. (4)
- Q17) Rajeev, the owner of Pathways Constructions decided to start a campaign to create awareness among people for developing clean surroundings in their area. He formed a team of 10 members to list the different ways for cleaning the surroundings. To achieve the desired goal various activities were identified like:

- (a) Purchase of necessary items like dustbins, garbage bags, brooms etc;
- (b) Collection of garbage;
- (c) Disposal of garbage, etc.

After identification of different activities the work was allocated to different members.

Identify the values which the company wants to communicate to the society. (4)

Q18) Madhav is the sole owner of a shirt manufacturing factory. He took loan of Rs. 30 lac from Jain finance company for expansion of his business. In beginning business was running well but later on he started facing losses and due to continuous losses he was not able to repay the loan. After receiving many reminders from finance company, Madhav planned to close the business. He sold all his machines and other assets and collected Rs. 20 lac. He requested the finance company to settle the accounts by taking Rs. 20 lac. The finance company refused and plan to file a case against him in court. In court, Mr. Madhav gave the argument that he was sold all his business assets and loan was taken by him for business and not for personal use. So finance company must settle the account by taking Rs. 20 lac. The court did not agree with the argument of Madhav and gave the decision in favour of finance company and order Madhav to pay full loan amount by selling his personal asset.

- (a) Name the form of business carried by Madhav?
- (b) State the feature of Sole Proprietorship which is kept in mind by court while taking decision.
- (c) Is Madhav's argument of saying he and business are separate entity is correct. (5)

Q19) Name the three different forms of economic activities and differentiate between them on different basis. (5)

Q20) Farhan, a young man, wants to provide employment to the local people of his village. He decided to do the wholesale business of mobile phones made by the latest techniques. But so many questions began to crop up in his mind: how will the goods be brought from distant places, how will the finance be arranged and how will the information of his modern business be conveyed to the people? He consulted a business expert, Mr. Balram who gave him information on the auxiliary to trade which could solve his problem. Farhan understood what the expert told him. He employed 50 workers and started his business.

- (a) Which economic activity is Farhan going to do?
- (b) On which part of business was the information given to Farhan by the business expert?
- (c) If we add answer of (a) to the answer of (b) which part of business shall we have?
- (d) Explain the Auxiliary to Trade which may solve the problem of Farhan as suggested by business experts. (6)

Subject: Economics

Class XI (2018-19)

Chapters-:

Introduction to Microeconomics, Consumer's equilibrium with Utility Analysis, Introduction to Statistics, Organisation of Data, Mean, Median and Mode

Answer the Following questions-:

1. Write the meaning of statistics in plural and singular sense.
2. Explain the importance of statistics in economics.
3. Why do you want to study economics? Give reasons.
4. What is meant by frequency?
5. Define discrete and continuous variables with the help of example.
6. Make a frequency distribution using class intervals 100 – 110:

125 108 112 126 110 113 136 130 149 155 120 130 126 138 125
132 119 125 140 148 145 137 144 150 142 150 137 132 166 154

7. Students of XI obtained following marks in Economics. Classify in form of discrete and continuous series:

15 15 18 16 20 21 25 25 15 16 18 22 24 25 20
18 22 24 24 25 25 23 20 15 16 17 19 18 22 22

8. With the help of following data construct a frequency distribution with difference of 10 (Inclusive):

10 24 19 20 48 36 16 21 39 42 29 39 40 49 30
46 27 37 44 13 17 24 31 56 57 59 31 34 52 24

9. Calculate mean, median and mode of the following data:

Value	Below	Below	Below	Below	Below
	10	20	30	40	50
C.F.	3	10	20	26	30

10. Mean marks obtained by a student in his five subjects are 15 in english he secures 8 marks, in economics 12, in mathematics 18 and in commerce 9, Find out the marks he secured in statistics.
11. Microeconomics and Macroeconomics are same. Defend or refute.

12. Calculate Mode using grouping method-:

C. I.	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
Frequency	14	22	30	45	15	20	22	10	15

13. Why is production possibility curve known as transformation curve?
14. Large number of technical training institutions have been started by the government. State its economic value in the context of production possibilities frontier.
15. What will be the impact of Swacch India campaign on production possibility frontier?
16. Present the following data in inclusive series and then convert it into exclusive
22, 13, 36, 48, 12, 10, 8, 7, 54, 45, 66, 76, 45, 23, 22, 34, 54, 12, 10, 13, 14, 22, 14, 16, 17, 18, 20, 87, 67, 88, 87, 78, 77, 66, 34, 33, 32, 22, 23, 25, 66, 65, 64, 35, 64, 78, 79, 70, 12, 34.
17. What is an array? What is a variable? Explain its type.
18. Assuming that a consumer consumes only two goods, explain the conditions of consumer's equilibrium with the help of Utility Analysis.
19. Why is a production possibilities curve downward sloping? Explain
20. Why does the problem of 'what to produce' arise? Explain with the help of PPC.

Subject: Informatics Practices

Class XI (2018-19)

Chapters:

1. Hardware Concepts

2. Software Concepts & Productivity Tools

1. What are Input devices for PDAs, Smart Phones and Tablet PCs ?
2. What are various Biometric Devices?
3. Recognize the four categories of Output
4. How is compiler different from interpreter?
5. What are the differences between hardware, software and firmware?
6. Give examples of each system software and application software. Explain the function of each type.
7. What are the types of computers? How do they
8. Name the super computers developed in India.
9. What are the major strength and weaknesses of a computer?
10. Why is binary language often termed as machine language ? Why is machine language needed
11. What is MICR? Where it is mostly used?
12. What is the difference between OCR and OMR ?
13. What are the two categories of printers ? Which type of printer is more speedy
14. What is the difference between RAM and ROM?
15. What does a Bus mean?
16. What is Port? Name some communication ports.
17. Can you pick the one that offers maximum read speed along with maximum capacity? Memory sticks ProDuo, SD Card, MMC Plus, and Smart Media Card.
- 18: Write in ascending order:
TB,Byte,PB,KB,MB
19. What are various categories of software?
20. What is difference between Compiler and Interpreter?
21. What is firewall?
22. What is application software? Why are its types?
23. Define the following.
 - a. Spam b. Malware c. Phishing d. Firewall e. Digital Signature f. Digital Certificate
24. What is DBMS ? How it is useful
25. What is DTP Software ? Give an example of DTP Software.
26. Name the major functions of an Operating system ?
27. What is spreadsheet software?
28. _____ is a program made to replicate automatically.

Subject: Biology

Class XI (2018-19)

Chapters

Living World

Biological Classification

Cell the unit of life

Cell division

1. Biological classification is a dynamic and ever changing phenomenon with our understanding of life forms. Justify the statement taking any two examples.
2. Give a brief account of viruses with their structure and nature of genetic material. Name any two viral diseases of plants and animals.
3. A virus is considered as a living organism and an obligate parasite when inside a host cell. But virus is not classified along with bacteria or fungi. What are the characteristics of virus similar to living and non-living objects?
4. Cyanobacteria and heterotrophic bacteria have clubbed together in eubacteria of kingdom monera, even though the two are vastly different from each other. Is this grouping justified. If so why?
5. Give a brief account of the economic importance of the following.
 1. Fungi
 2. Algae
 3. Diatoms
 4. Cyanobacteria
6. What is bioluminescence? Name a bioluminescent protist.
7. Why are dinoflagellates, diatoms and euglenoids also called protist algae?
8. Differentiate between zygotic and gamete meiosis.
9. Name the fungus that:
 1. Is source of antibiotic penicillin
 2. Causes pulmonary disease aspergillus's
 3. Used as fermenting agent in bakery or doughs.
 4. Causes white rust in crucifers.
 5. Causes late blight of potato.
 6. Is edible and considered as delicacy.
 7. Used to study of biochemical genetics.
10. Compare and contrast the four classes of Fungi studied by you based on the nature of mycelium and sexual reproduction.

Bring out the differences the natural system and phylogenetic system of classification

Subject: Physical Education

Class XI (2018-19)

1. Select any game/sport of your choice (Table Tennis, Badminton & Kho Kho) write the following details in your practical copy:
 - a. History of the game/sport
 - b. Latest General Rules & regulations
 - c. Dimensions/ Measurement of play fields and specifications of sports equipment
 - d. Fundamental Skills of the game/sport
 - e. Related sports terminologies
 - f. Important tournaments
 - g. Sports Personalities
2. Draw a neat diagram of the field/court of your game/sport with all the dimensions.
3. Write about any 7 yogic asana and their steps by step performance along with the benefits of each. Paste good pictures of the asana.
4. Mention the administration of AAHPER youth fitness test including the purpose, equipments required procedure and scoring of all the test items. (Take the help from the text book).
5. Write about the techniques and measurements of the following track and field events:
 - a) Shot put b) Long jump c) 100 meters d) 200 meters e) 4*100 meter relay
6. Draw a layout of Standard track of 400 meters stating all the dimensions and markings as per the IAAF.

Subject: Painting

Class XI (2018-19)

1. Learn the notes given for July Monday Test.
2. Practical:
 - a. Make 4 still life in pencil shading.
 - b. Make 2 Landscapes in pencil shading.
 - c. Make 1 designing sheet or card in colour technique

SUBJECT: PSYCHOLOGY

CLASS: XI (2018-19)

PROJECT:

Chapter- Methods of Enquiry in Psychology

Conduct a survey of the after-school activities of 10 year olds and 16 year olds, taking a sample of 10 students in each. Find information about the time devoted by them in various activities, such as studying, playing, television viewing, hobbies, etc. Do you find any difference? What conclusions do you draw and what suggestions would you offer?

Note- use pie chart, table, etc to depict the collected data and draw conclusions.

QUESTIONS:

Chapter- What is Psychology?

1. How can you distinguish scientific psychology from the popular notions about the discipline of psychology.
2. What are the problems for which collaboration of psychologists with other disciplines can be fruitful? Take any two problems to explain.
3. Describe some of the areas of everyday life where understanding of psychology can be put to practice.
4. How can knowledge of the field of environmental psychology be used to promote environment friendly behaviour?
5. Differentiate between:
 - (a) A psychologist and A psychiatrist.
 - (b) A counselor and a Clinical Psychologist.