

**JKG INTERNATIONAL SCHOOL
HOLIDAY HOMEWORK 2019-20
CLASS XII**

ENGLISH CORE

1. Who did M.Hamel blame for the neglect of learning on the part of boys like Franz?
2. Why did M.Hamel write 'VIVE LA FRANCE' on the blackboard in large bold letters?
3. Explain the term "LINGUISTIC CHAUVINISM" in context of the chapter THE LAST LESSON ?
4. Do you think Saheb was happy working at Tea Stall? Answer giving reason.
5. Why could the bangle makers not organise themselves into a co-operative?
6. Savita a symbol of innocence and efficiency. Comment.
7. How did the tiger king celebrate his victory over the killing of 100th tiger.
8. Why was Maharaja Sunk in a bloom? Was he able to overpower it?
9. How does the 100th tiger take its final revenge upon the tiger king?
10. What kind of images has the poet used to signify her mother's ageing and decay?
11. The poet says all I did was smile, smile and smile. Explain.
12. How does Stephen Spender picture the condition of slum children?
13. How far do you agree with the statement "History is theirs whose language is the sun"?
14. How can powerful persons, governor, inspector visitor may contribute to improve the lot of slum children?
15. What is the significance of the parting words of the poet and her smile?
16. Complete the Evergreen test assignment -4 ,pg no.36 (comprehension passage) in practice paper?
17. Complete the test assignment 18 ,pg no.88 (note making passage) in practice paper?
18. Complete the complaint letter on pg. no 214 of your Evergreen practice paper.
19. Write an essay in 300 to 500 words on the topic "South Korea – my favorite destination" in an A4 size sheet?
20. Write an essay on the topic 'What measures should I take to combat climate change'?

ACCOUNTANCY

Accounting For Partnership Firms - Fundamental

- Q1. (i) Distinguish between “Fixed Capital” and “Fluctuating Capital”?
(ii) List the circumstances when fixed capital of a partner may change.
(iii) If the partners in a partnership firm want to charge interest on drawing although no provision for the same is made in the partnership deed, are they authorized to do so?
(iv) Define “Partnership”. What is a “Partnership Deed”?
(v) For a partnership firm is it compulsory to prepare a partnership deed?
(vi) List the items that may appear in the credit and debit side of a capital account, when the capital account of the partners is fixed or fluctuating.
(vii) Give any two rights acquired by a new partner admitted in a partnership firm.
viii) In the absence of a partnership deed, what are the rules relating to:
(a) Profit Sharing Ratio
(b) Interest on Partner’s Capitals
(c) Interest on Loan
(d) Salaries of partners
(e) Interest on partner’s drawings
- Q.2. X, Y and Z are partners in a business and their capitals are ` 40,000, ` 32,000 and ` 8,000 respectively. The partnership deed provides that:
(a) Z gets ` 4,000 as annual salary.
(b) Y gets commission to the extent of 10% of the net profits after charging such commission and partner’s salary.
(c) Interest on capital to be provided @5% per annum.
(d) Drawings of X and Y are `12,000 and ` 10,000.
(e) Z withdrew ` 8,000 in addition to his salary.
(f) Profits to be divided in the ratio of 2 : 1 : 1.
The profits for the year ending December 2013, without taking into account the above points, are ` 34,470.
Draw the Profit and Loss Appropriation Account and prepare the Capital Accounts when capital accounts are kept on fluctuating method.

Q.3. A, B and C are in partnership and on 1st April, 2013 their respective capitals were ` 40,000, ` 27,800 and ` 15,900 respectively. The partnership deed provides that B is to be paid a salary of ` 200 per month, and C is to be paid a commission of ` 2,440 payable before division of profits. Interest is allowed on capital at 5% per annum but is not to be charged on drawings. A provision of 5% of the profits is to be made for manager's commission Profits are to be shared 40 : 35 : 25 of the first ` 10,000, over that amount profits are to be shared equally. The profits for the year ended 31st March 2014 were ` 29,500 and the partners had withdrawn ` 8,000 each.
Prepare Profit and Loss Appropriation Account, Capital Accounts and Current Accounts of the partners.

Q.4. The net profits of a firm for the year ended 31st December 2013 were ` 30,000, which have been distributed equally among its three partners P, Q and R. It was discovered on 15th January 2014 that the under mentioned transactions were not taken into account:

- (a) Interest on Capital @ 5% per annum.
- (b) Interest on Drawings are P: ` 350, Q: ` 250 and R: ` 150.
- (c) Salary of ` 5,000 paid to P and ` 7,500 paid to Q.
- (d) Commission due to P on a special transaction is ` 3,000.
- (e) Profits were to be shared 3 : 1 : 1 after all the above adjustments. The capital account balances stood as follows:
P's Fixed Capital Account: ` 50,000
Q's Fixed Capital Account: ` 40,000 R's Fixed Capital Account: ` 30,000
Pass necessary journal entry(s) to rectify the above errors.

Q.5. A, B and C are sharing profits and losses in the ratio 2 : 2 : 1. After the distribution of profits for the year 2013, it is discovered that there are the following omissions:

- (a) Interest on capital is payable @ 5% per annum on the fixed capitals of A, B & C.

The fixed capital account balances stood as follows:

A's Fixed Capital Account: `

50,000

B's Fixed Capital Account: `

40,000

C's Fixed Capital Account: ` 30,000

- (b) Interest on Drawings is to be charged @ 5% p.a. Drawings of the partners are:

A's Drawings: ` 10,000

B's Drawings: ` 8,000

C's Drawings: ₹ 6,000

(c) Salary payable to C @ ₹ 500 per month.

Pass the journal entry(s) for the above adjustments.

Q.6. P, Q and R are partners in a partnership firm. The net profits for the year 2013 ₹ 30,000 had been distributed to P, Q and R in the ratio of 3 : 1 : 1. Later it is discovered

that Interest on Capital @5% per annum, Interest on drawing @5% per annum, Salary of ₹ 5,000 to P and Salary of ₹ 7,500 to Q, Commission due to P, ₹ 3,000 are omitted. The capital account balances of P, Q and R are ₹ 50,000, ₹ 40,000 and ₹

30,000

respectively as on 31st December 2013. P withdrew ₹ 2000 per month in the middle of every month, Q withdrew ₹ 4,000 at the end of every quarter and R withdrew ₹ 10,000 in the beginning of every half year. Pass necessary rectification entry(s).

Q.7. A, B, C and D are partners in a partnership firm. Their capital accounts stood as ₹ 60,000, ₹ 30,000, ₹

30,000 and ₹ 20,000 respectively on the 1st January 2013. They shared profits in the ratio of 5 : 3 : 2 : 2. D's share of profits (Excluding Interest on Capital) is guaranteed by the firm to be not less than ₹ 16,000 per annum. C's share of profits (Including Interest on Capital and Salary) is guaranteed by A at a minimum of ₹ 26,000 per annum. The profits for the year ended 31st December 2012 amounted to ₹ 91,000 before considering interest on capital @5% per annum and salary to C @ ₹ 1,000 per month which under the partnership deed are allowable.

Prepare the Profit and Loss Appropriation Account for the year ended 31st December 2013.

Valuation of Goodwill

Q.8. The average net profits expected in future by Ramlal Bhogilal & Co. are ₹ 30,000 per year. The average capital employed in the business by firm is ₹ 2,00,000. The normal rate of return on the capital employed in similar business is 10% Calculate goodwill of the firm by,

(a) Super Profit Method on the basis of two year purchase, and

(b) Capitalization Method.

Q.9. The average net profits expected in the future by ABC firm are ₹ 36,000 per year. The average

capital employed in the business by the firm is ₹ 2,00,000. The rate of interest expected from capital

invested in this class of business is 10%. The remuneration of the partners is estimated to be ₹ 6,000

per annum. Find out the value of goodwill on the basis of two years' purchase of super profits.

Q. 10. A partnership firm earned net profits during the last three years as follows:

<i>Year</i>	<i>New Profit</i>
2008	` 17,000
2009	20,000
2010	23,000

The capital investment in the firm throughout the above-mentioned period has been ` 80,000. Having regard to the risk involved, 15% is considered to be a fair return on the capital.

Calculate the value of goodwill on the basis of 2 years' purchase of average super profits earned during the above-mentioned three years.

Q.11. A firm earned net profits during the last five years as follows: I- ` 7,000, II- ` 6,500 , III- ` 8,000, IV- `

7,500 and V- ` 6,000. The capital investment of the firm is ` 40,000. A fair return on capital in the

market is 12%. Find out the value of goodwill of the business if it is based on three years' purchase of average super profits of the past five years.

Q.12. A firm earns a profit of ` 15,000 per year. In the same business a 10% return is generally expected.

The total assets of the firm are ` 1,70,000. The value of other liabilities is ` 60,000. Find out the value

of goodwill.

Q. 13. A and B are equal partners in a firm. Their capital show credit balances of ` 18000 and ` 12000 respectively. A new partner C is admitted with 1/5th share in the profits. He brings ` 14000 for his capital. Find the value of goodwill of the firm at the time of C's admission.

Q.14. Goodwill is to be valued at 3 years' purchase of five years' average profits. The profits for last five years of the firm were: 2005 ` 12,000; 2006 ` 15,000; 2007 ` 17,000; 2008 ` 16,000; 2009 ` 20,000. Calculate the amount of goodwill.

BUSINESS STUDIES (054)

1. Suraj is a small entrepreneur involved in the manufacturing of hair wax. He finds that cost of production of 100gm of hair wax is Rs.250 .He has decided to keep a margin of 15% as profit. Moreover, he has assessed that there is a free competition in this product segment. Identify the function of marketing being performed by Suraj.

2. Which concept of marketing suggest that the organization earn profit through volume of production?

3. “In an organisation employees are happy and satisfied, there is no chaos and the effect of management is noticeable.” Which characteristics of management is highlighted by this statement?

4. “A good understanding of environment by business managers enables them not only to identify and evaluate but also to react to the forces external to their firm.”In the light of the above statement explain any four points of importance of understanding business environment by a manager.

5. As the number of people making online purchases has increased manifolds, there is a growing concern about the disposal and management of packaging waste. Every item bought is delivered with excess packaging and sometimes even non-biodegradable materials are used.

In the any context of the above case:

a) Name the other two levels of packaging that the marketers may be using besides the immediate packing.

b) Describe briefly two points highlighting the functions of packaging.

6. Neelkamal promoted a company under the name ‘Leathero Pvt.Ltd.’ in the year 2000 to engage in the field of fashion leather bags and accessories and manufacture innovative designs for all moods and for every occasion. Since inception his company has been earning adequate revenues to cover costs. Its capital base, number of employees and production turnover has increased manifolds over the years and touching new heights. The rate of profitability of the business is also creditable. The workers also take pride and care in each and every bag item that leaves their workbench. This is because the employees of the company are happy and satisfied with their remuneration, working conditions,

promotion policy etc. The business decision are based not only on financial factors, but also on the social and environmental consequences. It also pursues initiatives related to quality management, environment preservation and social awareness.

Identify and explain the various types of objectives of management being fulfilled by 'Leathero Pvt. Ltd.' by quoting lines from the paragraph.

7. "A manager is continuously engaged in maintaining an orderly arrangement of his group efforts so that their actions move in the same direction and common purpose of the company can be achieved." Which process is referred here? Discuss the importance of this process in the management.

8. Davinder is a class twelfth commerce student in a reputed school in Punjab. Satinder is his elder brother who is doing his Masters in Hospital administration from Delhi after completing his B.Sc. course. During vacations when Satinder comes home, Davinder shows him the business studies project that he is preparing on the topic 'Principles of Management'. Satinder tells him that these principles are also a part of MBA course curriculum at the beginner's level as they form the core of management in practice. But he finds these principles different from those of pure science.

- (a) Outline the concept of principles of management.
- (b) Why does Satinder find the principles of management different from those of pure science?
- (c) Why do the principles of management form the core of management in practice? Explain by giving any four points highlighting the importance of principles of management.

9. Explain the features of demonetisation.

10. Raj is a middle level manager. He keeps all his subordinates under a lot of discipline. His subordinates however complain of wastage of time and efforts as nothing is being assigned in a proper way. Place and no proper schedule is made for working. Which principle of management is violated here?

11. Name the marketing function which is concerned with informing the customers about the firm's product.

12. H.tech Ltd. is a company producing IT services. The company's profits are enough for the survival and growth. The management of the company believes that a satisfied employee creates a satisfied customer, who in turn creates profits that lead to satisfied shareholders. So it pays competitive salaries and perks to its all employees. All the employees are happy working in the organisation because of personal growth and development.

The company has a strong sense of social responsibility. It has set up an Engineering College in which one third of the students are girls to whom the company gives 50% scholarship. Is the management of the company fulfilling the objectives? Justify your answer by giving reasons.

13. Naman, a manager of Z Ltd. always takes into account the changes taking place in business environment while determining plans. He accepts changes readily and gives useful suggestions to his superior, which results in reduction of costs, as a result company's profits increase. Naman enjoys cordial relations with his co-workers and makes plans in consultation with his team to achieve organisational goals.

i) Which feature of management is highlighted in above lines?

ii) Identify and state any one principle of management followed by Z Ltd.

Give any two benefits which Z Ltd. get by taking into account the changes taking place in business environment by quoting the lines.

14. My Car is a cab company running petrol and diesel taxis in Delhi & NCR. To control the pollution, a rule was passed in the year 1998 to convert all commercial vehicles into CNG. Soon, after the ruling the company sold off its diesel cars and converted petrol cars into CNG. Delhi Govt. introduced the scheme 'odd-even' in January'2016. Later in the year, Supreme Court passed an order that only CNG commercial vehicles could ply in Delhi and NCR. The company started earning huge profits while competitors ran out of business.

(a) Identify and state the dimension of business environment discussed above.

(b) State any 2 reasons why the profits of the company surged.

15. Amandeep is a distributor of tea to far off places. He has opened a company by the name of 'Mehak Tea' which deals in tea selling. He has divided his tea into three categories: Green, Black and Red. His friend Shobhit, on the other hand, is running a mobile manufacturing company. His company produces mobiles strictly according to the pre-determined specifications. The mobiles of each variety are of same size, look and performance.

In the above case, which function of marketing has been highlighted?

16. What will be impact of demonetisation on real state and tax collection?

17. Suggest any three means which indicate managerial response to changes in business environment.

18. PRACTICE the Case Studies/HOTS questions of Units 1, 2, 3 and 11 given at the back of the chapters.

19. Pakka employment is a company which takes care of the fact that the confidence of the employees always be at its peak. For this reason they give surety to their employees for a minimum fixed period of time. Which principle of management is highlighted here?

20. PROJECT WORK on any one of the following topics as per the instructions given in the class :

- (a) Elements of business environment
- (b) Principles of management
- (c) Stock exchange
- (d) Marketing Management

ECONOMICS

Q1 What is meant by factor income to abroad? State its components.

Q2 explain the function of RBI as “lender of last resort”.

Q3 giving reason explain how should the following be treated in estimating national income.

- a) Payment of bonus by a firm
- b) National debt interest
- c) Interest paid by banks on deposits by individuals

Q4 calculate NVAmp :-

- a) Output sold (units) 100
- b) Price per unit of output 20
- c) Excise 1600
- d) Import duty 400
- e) Net change in stock -500
- f) Depreciation 1000
- g) Intermediate cost 8000

Q5 define externalities, give an example of negative externality , what is its impact on welfare?

Q6 distinguish between consumer goods and capital goods which of these are final goods

Q7 difference between repo rate and reverse repo rate .

Q8 “machine” purchased is always a final good . do you agree ? give reasons for your answer.

Q9 explain the concept of normal resident .

Q10 what is meant by net export & how it is differ from NFIA?

Q11 write the pros and cons of demonetization.

Q12 what are the main causes of educational unemployment in urban area of India ?

Q13 write a short note on :-

- a) Mudra Yojna
- b) Skill India

Q14 make a list of different slab of GST.

Q15 define operating surplus with its components.

Q16 the vegetables grown in kitchen gardening are final goods , yet their value is not considered in estimating national income . why?

Q17 why should the aggregate final expenditure of an economy be equal to the aggregate factor payments? Explain

Q 18 define :- GDP deflator, mixed income , depreciation

Q19 calculate the value of money multiplier and total deposits created if initial deposit is of 500 crores and LRR is 10 %

Q20 calculate the legal reserve requirements if initial deposits of rs 200 crore lead to creation of total deposits of rs 1600 crore.

MATHEMATICS

1. Revise Chapter 2, 3, 4 and 5 from NCERT Text Book and exemplar problem.
2. Solve Board Questions from 2012-2019 related to chapters 2, 3, 4 and 5

COMMERCIAL ART

Note: Write all answers in a separate notebook and learn well.

Q1. Origin and development of Rajasthani School of miniature painting.

Q2. Origin and development of Pahari School of miniature painting. Give the name of all the Sub Schools of Rajasthani School of Arts.

Q3. The main features of Rajasthani School of Miniature painting.

Describe the Maru Ragini Painting.

Q4. Main features of Paharai school. Write a short note on Chaugan players Painting.

Q5. What is the meaning of Miniature Painting

Describe the Raja Aniruddha Singh Heera Painting

Q6. Describe the following paintings of Rajasthani School:

- (i) Maru Ragini
- (ii) Aniruddha Singh Hara
- (iii) Chaugan Player
- (iv) Radha Bani Thani
- (v) Bharat meets Ram at Chitrakoot
- (vi) Nand Yashoda Krishna with Kingsman

Q7. Describe the painting Krishna with Gopis of Paha

PRACTICAL WORK

Q1. Make Educational poster on the following themes in your sketch book Swachh Bharat/ Save Environment/ Save Girl child.

Q2. Make Composition in black and white on following theme :

- (i) Market Scene/ Mall Scene
- (ii) Railway Station/ Bus Stop Scene
- (iii) Story Illustration
- (iv) Folk Art
- (v) Object Drawing

PHYSICAL EDUCATION

1. Physical fitness test(AAPHER).

2. Any two events of athletics.

3. Proficiency in games/sports choice from the given list:-

Basketball, Volleyball, Hockey, Football, kho-kho, Handball, Cricket

4. Details the features of any one of the following :-

- a. History of the game
- b. Fundamental skills
- c. Important Tournaments and Venues
- d. Terminologies
- e. Sports personalities

fgUnh

- iz- 1-tgk; ij nkuk jgrs gSa] ogha uknu Hkh gksrs gSa& dfo us ,slk D;ksa dgk gksxk\
iz- 2-“khry ok.kh esa vx ds gksus dk D;k vfHkizk; gS\
iz- 3-lcls rst ckSNkjsa x;h] Hkknksa x;k ds ckn izd`fr esa tks ifjorZu dfo us fn[kk;k
gS]mldk o.kZu vius
“kCnksa esa djsaA
iz- 4- tUe ls gh os vius lkFk ykrs gS] dkl&dkl ds ckjs esa lkspsa fd dkl ls cPpksa dk
D;k laca/k cu ldrk
gS\
iz- 5-HkfDru viuk okLrfod uke yxsxksa ls D;ksa Nqikrh Fkh\ HkfDr uke fdls vkSj
D;ksa fn;k gksxk\
iz- 6-HkfDru ds vk tkus ls egknsoh vf/kd nsgkrh dSls gks xbZ\
iz- 7- cktkj dk tknw p<+us vkSj mjrns ij euq’; ij D;k&D;k vlj iM+rk gS\
iz- 8- cktkj esa Hkxr th ds O;fDrRo dk dkSu&lk l”kDr igyw mHkj dj vkrk gS\ D;k vkidh utj
esa mudk vkpj.k
lekt esa “kkafr&LFkkfir djus esa en~nxkj gks ldrk gS\
iz- 9- ^ctkt:iu* ls D;k rRi;Z gS & fdl izdkj ds O;fDr cktkj dks lkFkZdrk iznku djrs gSa
vFkok cktkj dh
lkFkZdrk fdlesa gS\
iz- 10- thth us banj lsuk ij ikuh Qsads tkus dks fdl rjg lgh Bgjk;k\
iz- 11- yxsxksa us yM+dksa dh Vksyh dks esa<d&eaMyh uke fdl vk/kkj ij fn;k\ ;g Vksyh
vius vkidks banj lsuk dg dj
D;ksa cqykrh Fkh\
iz- 12- banj lsuk lcls igys xaxk eS;k dh t; D;ksa cksyrh gS\ ufn;ksa dk Hkkjrh; lkekftd
lkaLd`frd ifjos”k esa D;k egRo gS\
iz- 13- HkfDru vPNh gS] ;g dguk dfBu gksxk] D;ksafd mlesa nqxqZ.kksa dk vHkko ugha
ysf[kdk us ,slk D;ksa dgk gksxk\
iz- 14- cPps fdl ckr dh vk”kk ls uhM+ksa ls >k;d jgs gksaxs\
iz- 15- vkRe ifjp; dfork dk lkj fy[kksA
iz- 16- ;”kks/kj ckcw dh iRuh le; lkFk <y ldu esa lQy gksrh gS ysfdu ;”kks/kj ckcw vlQy
jgrs gSaA ,slk D;ksa\
iz- 17- ;”kks/kj ckcw dh dgkuh dks fn”kk nsus esa fd”kunk dh egRoiw.kZ Hkxfedk jgh
gSA vkids thou dks fn”kk nsus esa

fdldk egRoiw.kZ ;ksxnku jgk vkSj dSlS\
 iz- 18- flYoj cSfMax dgkuh ds vk/kkj ij ;"kks/kj ckcw ds varn~oZn~o dks Li'V dhft,A
 iz- 19- vius ?kj vkSj folky; ds vkl&ikl gks jgs mu cnykoksa ds ckjs esa fy[ksa tks
 lqfo/kktud vkSj vk/kqfud gksrs gq,
 Hkh cqtqxksZa dks vPNs ugha yxrs gSaA vPNk u yxus ds D;k dkj.k gksaxs\
 iz- 20- vius ?kj esa viuh ^^flYoj cSfMax** ds vk;kstu esa Hkh ;"kks/kj ckcw dks vusd ckrs
 ^legkm baizkij* yx jgh FkhA
 ,slk D;ksa\
 iz- 21- fuEufyf[kr esa ls fdls vki dgkuh dh ewy laosnuk dgsaxs vkSj D;ksa\
 $\frac{1}{4}d\frac{1}{2}$ gkf"k, ij /kdsys tkrs ekuoh; ewY;A
 $\frac{1}{4}[k\frac{1}{2}$ ih<+h dk varjkyA
 $\frac{1}{4}x\frac{1}{2}$ ik"pkR; laLd`fr dk izHkkoA

CHEMISTRY

- Do all ques (exercise and intext) of chapter 1, 2, 3, 4 & 15 from NCERT textbook.
- Do all previous year board ques (year 2014-2019) of chapter 1, 2, 3, 4 & 15.
- Prepare investigatory project file for AISSCE-2020 under the title of:
 - Certificate • Acknowledgement • Introduction • Details of the project(research related to the topic) • Experiment (detailed manner including procedure) • Observations & Analysis • Result • Bibliography (mention the links)
- Practice for the following topics in chemistry notebook:
 - Nomenclature (minimum 20 organic compounds)
 - Mechanisms done in organic chemistry
 - Minimum 15 pairs of compounds for distinguishing between covering all the chemical tests done(Heisenberg, lucas, carbylamine, iodoform, 2,4-DNP , neutral FeCl₃ test, bromine water test, silver nitrate test etc)
 - Name reactions(all)
 - Word problems(minimum 10)
- Ques for practice:
 - 0.5g of KCl was dissolved in 100g of water and the solution originally at 20 °C froze at -0.24 °C. Calculate the percentage ionization of the salt. K_f for water is 1.86 K Kg mol⁻¹.

- ii) the decomposition of a compound is found to follow first order rate law. If it takes 15 minutes for 20% of original reactant to react, calculate i) the specific rate constant (ii) the time at which 10% of the original material remains unreacted.
- iii) Write the difference between order and molecularity of reaction.
- iv) A first order reaction takes 69.3 min for 50% completion. Set up an equation for determining the time needed for 80% completion.
- v) For what concentration of $\text{Ag}^+(\text{aq})$ will the emf of given cell be zero at 25°C if the concentration of $\text{Cu(s)} \mid \text{Cu}^{2+}(0.1\text{M}) \parallel \text{Ag}^+(\text{aq}) \mid \text{Ag(s)}$?
Given. $E^\circ_{\text{Ag}^+/\text{Ag}} = 0.80\text{V}$; $E^\circ_{\text{Cu}^{2+}/\text{Cu}} = 0.34\text{V}$.
- vi) Explain the effect of temperature on the extent of physical and chemical adsorption.
- vii) Distinguish between multimolecular, macromolecular and associated colloids with the help of one example of each.
- viii) Find the solubility product of a saturated solution of Ag_2CrO_4 in water at 298K if the emf of the cell $\text{Ag}/\text{Ag}^+ (\text{saturated } \text{Ag}_2\text{CrO}_4) \parallel \text{Ag}^+(0.1\text{M})/\text{Ag}$ is 0.164 V at 298K .

BIOLOGY

- **Prepare a project file on allotted topics**
- **Learn Chapters 1,2,3,4 for Assessment-1**
- **Answer the following questions in Biology notebook.**
 1. Name the product of fertilisation that forms the kernel of coconut. How does kernel differ from coconut water?
 2. Write the function of the tassels of corn cob.
 3. Write the difference between Cu T and LNG-20
 4. Why are some seeds referred to as apomictic? mention one advantage & disadvantage to a farmer who uses them.
 5. A) How does cleistogamy ensure autogamy? State one advantage & one disadvantage of cleistogamy to the plant.
 6. How does megaspore mother cell develop into 7 celled 8 nucleate embryo sac in an angiosperm? Draw a labelled diagram of embryo sac.
 7. List the changes that Primary Oocyte undergoes in the tertiary follicle stage in the ovary.

8. What is seminal plasma? What are its components?
9. Draw a labelled diagram of the embryonic stage that gets implanted into the human uterus. State the functions of the two parts labelled.
10. Describe the events of spermatogenesis With the help of schematic representation. Write two differences between spermatogenesis & Oogenesis.
11. What are the ART practiced to help infertile couples? Describe any three techniques.
12. Draw a transverse sectional view of an apple and label the following parts along with their technical names
A-edible part
B-encloses the embryo
C-forms the fruit wall
13. Describe the process of megasporogenesis up to fully developed embryo sac formation in an angiosperm
14. State the role of oxytocin in parturition. What trigger it release from the pituitary?
15. A single pea plant in your kitchen garden produces pod with viable seeds, but the individual Papaya plant does not. explain
16. The cell division involved in gamete formation is not the same type in different organisms. justify.
17. When and where do chorionic villi appear in humans? State their functions.
18. Describe the role of pituitary hormones during the menstrual cycle in human females.
19. Give reason why groundnut seeds are exalbuminous and castor seeds are albuminous
20. What do contraceptive pills contain & how do they act as contraceptives? What schedule should be followed for taking these pills?

POLITICAL SCIENCE

Write and learn the given questions.

Ch-1

1. What do you mean by cold war? Write its consequences?
2. Why did super powers have military alliances with smaller countries ?
3. Write a note on New International Economic order.
4. NAM has become irrelevant today. Give reasons to support your answer.

Ch-2

5. What was soviet system? Write its features.
6. Describe the reasons for the collapse of soviet union.
7. Describe the consequences of the collapse of soviet union.
8. What was shock-therapy? Write its consequences .

Ch-3

9. Discuss Hegemony as hard, structural & soft power with reference to the position of the USA in the world politics.
10. What are the constraints on American hegemony today ? Describe them.
11. Evaluate India's changing relationship with U.S.A.

12. Analyse the role of USA on attack on Iraq after the attack on world centre on 9'Sept 2001.

Ch-4

13. Describe the significant characteristics of ASEAN.
14. What are the objectives of establishing regional organisation ?
15. Briefly outline the attempts that led to the formalitian of the european union.
16. What makes the European union a highly influential regional organisation ?

Ch-5

17. Describe the factor responsible for Pakistan's failure in building a stable democracy.
18. Mention two areas each of caoperation and disagreement between India & Pakistan.
19. Describe the limitation of SAARC.
20. Describe the recent agreements between India & Pakistan.

Also collect the complete information and pictures of 2019 general elections through various surveys, exit polls, news articles, editorials etc.(from news papers)

HISTORY

1. What was unique about pots made of Faience?
2. Mention the extent of the Harappan civilisation/culture?
3. Mention the characteristic features of domestic architecture at Mohenjodaro.
4. How the seals of Harappan culture helped in reconstructing the religious beliefs?
5. What is the Harappan legacy?
6. "Harappan Script is an enigmatic script". Discuss.
7. How is the lower town different from the Citadel?
8. Which incident brought change in Ashoka, the great and why?
9. Discuss the importance of the Mauryan Empire.
10. Why did rulers make arrangements for Irrigation?
11. What were the rules of marriage during the period (600 BCE – 600 CE)
12. What was the Varna System? What were the ideal occupations for each Varna?
13. How did the four Varnas originated?
14. What was the impact of Buddhism on Indian literature and education.
15. Why are Buddhism and Jainism considered as religious movements.
16. Mention the responsible causes for the rise of Jainism and Buddhism.

17. Why did some passengers carry arms when they travelled?
18. What do you mean by “Antyaja”
19. Which valuable interesting detail “Rihla” provides us.
20. Bernier highlighted the practice of Sati. Was he justified in doing so?

IP

A programmer is required to develop a student record. The school offers two different streams, medical and non-medical, with different grading criteria.

The following is the data entry screen used to calculate percentage and grade.

Student Record

First Term Marks :

Second Term Marks :

Stream

☐ Medical

☐ Non-Medical

Percentage :

Grade :

Calculate Percentage

Calculate Grade

Clear

Exit

- (1) Write the code to disable the txtPercentage and the txtGrade text fields.
- (2) Write the code for the cmdClear button to clear all the text fields.

(3) Write the code for the cmdCalcPerc button to calculate the percentage to display in text field txtPercentage, after finding the total marks of first term and second term (assuming that both marks are out of 100).

(4) Write the code for the cmdCalcGrade button to calculate the grade to display in text field txtGrade, depending on the stream selected according to the criteria in the following table:

Stream	Percentage	Grade
Medical	≥ 80	A
	60 – 80	B
	< 60	C
Non Medical	≥ 75	A
	50 – 75	B
	< 50	C

PHYSICS

1. What happens to the power dissipation if the value of electric current passing through a conductor of constant resistance is halved
2. Uniform wire of resistance 2 ohm is cut into two equal parts. These parts are now connected in parallel. What will be the resistance of the combination?
3. two wires one of aluminium and the other of copper have equal length and equal resistances. Which one of these wires will be thicker?
4. If potential difference V applied across a conductor is increased to $2V$, how will the drift velocity of electrons change?
5. Two wires A and B of same metal, have the same area of cross section and have their lengths in the ratio 2:1. What will be the ratio of currents flowing through them respectively when the same potential difference is applied across length of each of them
6. three identical resistors R_1 R_2 and R_3 are connected to a battery as shown in figure what will be the ratio of voltages across R_1 and R_3
7. Two identical cells of EMF 1.5 volt each are joined in parallel providing supply to an external circuit consisting of two resistors of 13 ohm each are joined in parallel. A very

high resistance voltmeter reads the terminal voltage of cells to 1.4V. Find the internal resistance of each cell.

8. A cell of emf 4 volt and internal resistance 0.5 ohm is connected across a load of resistance
(i) 7.5 ohm (ii) 11.5 ohm. Calculate (i) the ratio of the differences in the EMF of the cell and potential drop across the load and (ii) ratio of the currents in the two cases.
9. You are given an 8ohm resistor. What length of constantan wire of resistance 120 ohm/m should be joined in parallel with it to get a value of 6 ohms ?
10. Two nichrome wires connected in series with the battery. The length of nichrome wires are in the ratio 1:2 whereas the resistances are in the ratio 2:1. Find the value of the following:
(i) ratio of the diameters
(ii) ratio of the drift velocity of electrons in them.
11. The EMF of a cell measured using a potentiometer is found to be 1.5 V. An accurate voltmeter connected across the terminals of the cell is 1.4 volt. Explain the discrepancy and calculate the ratio of the resistance of the voltmeter to the internal resistance of the cell.
12. A silver wire has a resistance of 2.1 ohm at 27.5 degree centigrade and a resistance of 2.7 ohms at hundred degree centigrade. Determine the temperature coefficient of resistivity of silver.
13. Derive the expression for force per unit length between two long straight parallel current carrying conductors and define one ampere
14. A long straight wire of circular cross section of radius 'a' carries a current 'I'. The current is uniformly distributed across the cross-section. Apply ampere's circuital law to calculate the magnetic field at a point 'r' in the region for
(i) $r < a$ (ii) $r > a$
15. Draw a labelled diagram of moving coil galvanometer and explain its working. What is the function of radial magnetic field inside the coil
16. How much work is required in turning an electric dipole of dipole moment 'p' from its position of stable equilibrium to its position of unstable equilibrium in a uniform electrostatic field E.
17. What should be the charge on a sphere of radius 2cm so that when it is brought in contact with another sphere of radius 4 cm carrying a charge of 10uC there is no net transfer of charge between the spheres.
18. There is a sphere of radius 20 cm. What charge should be given to the sphere so that it acquires a surface charge density of $3C/m^2$

19. Derive the expression for energy stored in a parallel plate capacitor with air as a medium between its plates. Air is now replaced by a dielectric medium of dielectric constant k . How does it change the total energy of the capacitor if
- (i) capacitor is connected to the battery
 - (ii) the capacitor is disconnected from the battery ?
20. (i) Define electric flux. Write its SI units.
- (ii) Using Gauss law, prove that electric field at a point due to a uniformly charged infinite plane sheet is independent of the distance from it