

SAINIK SCHOOL CHITTORGARH

SUMMER VACATION HOLIDAY HOMEWORK

BIOLOGY

CLASS & SECTION: XII B

SUBJECT TEACHER NAME: Mr MANJIT SINGH

INSTRUCTIONS: PLEASE PREPARE A SEPARATE NOTEBOOK FOR THE HOME ASSIGNMENT

ASSIGNMENT

Chapter 1: Sexual Reproduction in Flowering Plants

1. Angiosperms bearing unisexual flowers are said to be either monoecious or dioecious. Explain with the help of one example each. (All India 2016)

2. Name the parts of the flower which the tassels of corn cob represent. (All India 2014)

3. Draw a diagram of a mature microspore of an angiosperm. Label its cellular components only. (Foreign 2014)

OR

Draw a labelled diagram of a mature pollen grain. (Delhi 2013C)

4. State the function of filiform apparatus found in mature embryo sac of an angiosperm. (Foreign 2014)

5. Give an example of a plant which came into India as a contaminant and is a cause of pollen allergy. (All India 2014)

6. A bilobed, dithecous anther has 100 microspore mother cells per microsporangium. How many male gametophytes this anther can produce? (Delhi 2010)

7. An anther with malfunctioning tapetum often fails to produce viable male gametophytes. Give one reason. (Delhi 2010)

OR

Write the function of tapetum in anthers. (Delhi 2012)

8. A pollen grain in angiosperm at the time of dehiscence from an anther could be 2-celled or 3-celled. Explain, how are the cells placed within the pollen grain when shed at a 2-celled stage? (All India 2017)

9. A mature embryo sac in a flowering plant may possess 7-cells, but 8-nuclei. Explain with the help of a diagram only. (Delhi 2017)

10. Gynoecium of a flower may be apocarpous or syncarpous. Explain with the help of an example each. (Delhi 2016)

11. Draw a diagram of a section of a megasporangium of an angiosperm and label funiculus, micropyle, embryo sac and nucellus. (All India 2016)

12. Differentiate between the two cells enclosed in a mature male gametophyte of an angiosperm. 13. Name all the haploid cells present in an unfertilised mature embryo sac of a flowering plant. Write the total number of cells in it. (All India 2013)

OR

How many haploid cells are present in mature female gametophyte of a flowering plant? Name them. (Delhi 2013C)

14. Explain the function of germ pores. (All India 2012)

15. (i) Name the organic material exine of the pollen grain is made up of. How is this material advantageous to pollen grain?

- (ii) Still it is observed that it does not form a continuous layer around the pollen grain. Give reason.
(iii) How are 'pollen banks' useful? (All India 2016C)
16 Write one advantage and one disadvantage of cleistogamy to flowering plants. (2018C)
17. Differentiate between xenogamy and geitonogamy. (Delhi 2014C)
18. In angiosperms, zygote is diploid, while primary endosperm cell is triploid. Explain. (All India 2013)

OR

Mention the reasons for difference in ploidy of zygote and primary endosperm nucleus in an angiosperm. (Delhi 2010)

19. Why should a bisexual flower be emasculated and bagged prior to artificial pollination? (Foreign 2010)

OR

Why does a breeder need to emasculate a bisexual flower? Mention a condition in a flower where emasculation is not necessary. (Delhi 2011)

- (ii) Write the functions of the following

20. Flowering plants have developed many devices to discourage self-pollination and to encourage cross-pollination. Explain three such devices. Delhi 2016C

OR

Why do hermaphrodite angiosperms develop outbreeding devices? Explain any two such devices with the help of examples. (All India 2015)

OR

Make a list of any three outbreeding devices that flowering plants have developed and explain how they help to encourage cross-pollination. (All India 2014)

21. (i) Write the characteristic features of anther, pollen and stigma of wind pollinated flowers.

(ii) How do flowers reward their insect pollinator? Explain. (All India 2010)

22. The meiocyte of rice has 24 chromosomes. Write the number of chromosomes in its endosperm. (All India 2013)

23. Banana is a true fruit but is also a parthenocarpic fruit. Give reason. (Foreign 2010C)

OR

Why is banana referred to as a parthenocarpic fruit? (All India 2013)

OR

Why is banana considered a good example of parthenocarpy? (All India 2012)

24. Why is apple referred to as a false fruit? (All India 2010C)

25. Name the mechanism responsible for the formation of seed without fertilisation in angiosperms. Give an example of a species of flowering plants with such seed formation. (Delhi 2010)

Chapter 2 : Human Reproduction

1. Why are human testes located outside the abdominal cavity? Name the pouch in which they are present. (All India 2014)

2. Write the location and functions of following in human testes

- (i) Sertoli cells

(ii) Leydig cells (All India 2014)

OR

Name the cells that nourish the germ cells in the testes. Where are these cells located in the testes? (All India 2013C)

3. Write the function of the seminal vesicle. (Delhi 2012)

4. List the different parts of human oviduct through which the ovum travels till it meets the sperm for fertilisation. (Delhi 2014C)

5. Name and explain the role of inner and middle walls of human uterus. (Delhi 2014)

Answer:

6. Draw a labelled diagram of reproductive system in a human female. (All India 2011)

7. When do the oogenesis and the spermatogenesis initiate in human females and males,

respectively? (Delhi 2012).

8. Mention the differences between spermiogenesis and spermiation. (Delhi 2012)

9. Where is acrosome present in humans? Write its function. (All India 2012)

10. List the changes the primary oocyte undergoes in the tertiary follicular stage in human embryo. (Foreign 2011)

11. Draw a sectional view of human ovary showing the different stages of developing follicles, corpus luteum and ovulation. (Delhi 2019)

OR

(i) Draw a sectional view of human ovary and label the following parts

(a) Primary follicle

(b) Secondary oocyte

(c) Graafian follicle

(d) Corpus luteum

(ii) Name the hormones influencing follicular development of corpus luteum. (All India 2019)

12. Explain the role of pituitary and sex hormones in the process of spermatogenesis. (All India 2015C)

OR

Spermatogenesis in human males is a hormone regulated process. Justify. (Delhi 2014)

OR

Explain the hormonal regulation of the process of spermatogenesis in humans. (All India 2013)

13.

What happens to corpus luteum in human female if the ovum is (i) fertilised, (ii) not fertilised? (Delhi 2015)

OR

Mention the fate of corpus luteum and its effect on the uterus in the absence of fertilisation of the ovum in human female. (Foreign 2010)

14.

Draw a diagram of a mature human sperm. Label any three parts and write their functions.

OR

Draw a labelled diagram of a human sperm. (Foreign 2015, 2011)

OR

Draw a diagram of human sperm. Label only those parts along with their functions that assist the sperm to reach and gain entry into the female gamete. Foreign 2014

15. Write the effect of high concentrations of LH on a mature Graafian follicle. (All India 2014)

16. Differentiate between menarche and menopause. (All India 2010)

17. How and at what stage of menstrual cycle is corpus luteum formed in human females? When does it regress? (Delhi 2010C)

18. (i) How many primary follicles are left in each ovary in a human female at puberty?

(ii) Draw a sectional view of the ovary showing the different follicular stages of a human female in her preovulatory phase of menstrual cycle. (Outside Delhi 2016C)

19. Explain the events in a normal woman during her menstrual cycle on the following days (Delhi 2015C)

(i) Ovarian event from 13-15 days.

(ii) Ovarian hormones level from 16-23 days.

(iii) Uterine events from 24-29 days.

20. Explain the hormonal control of spermatogenesis in humans. (Foreign 2014)

21. Explain the steps in the formation of an ovum from oogonium in humans. (All India 2013)

22. (i) Explain menstrual cycle in human females.

(ii) How can the scientific understanding of the menstrual cycle of human females help as a contraceptive measure? (2018)

23. (i) Arrange the following hormones in the sequence of their secretion in a pregnant woman. hCG,

LH, FSH, Relaxin

(ii) Mention their source and the function they perform. (Delhi 2017)

24. How is the entry of only one sperm ensured into an ovum during fertilisation in humans? (All India 2012).

25. Why is breastfeeding recommended during the initial period of an infant's growth? Give reasons. (Delhi 2016)

OR

(i) Why is mother's milk considered very essential for the healthy growth of infants?

(ii) What is the milk called that is produced in the initial days of lactation? (All India 2016)

Chapter 3 : Reproductive Health

1. Our government has intentionally imposed strict conditions for MTP in our country. Justify giving a reason. (Delhi 2017)

2. Name an IUD that you would recommend to promote the cervix hostility to sperms. (Delhi 2014C)

3. State one reason, why breastfeeding the baby acts as a natural contraceptive for the mother. (Delhi 2014C)

4. Mention one positive and one negative application of amniocentesis. (Delhi 2010)

5. Why is tubectomy considered a contraceptive method? (Foreign 2010)

6. Mention the problems that are taken care of by Reproduction and Child Healthcare Programme. (All India 2016)

7. What is amniocentesis? How is it misused? (Delhi 2014C)

OR

Why there is a statutory ban on amniocentesis? Why is this technique so named? (Delhi 2012C)

OR

What is amniocentesis? Why has the government imposed a statutory ban inspite of its importance in medical field? (Foreign 2010)

8. What do oral pills contain and how do they act as effective contraceptives? (Delhi 2014C)

9. Why is Cu-T considered a good contraceptive device to space children? (Delhi 2011)

10. Name an oral pill used as a contraceptive by human females. Explain, how does it prevent pregnancy? (Delhi 2011)

OR

Why is Saheli a well-accepted contraceptive pill? (Foreign 2010)

11. Describe the lactational amenorrhea method of birth control. (All India 2011)

12. At the time of Independence, the population of India was 350 million, which exploded to over 1 billion by May 2000. List any two reasons for this rise in population and any two steps taken by the government to check this population explosion. (Foreign 2011)

13. How do copper and hormone releasing IUDs act as contraceptives? Explain. (All India 2010)

14. (i) List any four characteristics of an ideal contraceptive.

(ii) Name two intrauterine contraceptive devices that affect the motility of sperms. (All India 2016)

15. Name two hormones that are constituents of contraceptive pills. Why do they have high and effective contraceptive value? Name a commonly prescribed non-steroidal oral pill. (All India 2014)

16. If implementation of better techniques and new strategies are required to provide more efficient care and assistance to people, then why is there a statutory ban on amniocentesis? Write the use of this technique and give reason to justify the ban. (All India 2014)

17.A woman has certain queries as listed below, before starting with contraceptive pills. Answer them.

(i) What do contraceptive pills contain and how do they act as contraceptives?

(ii) What schedule should be followed for taking these pills? (Delhi 2014)

18.(i) Name any two copper releasing IUDs.

(ii) Explain, how do they act as effective contraceptives in human females. (All India 2014)

19.Name and explain the surgical method advised to human males and females as a mean of birth control. Mention its one advantage and one disadvantage. (Foreign 2014)

20.How do 'implants' act as an effective method of contraception in human females? Mention its one advantage over contraceptive pills. (Delhi 2012)

SAINIK SCHOOL CHITTORGARH
SUMMER VACATION HOLIDAY HOMEWORK

INFORMATION

SUBJECT NAME: CHEMISTRY

CLASS & SECTION: XII A & B

SUBJECT TEACHER NAME: TONY ABRAHAM

INSTRUCTIONS:

1. Attempt all the questions
2. Draw diagrams and write equations where necessary
3. Prepare a separate homework note book for chemistry

ASSIGNMENT

UNIT 1

1. If we place the blood cells in a solution containing less than 0.9% NaCl. It will ----- Explain
2. The values of Van't Hoff factor 'i' for KNO_3 , NaCl and K_2SO_4 will be -----, ----- and ----- Give reason
3. The value of Van't Hoff factor for ethanoic acid in benzene is ----- Why?
4. Which out of 1M NaOH and 1M Na_2SO_4 will have a higher boiling point? Why?
5. In comparison to a 0.01 molar glucose, the depression in freezing point of 0.01M MgCl_2 will be ----- times.
6. Why some solutions show abnormal molecular mass? Explain with the help of suitable examples.
7. The solute particles undergo ----- when $i = 0.3$
8. How will you define molal elevation constant K_b and molal depression constant K_f ?
9. A solution is prepared by dissolving 1.25 g of oil of winter green (methyl salicylate) in 99 g of benzene has a boiling point of 80.31°C . Determine the molar mass of this compound if the boiling point of pure benzene is 80.10°C and K_b for benzene is $2.53^\circ \text{C Kg mol}^{-1}$.
10. What type of mixture the rectified spirit is? Explain giving reason.
11. When will a liquid start boiling? Explain.
12. Why is osmotic pressure is considered to better than other colligative properties?

UNIT 2

1. The standard reduction/electrode potentials of some metals are as follows. Arrange them in their increasing order of reducing power. $K = -2.93\text{V}$, $\text{Ag} = 0.80\text{V}$, $\text{Hg} = 0.79\text{V}$, $\text{Cr} = -0.74\text{V}$
2. How much charge is required for reduction of (a) 1 mol of Al^{3+} (b) 1 mol of MnO_4^- to Mn^{2+}
3. What are the products when dil. H_2SO_4 is electrolyzed using Pt electrodes?
4. Find the products when an aqueous solution of AgNO_3 is electrolyzed using Ag electrodes.
5. When will an electrochemical cell behave like an electrolytic cell?
6. What should be the values of ΔG and E° for the spontaneity of the cell?
7. What is the effect of temperature on ionic conductance? Explain.
8. Using E° values predict which metal can be used to coat Fe for preventing rusting.
 $\text{Fe} = -0.44\text{V}$, $\text{X} = -2.36\text{V}$, $\text{Y} = -0.14\text{V}$
9. The conductivity of 0.20 M solution of KCl at 298 K is 0.025 S cm^{-1} . Calculate its λ_m .
10. The molar conductivity of 1.5 M solution is $138.9 \text{ S cm}^2 \text{ mol}^{-1}$. Calculate its conductivity.
11. State the Kohlraush law of independent migration of ions.
12. Why does the conductivity or specific conductance of a solution decrease with dilution?
13. Calculate the degree of dissociation (α) of CH_3COOH if its molar conductivity is $39.05 \text{ S cm}^2 \text{ mol}^{-1}$. The molar conductivity at infinite dilution for H^+ is 349.6 and for $\text{CH}_3\text{COO}^- = 40.9$.
14. Write the reactions taking place in the cell used in hearing aids.
15. The chemistry of corrosion is essentially an electrochemical phenomenon. Give reactions.
16. Calculate ΔG for the reaction at 298 K. $2\text{Cr} + 3\text{Fe}^{2+} \rightarrow 2\text{Cr}^{3+} + 3\text{Fe}$. Given $E^\circ_{\text{cell}} = 0.30\text{V}$.
17. What are the applications of Kohlraush law?
18. How does molar conductivity vary with increase in concentration of strong electrolytes?
19. State two advantages of $\text{H}_2\text{-O}_2$ type of fuel cell.
20. What type of metal is preferably used for cathodic protection of iron?
21. Which out of 0.1M HCl and 0.1M NaCl, do you expect to have greater λ_m at infinite dilution?
22. Which electrodes are used in fuel cell and why?
23. Why is the equilibrium constant K related to E°_{cell} and not E_{cell} ?
24. Why does alkaline medium inhibits rusting of iron? Explain.
25. State Faraday's second law of electrolysis.
26. Which cell is generally used in inverters? Give the chemical reactions at anode and cathode?

Note: Kindly allocate the required number of questions.*

SAINIK SCHOOL CHITTORGARH**SUMMER VACATION HOLIDAY HOMEWORK****SUBJECT: COMPUTER SCIENCE (083)****CLASS & SECTION : XII-A****SUBJECT TEACHER: MR ABHISHEK BHARDWAJ****INSTRUCTIONS**

- (i) Do your homework by yourself.
- (ii) Use separate notebook for holiday homework.
- (iii) Don't use computer to find the output of a program.
- (iv) Answers should be neat & clean with concepts.
- (v) Do all work with date & day.
- (vi) Try to do your written work regularly to enhance your writing power.
- (vii) Pay special attention towards your health and caring.
- (viii) Completed Homework notebook to be submitted on **01 Jul 25** positively.
- (ix) In case of any difficulty please mail me at **ssccomputerscience@gmail.com**

1. Which of the following is not a valid variable name in Python? Give the reason to justify your answer.

- (i) def (ii) DEF (iii) Def (iv) dEF

2. Given a Dictionary **dict={1:'A',2:'B',3:'C',6:'D',4:'E',5:'F'}** ? What is the output of the command **print(dict[6])**?

3. Evaluate the following expressions:

- (i) $6 + 3 * 4 ** 2 - 5 // 4$
(ii) $12 > 15$ and $15 < 12$ or not $18 > 31$

4. Dry run and write the output of the following Python code:

```
a = 10
y = 5
def myfunc():
    y = a
    a = 2
    print("y =", y, "a =", a)
    print("a + y =", a + y)
    return a + y
print("y =", y, "a =", a)
print(myfunc())
print("y =", y, "a =", a)
```

5. Dry run and write the output of the following Python codes :

(i)

```
V = 25
def Fun(Ch):
    V = 50
    print(V, end = Ch)
    V *= 2
    print(V, end = Ch)
print(V, end = "*")
Fun("!")
print(V)
```


(ii)

```
def fun(s):  
    n = len(s)  
    m=''  
    for i in range(0, n):  
        if (s[i] >= 'a' and s[i] <= 'm'):  
            m = m + s[i].upper()  
        elif (s[i] >= 'n' and s[i] <= 'z'):  
            m = m + s[i-1]  
        elif (s[i].isupper()):  
            m = m + s[i].lower()  
        else:  
            m = m + '#'  
    print(m)  
fun('Ssc%Cse')
```

6. Write short notes on the following:

(i) Default Arguments

(ii) return

(iii) Keyword Arguments

SAINIK SCHOOL CHITTORGARH

SUMMER VACATION HOLIDAY HOMEWORK

SUBJECT NAME

CLASS & SECTION: XII A, B

SUBJECT TEACHER NAME: DIVYA RAO

INSTRUCTIONS: This project should be done as a part of internal assessment.

ASSIGNMENT

Content 1. Maintain a 'Vocabulary Journal' with meanings, synonyms, antonyms and usage in sentences. (Minimum 500 words)

Content 2. Prepare a project on the topic Poverty and Child Exploitation. Ensure that the following sub-headings are included:

- a) Index
- b) Acknowledgement
- c) Introduction
- d) Types of Child Exploitation
- e) Causes of Child Exploitation Related to Poverty
- f) Impact on Children
- g) Geographic Hotspots
- h) Role of Education
- i) Solutions and Recommendations
- j) Conclusion
- k) Bibliography

Content 3. Spot the error in the given sentences. Supply the correction and give reason for it.

1. One of the most (a)/ widespread bad habit (b)/ is the use of tobacco. (c)/ No error (d)
2. Recently I visited Kashmir (a)/ and found the sceneries (b)/ to be marvellous. (c)/ No error (d)
3. All the furnitures have been (a)/ sent to the new house (b)/ located in a village. (c)/ No error (d)
4. The crowd of angry students (a)/ ordered the (b)/ closing of shops.(c)/ No error (d)
5. They left (a)/ their luggages (b)/ at the railway station. (c)/ No error (d)
6. The bus could not (a)/ ascend the steep hill (b)/ because it was in the wrong gears. (c)/ No error (d)
7. The Indian force (a)/ drove away (b)/ the Chinese. (c)/ No error (d)
8. His mouth watered (a)/ when he saw (b)/ a bouquet of grapes. (c)/ No error (d)
9. My brother-in-laws (a)/ who live in Mumbai have come (b)/ to stay with us. (c)/ No error (d)
10. These kind of shirts (a)/ are rather expensive (b)/ for him to buy. (c)/ No error (d)
11. Those sort of people (a)/ usually do not (b)/ earn fame in society. (c)/ No error (d)
12. Being a very (a)/ hot day I (b)/ remained indoors. (c)/ No error (d)

13. Had I come (a)/ to know about his difficulties (b)/ I would have certainly helped. (c)/ No error (d)
14. One of them (a)/ forgot to take their bag (b)/ from the school. (c)/ No error (d)
15. Mr. Sharma, our representative,(a) / he will attend the meeting (b)/ on our behalf. (c)/ No error (d)
16. If the teacher is good, (a)/ the students will respond (b)/ positively to them. (c)/ No error (d)
17. It is not difficult to believe that a man (a)/ who has lived in this city for a long time (b)/ he will never feel at home anywhere else in the world. (c)/ No error (d)
18. Each girl was (a)/ given a bunch of flowers (b)/ which pleased her very much. (c)/ No error (d)
19. As it was Rajan's (a)/ first interview, he dressed him (b)/ in his most formal suit. (c)/ No error (d)
20. Gopal and myself (a)/ will take care of (b)/ the function on Sunday. (c)/ No error (d)
21. During freedom struggle (a)/ many a patriot (b)/ were filled with patriotism. (c)/ No error (d)
22. There are a dozen (a)/ of Geography books lying in the shelf of my personal library (b)/ and you can use them whenever you like. (c)/ No error (d)
23. The number of amendments to our Constitution (a)/ have been very large (b)/ during the last 69 years of independence. (c)/ No error (d)
24. Just to the North of India (a)/ is the Himalayas (b)/ that were once impregnable. (c)/ No error (d)
25. She disappeared (a)/ and found dead (b)/ near a well outside the village. (c)/ No error (d)
26. I had been (a)/ to Delhi last week (b)/ to visit my friend. (c)/ No error (d)
27. Either she or you (a)/ is to blame (b)/ for the mismanagement of the domestic affairs. (c)/ No error (d)
28. It were the children (a)/ that caused a lot of problem to their parents (b)/ during the long bus journey. (c)/ No error (d)
29. He will be likely (a)/ to leave for the United States (b)/ last year to visit his brother. (c)/ No error (d)
30. The soldiers along with the commander (a)/ was court-martial led (b)/ for defying the orders. (c)/ No error (d)
31. She is better than (a)/ any girl that studies (b)/ in our institute. (c)/ No error (d)
32. The latest chapter of this novel (a)/ is the most comprehensive of all (b)/ the chapters in the book. (c)/ No error (d)
33. She was not punished (a)/ though she came (b)/ latter than . (c)/ No error (d)
34. She is the best (a)/ and beautiful girl (b)/ of our class. (c)/ No error (d)
35. My notes are superior (a)/ than yours although I have prepared (b)/ them in a hurry. (c)/ No error (d)
36. Of all other my neighbours (a)/ he is the kindest (b)/ and the most considerate. (c)/ No error (d)
37. The works of Shakespeare (a)/ are more famous than (b)/ any other English dramatist. (c)/ No error (d)
38. It is all the more better (a)/ if you work (b)/ in my company. (c)/ No error (d)
39. A little quantity of sugar (a)/ is required to meet (b)/ the present demands. (c)/ No error (d)
40. He doesn't need (a)/ your help because (b)/ he is too intelligent. (c)/ No error (d)
41. The interviewer asked me (a)/ if I knew that Kalidas was the greater (b)/ than any other poet. (c)/ No error (d)
42. The reason we have not been able to pay income tax (a)/ is due to fact (b)/ that we did not receive pay on time. (c)/ No error (d)
43. Even now when I see the spot (a)/ I am reminded of an unique incident (b)/ that took place several years ago. (c)/ No error (d)

44. As soon as the teacher entered (a)/ everyone fell (b)/ in a silence. (c)/ No error (d)
45. As he had taken only a few sips (a)/ there was still little water (b)/ left in the glass. (c)/ No error (d)
46. To perform this experiment (a)/ drop little sugar (b)/ into a glass of water. (c)/ No error (d)
47. It is written in Gita (a)/ that God incarnates himself (b)/ in times of trouble. (c)/ No error (d)
48. Troy was taken by Greeks; (a)/ this formed the basis of a story (b)/ which has become famous. (c)/ No error (d)
49. These facts make it very clear (a)/ that he had hand in the murder (b)/ though he still pleads innocence. (c)/ No error (d)
50. A nationwide survey has brought up an (a)/ interesting finding (b)/ regarding infant mortality rate in India. (c)/ No error (d)
51. When I got (a)/ home I was (b)/ too exhausted. (c)/ No error (d)
52. I did not know hardly (a)/ anyone in the city (b)/ and so felt lonely. (c)/ No error (d)
53. I rarely find something (a)/ in the movie (b)/ that is worth remembering. (c)/ No error (d)
54. You have (a)/ acted nobler (b)/ than all of us. (c)/ No error (d)
55. Don't stop (a)/ anywhere. Go home (b)/ directly. (c)/ No error (d)
56. He has no time (a)/ to read magazines (b)/ and no desire neither. (c)/ No error (d)
57. He has not seldom (a)/ visited his parents (b)/ since he left this place. (c)/ No error (d)
58. It was much hot (a)/ yesterday and we (b)/ didn't go out. (c)/ No error (d)
59. I meet him often (a)/ near(b)/ the Town Hall. (c)/ No error (d)
60. I told her (a)/ as blunt as I could (b)/ but she was not convinced. (c)/ No error (d)
61. No sooner did the sun rise (a)/ when we took a hasty breakfast (b)/ and resumed the journey.(c)/ No error (d)
62. Because he is physically strong (a)/ therefore he was selected (b)/ for the school boxing team. (c)/ No error (d)
63. The reason for his failure (a)/ is because (b)/ he did not work hard. (c)/ No error (d)
64. Arjun asked him (a)/ that which was the way (b)/ to the post office. (c)/ No error (d)
65. Unless you do not listen to his advice (a)/ I am not going (b)/ to help you. (c)/ No error (d)
66. How do you say (a)/ that neither he or Raj has qualified (b)/ in the examination ? (c)/ No error (d)
67. We are not sure (a)/ if he is coming (b)/ to the party. (c)/ No error (d)
68. Sooner than he had arrived (a)/ his friends arranged a reception in his honour (b)/ in the best hotel in the town. (c)/ No error (d)
69. Mrs Dhaka went to Delhi (a)/ because she might (b)/ see Mrs Rai. (c)/ No error (d)
70. Neither he gave him no money (a)/ nor he helped him (b)/ in any way. (c)/ No error (d)
71. The doctor referred the patient (a)/ for the OPD (b)/ without examining him. (c)/ No error (d)
72. A man who always connives (a)/ on the faults of his children (b)/ is their worst enemy. (c)/ No error (d)
73. I do not understand (a)/ why (b)/ he is so angry at me. (c)/ No error (d)
74. I am hearing a lot (a)/ about the problem (b)/ of AIDS these days. (c)/ No error (d)
75. Because of his innocence (a)/ he can not distinguish (b)/ a cheat for an honest person. (c)/ No error (d)
76. After opening the door we entered (a)/ into the room (b)/ next to the kitchen. (c)/ No error (d)
77. As the meeting was (a)/ about to end (b)/ he insisted to ask several questions. (c)/ No error (d)
78. The watchman was kind enough (a)/ to inform us about the conspiracy (b)/ but declined to name the person behind it. (c)/ No error (d)

79. The captain and his wife (a)/ were invited for the cultural function (b)/ at my home. (c)/ No error (d)
80. The engineer came out to a novel solution (a)/ which may even reduce (b)/ daily energy consumption. (c)/ No error (d)
81. We are meeting today afternoon (a)/ to discuss the matter (b)/ and reach a compromise. (c)/ No error (d)
82. Either Ram or (a)/ you is responsible (b)/ for this action. (c)/ No error (d)
83. The student flatly denied (a)/ that he had copied (b)/ in the examination hall. (c)/ No error (d)
84. By the time you arrive tomorrow (a)/ I have finished (b)/ my work. (c)/ No error (d)
85. The speaker stressed repeatedly on (a)/ the importance of improving (b)/ the condition of the slums. (c)/ No error (d)
86. The captain with the members of his team (a)/ are returning (b)/ after a fortnight. (c) /No error (d)
87. After returning from (a)/ an all-India tour (b)/ I had to describe about it. (c)/ No error (d)
88. The teacher asked his students (a)/ if they had gone through (b)/ either of three chapters included in the prescribed text. (c)/ No error (d)
89. Although they are living in the country (a)/ since they were married (b)/ they are moving to the town. (c)/ No error (d)
90. Do you know (a)/ how old were you (b)/ when you came here? (c)/ No error (d)
91. Whenever a person losses anything (a)/ the poor folk around (b)/ are suspected. (c)/ No error (d)
92. Still impressive is that (a)/ we achieve this selective attention (b)/ through our latent ability to lip read. (c)/ No error (d)
93. As I entered the famous gallery (a)/ my attention was at once drawn to the large sculpture in the corner. (c)/ No error (d)
94. Everyday before (a)/ I start work for my livelihood (b)/ I do my prayer. (c)/ No error (d)
95. Pooja went to her friend's house at the appointed hour ; but (a)/ she was told (b)/ that her friend left half an hour earlier. (c) No error (d)
96. Rekha is (a)/ enough old (b)/ to get married. (c)/ No error (d)
97. As far as I am concerned, (a)/ I shall do everything (b)/ possible to help you. (c)/ No error (d)
98. The person in the seat of justice (a)/ should be absolutely partial (b)/ and not treat his nearest and dearest with favour. (c)/ No error (d)
99. Let us congratulate him (a)/ for his success (b)/ in the examination. (c)/ No error (d)
100. Many people prefer to travel (a)/ by the road (b)/ because it is less expensive. (c)/ No error (d)
101. She was beside herself in joy (a)/ when she came to know (b)/ that she had been selected for the job. (c)/ No error (d)
102. Mother tongue is as natural (a)/ for the development of man's mind (b)/ as mother's milk is for the development of the infant's body. (c)/ No error (d)
103. The Prime Minister as well as his secretary were expected to (a)/ arrive in Chennai (b)/ on Saturday morning. (c)/ No error (d)
104. The speaker was (a)/ not only slow (b)/ but also inaudible as well. (c)/ No error (d)
105. The crowd surged forward (a)/ to have a glimpse (b)/ of their favourite leader. (c)/ No error (d)
106. There is a distinctive possibility (a)/ that he will leave the job (b)/ once the investigation is over. (c)/ No error (d)
107. Many a star (a)/ are (b)/ twinkling in the sky. (c)/ No error (d)
108. We discussed the problem (a)/ so thoroughly that (b)/ I found it easy to work it out. (c)/ No error (d)

109. He hesitated to accept the post (a)/ as he did not think (b)/ that the salary would not be enough for a man with a family of three. (c)/ No error (d)
110. Have you gone through (a)/either of these three chapters (b)/ that have been included in his volume? (c)/ No error (d)
111. I am learning English (a)/ for ten years (b)/ without much effect. (c)/ No error (d)
112. Ramesh has agreed (a)/ to marry with the girl (b)/ of his parents's choice. (c)/ No error (d)
113. The pity is that (a)/ no sooner he had left the place (b)/ than the fire broke out. (c)/ No error (d)
114. When he was arriving (a)/ the party was (b)/ in full swing. (c)/ No error (d)
115. The Dean wrote that he constituted a committee of experts (a)/ comprising five members (b)/ before the next meeting took place. (c)/ No error (d)
116. I can't help to sneeze as (a)/ I got drenched yesterday (b)/ and have a bad cold. (c)/ No error (d)
117. I have lived (a)/ from the hand to the mouth (b)/ for all these fifty years though nobody know it. (c)/ No error (d)
118. Both he as well as his friend (a)/ worked in close harmony (b)/ on this same project. (c)/ No error (d)
119. The Monk loved riding and hunting (a)/ and refused to conform by rules and regulations (b)/ of the ancient monastic order. (c)/ No error (d)
120. Each of them (a)/ have a different version (b)/of the crime. (c)/ No error (d)

Notebook Assignment: Finish the pending work for all the chapters taught till now.

Note: Kindly allocate the required number of questions.*

SAINIK SCHOOL CHITTORGARH

SUMMER VACATION HOLIDAY HOMEWORK

INFORMATION

SUBJECT NAME: Mathematics

CLASS & SECTION: Class XII A & B

SUBJECT TEACHER NAME: Rakesh Rampuria & Manish Jain

INSTRUCTIONS: Compulsory to attempt all questions.

ASSIGNMENT

1. Five years Old NDA questions of Mathematics syllabus from **Pathfinder by Arihant Pub.**
2. Relations & Functions, Inverse Trigonometry Functions, Matrices, Determinants, Differentiation and higher order differentiation of Various Functions - Solve all the problems From R D Sharma.
3. From NCERT textbook –
 - Ch.1
 - Exercise 1.1 (Q.2,5,7,9,11)
 - Exercise 1.2 (Q.1,3,5,6,7,10)
 - Ch.2
 - Exercise 2.1 (Q.2,5,7,9)
 - Exercise 2.2 (Q.1,3,5,6,7,10)
 - Ch.3
 - Exercise 3.1 (Q.2,5,7,9)
 - Exercise 3.2 (Q.1,3,5,6,7)
 - Exercise 3.3 (Q.1,3,6,7,8,9)
 - Ch.4
 - Exercise 4.1 (Q.2,5)
 - Exercise 4.2 (Q.1,3,5)
 - Exercise 4.3 (Q.1,4,6)
 - Exercise 4.4 (Q.1,2,4,5,6,7)
 - Exercise 4.5 (Q.2,3,5,7)
 - Ch.5
 - Exercise 5.1 (Q.2,5)
 - Exercise 5.2 (Q.1,3,5)
 - Exercise 5.3 (Q.1,4,6)
 - Exercise 5.4 (Q.1,2,4,5,6,7)
 - Exercise 5.5 (Q.2,3,5,7)
 - Exercise 5.6 (Q.1,3,5,6,7,8)
 - Exercise 5.7 (Q.2,3,5,7,9,10)
 - Misc. Exercise of Ch.5

SAINIK SCHOOL CHITTORGARH

SUMMER VACATION HOLIDAY HOMEWORK

(

INFORMATION

SUBJECT NAME: PHYSICS

CLASS & SECTION: XII (A,B)

SUBJECT TEACHER NAME: Mr Onkar Singh, Mr Bhandarkar C L (NEW)

**INSTRUCTIONS: Please prepare file in support of model.
Use your own creativity.
Marks for Assignments and projects will be counted for subject internal marks.**

ASSIGNMENT

CHAPTER1: ELECTRIC CHARGES AND THE FIELDS

Content 1. Two charges q and $-3q$ are placed on x -axis separated by distance 'd'. Where should a third charge $2q$ be placed such that, it will not experience any force?

Content 2. Sketch the electric field lines for a uniformly charged hollow cylinder.

Content 3. Draw the graph showing variation of electric field at the centre, on the surface and at a distance 'r' from the hollow charged conducting spherical shell.

Content 4. Four equal charges each $16 \mu\text{C}$ are placed on the four corners of a square of side 0.2 m . Calculate the force on any one of the charges?

Content 5. Two large plane sheets of charge densities σ and $-2 \sigma \text{ C/m}^2$ are arranged vertically with a separation of 'd' between them. Deduce expression for the electric field at points (i) to the left of the first sheet (ii) to the right of the second sheet and (iii) Between the two sheets.

CHAPTER 2: ELECTROSTATIC POTENTIAL AND CAPACITANCE

Content 1. A regular hexagon of side 10 cm has a charge 5 micro coulomb at each of its vertices. Calculate the potential at the centre of the hexagon?

Content 2. Three capacitors each of capacitance 9 Pf are connected in series.
(a) Find the total capacitance of the combination?
(b) What is the potential difference across each capacitor if the combination is connected to a 120 V supply.

Content 3. A 12 pF capacitor is connected to 50 V battery. How much electrostatic energy is stored in the capacitor?

Content 4. Why two equipotential surfaces not intersect each other?

Content 5. Two identical capacitors of 12 pF each are connected in series across a 50 V battery, Calculate the electrostatic energy stored in the combination

If these were connected in parallel across the same battery, find out the value of energy stored in this combination?