SECTION A

QNO1. GIVE SHORT ANSWERSTO THE QUESTIONS.
1. Differentiate between lenticels and stoma?
2. What is glottis? What is its role in the process of breathing?
3. Differentiate between the pharynx and larynx?
4. Write down the causative agents of PENUMONIA, BRONCHITIS, and ASTHMA?
5. How does smoke damage our respiratory system?
6. Differentiate between transpiration and guttation?
7. What do you know about the osmotic adjustments in halophytes?
8. Write down the functions of the pelvis, ureter, and nephron.
9. What is lithotripsy?
10. What do you know about the following terms dialysis, thermoregulation, and osmoregulation?.
11. What do you know about the fight and flight response?
12. What is meant by? Brain stem, ganglion, nerve impulse
13. What is the function of vestibule and cochlea
14. Differentiate between STH and TSH
15. What are the symptoms of epilepsy and paralysis
16. What is antagonism give an example to explain it
17. Differentiate between tendons and ligaments?
18. What do you know about beads and string model of chromatin?
19. Define and explain theory of special creation?
20. Differentiate between natural and artificial selection?
21. How does the energy differ from the flow of material?
22. Define the following biogeochemical cycle, commensalism, parasitism
23. What is meant by urbanization stone cancer afforestation?
24. What is meant by parthenogenesis?
25. Double double fertilization?
26. How will you differentiate between external and internal fertilization?
27. What are interferon’s urokinases GMO?
28. What is the significance of single cell proteins?
29. What is metrica indica?
30. Differentiate between broad spectrum and narrow spectrum antibiotics

SECTION B

QNO2. DRAW AND LABEL THE FOLLOWINGS
1. L.s of human kidney
2. Nephron
3. Human eye, ear, brain
4. Stages in sexual rep. of flowering plants
5. Carbon cycle and nitrogen cycle
6. Male and female reproduction of rabbit?
7. Biceps and triceps
8. Human respiratory system
9. Neuron
10. Steps of genetic engineering

Solve the following questions in a separate register and also learn this question.

Q1. Write a balance chemical equation for neutralization reaction that takes place when these antacids react with HCl in stomach.
Q2. Consider the following reaction
Cl₈H₂₁NO₃ + H₂O → [C₁₈H₂₁HNO₃]⁺ + OH⁻

Identify codeine as Bronsted – Lowry acid or base

Q3. Explain how using toothpaste of PH 10 can help to prevent the acid from damaging our teeth?

Q4. Give importance of PH?

Q5. What are the side effects of smoking?

Q6. Give PH range needed for growing following plants apple, beans, potatoes, tomatoes?

Q7. What is optimum PH range for swimming pool?

Q8. Give PH range of some common indicators?

Q9. Why is lemon juice applied on fish?

Q10. Write structural formulae of

   1. Methanol
   2. Propanol
   3. Dimethyl ether
   4. Ethyl methyl ether
   5. Methanal (formaldehyde)
   6. Acetaldehyde
   7. Butanone
   8. Formic acid
   9. Acetic acid
   10. Methyl ethanoate
   11. Glucose
   12. Fructose

Q11. How can you change

   a) Ethene into ethane
   b) Methane into carbon tetra chloride
   c) Ethene into glycol
   d) Ethyl chloride into ethane
   e) Ethyl bromide into ethane

Q12. Write a note on Baeyer’s test?

Q13. Write a note on kwashiorkor?

Q14. Write a note on distribution a water on earth?

Q15. How does Chemistry help to maintain a clean swimming pool?

Q16. Why are municipal water supplies treated with aluminium Sulphite and slaked lime?

Q17. Learn M.C.Qs from booklet provided by college

Q18. Solved the past paper of 2016, 2017

Reference Books

1. Addison Wesley, Chemistry
2. Raymond Chang, Essential Chemistry
3. Text Book of Chemistry class 10th

Computer Science

Q1. Write & perform the following algorithm.

   ➢ Find the sum, product and average of five given numbers.
   ➢ Find the volume of a cube.
   ➢ Find the area of a triangle when the lengths of height and base are given.
   ➢ Read the marks (M) and print grades according to federal board.
   ➢ Convert temperature ROM Fahrenheit to Celsius.
   ➢ Find the Factorial of a given Number.

   Also convert the above Algorithms into Flowchart.

Q2. Write the Definition, Syntax, Explanation, Example (programming example) of the following conditional control structure. Also perform on the computer.

   ➢ IF Statement, IF Else statement,
   ➢ ELSE –IF Statement, Switch statement,
   ➢ Nested selection structure.

Q3. Write the Definition, Syntax, Explanation, Example (programming example) of the following loop control structure. Also perform on the computer

   For loop, WHILE loop, DO-WHILE LOOP, BREAK & CONTINUE Statements, Nested loops.
Q4. Write the programs for the following tags of HTML & also perform on the computer.
   Text formatting tags, images& background tags, Hyperlinks, Table& Form tags.
Q5. Attempt the past paper of 2019 and model paper.

Assignment Submission Instructions:
1. Take a separate register for above tasks or you may use your previous computer’s register.
2. Every task should be written neat and clean with proper margins drawn on sides.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Assignment</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>1.</td>
<td>Past Paper 2017, 2018 and 2019</td>
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<tr>
<td>2.</td>
<td>Chapter No. 2</td>
<td></td>
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<tr>
<td></td>
<td>Exe # 2.1, 2.4, 2.7 and 2.8</td>
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<tr>
<td>3.</td>
<td>Chapter No. 7</td>
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<tr>
<td></td>
<td>Exe 7.4 and 7.5</td>
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<td>4.</td>
<td>Theorems of Chapter 8 – 12</td>
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3. Vacations work will be collected on the very first day of the winter camp.
4. Plagiarism and summarized answers are strictly not allowed.

Note:
A comprehensive test will be conducted from the winter vacations’ assignment on the
very first day of the winter camp. Come well prepared for the test.

Subject: English                      Class: 10th

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>1.</td>
<td>Solving past board papers for the years 2016 to 2019</td>
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Mathematic

Note:
➢ Maintain a separate register for winter vacations assignment.
➢ Prepare all MCQs which have been provided with answer key.

Subject: Pak Studies                  Class: 10th

1. Prepare MCQs from all the 4 Chapters.
2. Prepare short answers form end of exercise and short answers other than end of exercise
   (from the chapters) as taught during the lectures.
3. Prepare long answers and also practice to make outline of the long answers as taught
during the classes.
4. Attempt the Past Papers of last four years.

Physics

Subject: Physics                      CLASS: 10th

❖ Write answers of all margin line question
❖ Solve chapter wise all sample examples and numerical problems
❖ Enlist all the formulae and constants
❖ Enlist all the physical quantities with symbols and units
❖ Derive relations for mass-spring system and simple pendulum
Draw ray diagram for:

i. Compound microscope
ii. Telescope, slide projector
iii. Photograph enlarger
iv. Camera
v. Simple microscope
vi. Defects of vision
vii. Image formation by lenses

Draw circuit diagram and derive relation for capacitors and resistors in series and parallel combination

Draw label diagram for DC motor, AC generator and transformer

Draw the truth table and circuit diagrams of the following gates:

i. AND gate
ii. OR gate
iii. NOT gate
iv. NAND gate
v. NOR gate

NOTE. Use extra register for assignment

Winter Vacation Assignments Islamiyat (2020)

Class - 10th

1. سو۹رۂ الاحزاب اور سو۹رۂ الممتحنہ کا ترجمہ مکمل یاد کریں۔
2. دونوں سورتوں کی مشقوں میں درج تمام الفاظ ومعانی، آیات کا ترجمہ، اور مختصر سوالات زبانی یاد کریں۔
3. احادیث (11-20) ترجمہ، و تشریح زبانی یاد کریں۔
4. تہجی الرئیسی سوالات زبان یاد کریں۔
5. موضوعاتی مطالعہ کا تمام مختصر اور تفصیلی سوالات لکھ کر کے یاد کریں۔
6. سالہ سال سالہ، جات (2017، 2018، 2019) مکمل حل کر کے یاد کریں۔