

# N.K PUBLIC SCHOOL, RAJAWAS, SIKAR ROAD, JAIPUR

## Summer Vacation Home Work (2020-21)

Class – IX (A+B)

S.No.	Subject	Holiday Home Work
1.	Hindi	‘करोना’ वैश्विक महामारी पर (अनुच्छेद) ३५० शब्दों पर
2.	ENGLISH	English-Prepare a compilation of 5 Indian and 5 Foreign poetries in a file. Write. An essay on the world wide pandemic Corona Virus in about 200 words in the same file.
3.	Social Science	1. Prepare a weather report of continuous 10 days. 2. Map of India - Locate and label the following - * Important rivers * Natural vegetation * Mountain ranges 3. Women's position in society. Should women have the same right as men? Should there be more female leader in politics and public institutions? 4. Learn all the syllabus of April and May.
4.	Science	1. Do the activity 1.13 (Sublimation) of your NCERT Book page no. 8. 2. Draw the diagram of plant cell and animal cell with labeling. 3. Write difference between eukaryotic cells and prokaryotic cells. You can do all the above activities in file.



5.	Maths	<p>Q 1. Make a project file  A) Five mathematicians  History, Achievements in math's field  B) Write Any 10 formulas (not identities) of your book and their derivation (you can Google for derivation).</p> <p>Q 2. Solve the following worksheets  <u>Topic: Number System</u></p> <p>Q1. Find three rational numbers between:  (i) <math>\frac{1}{3}</math> and <math>\frac{5}{4}</math>    (ii) <math>\frac{3}{7}</math> and <math>\frac{2}{7}</math>    (iii) <math>\frac{-2}{5}</math> and <math>\frac{-1}{3}</math></p> <p>Q2. Find three irrational numbers between  (i) -11 and -12    (ii) <math>\frac{11}{4}</math> and <math>\frac{13}{5}</math>    (iii) <math>\sqrt{2}</math> and <math>\sqrt{3}</math></p> <p>Q3. Express the following in the form of <math>\frac{p}{q}</math> where p, q are integers, q <math>\neq</math> 0  (i) 0.0327    (ii) 4.38    (iii) 1.314</p> <p>Q4. Simplify the following:  (i) <math>(5+\sqrt{7})(2+\sqrt{5})</math>    (iii) <math>(2\sqrt{3}+6\sqrt{5})(5\sqrt{2}-3\sqrt{3})</math>  (ii) <math>(\sqrt{11}+\sqrt{7})(\sqrt{11}-\sqrt{7})</math>    (iv) <math>(8\sqrt{2}+3\sqrt{5})(3\sqrt{2}-6\sqrt{3})</math></p> <p>Q5. Rationalize the denominator of the following:  (i) <math>\frac{25}{\sqrt{2}+\sqrt{5}}</math>  (ii) <math>\frac{3}{\sqrt{7}-\sqrt{2}}</math>  (iii) <math>\frac{4\sqrt{3}+3\sqrt{2}}{6\sqrt{2}-3\sqrt{5}}</math>  (iv) <math>\frac{8}{3\sqrt{2}+7\sqrt{3}}</math></p> <p>Q6. Simplify the following:  (i) <math>\left(\frac{64}{125}\right)^{-\frac{2}{3}} + \left(\frac{625}{256}\right)^{\frac{1}{4}} + \frac{\sqrt{25}}{\sqrt[3]{64}}</math>  (ii) <math>\left(\frac{x^a}{x^b}\right)^{a+b} \cdot \left(\frac{x^b}{x^c}\right)^{b+c} \cdot \left(\frac{x^c}{x^a}\right)^{c+a}</math>  (iii) <math>\sqrt{3} \times 5^{-3} \div \sqrt[3]{3^{-1}} \times \sqrt{5} \times \sqrt[5]{3} \times 5^4</math>  (iv) <math>\sqrt[4]{81} - 8\sqrt[3]{216} + 15\sqrt[5]{32} + \sqrt{225}</math></p>
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Q7. Simplify.

(i)  $\frac{2\sqrt{6}}{\sqrt{3}+\sqrt{2}} + \frac{6\sqrt{2}}{\sqrt{6}+\sqrt{3}} - \frac{8\sqrt{3}}{\sqrt{6}+\sqrt{2}}$

(ii)  $\frac{4+\sqrt{5}}{4-\sqrt{5}} + \frac{4-\sqrt{5}}{4+\sqrt{5}}$

(iii)  $\frac{3}{5-\sqrt{3}} + \frac{2}{5+\sqrt{3}}$

Q8. Find the value p if

(i)  $2^{5p} \div 2^p = 5\sqrt{2^{20}}$

(ii)  $(27)^p = 9 \div 3^p$

Q9. (a) If  $\frac{3+\sqrt{7}}{3-\sqrt{7}} = a + b\sqrt{7}$ , find the value of a and b.

(b) If  $x = \frac{2-\sqrt{5}}{2+\sqrt{5}}$  and  $y = \frac{2+\sqrt{5}}{2-\sqrt{5}}$ , find  $x^2 - y^2$

(c) If  $x = 3 + \sqrt{8}$ , find  $x^2 + \frac{1}{x^2}$

Q10. Represent the following numbers on a number line.

(i)  $\sqrt{18}$  (ii)  $\sqrt{5.6}$  (iii)  $\sqrt{13}$  (iv)  $\sqrt{6.7}$  (v)  $\sqrt{29}$

विद्या ददाति विनयम्

**Topic: Heron's Formula**

- Q1. Find the area of a triangle, two of whose sides are 18 cm and 10 cm and the perimeter is 42 cm.
- Q2. The sides of a triangle are in the ratio 3:5:7 and its perimeter is 300 m. Find its area.
- Q3. The perimeter of a rhombus is 100 m and if one of its diagonal measures 40 m, find its area.
- Q4. Find the area of a quadrilateral ABCD in which  $AB = 24\text{cm}$ ,  $\angle BAD = 90^\circ$  and  $\angle BCD$  forms an equilateral triangle each of whose side measures 26cm. ( $\sqrt{3} = 1.73$ )
- Q5. A triangle and a parallelogram are on the same base and have the same area. If the sides of the triangle are 15 cm, 14 cm and 13 cm and the parallelogram stands on the base 15 cm, find the height of the parallelogram.
- Q6. Two parallel sides of a trapezium measure 60 cm and 77 cm and other sides are 25cm and 26 cm long. Find the area of the trapezium.
- Q7. Find the area of an isosceles triangle XYZ in which  $XY = ZX = 4\text{ cm}$  and  $YZ = 10\text{cm}$ .
- Q8. A triangular park ABC has sides 120m, 80m and 50m. A gardener has to put a fence all around it and also plant grass inside. How much area does he need to plant? Find the cost of fencing it with wire at the rate of rupees 15 per metre, leaving a space 3m wide for a gate on one side.
- Q9. Prove that area of the quadrilateral PQRS is  $3(4 + 3\sqrt{3})\text{ m}^2$  if  $PQ = 5\text{m}$ ,  $QR = 5\text{m}$ ,  $RS = 6\text{m}$ ,  $SR = 6\text{ m}$  and diagonal  $PR = 6\text{ m}$ .
- Q10. Mahajan has a vegetable garden in the shape of a rhombus. The length of each side of the garden is 35m and its diagonal is 42m long. After growing the vegetables in it, he wants to divide it in six equal parts. Find the area of each part.
- Q11. A field is in the shape of a trapezium whose parallel sides are 50 m and 15 m. If its non-parallel sides are 20 m and 25 m, prove that the area of trapezium is  $\frac{1300\sqrt{6}}{7}\text{ m}^2$ .
- Q12. Raghu has a triangular field with sides 240 m, 200 m, 360 m where he grew wheat. In another triangular field with sides 240 m, 320 m, 400 m adjacent to the previous field, he wants to grow potatoes and onions. He divided the second field in two parts by joining

the mid-point of the longest side to the opposite vertex and grew potatoes in one part and onions in the other part. How much area (in hectares) has been used for wheat, potatoes and onions?

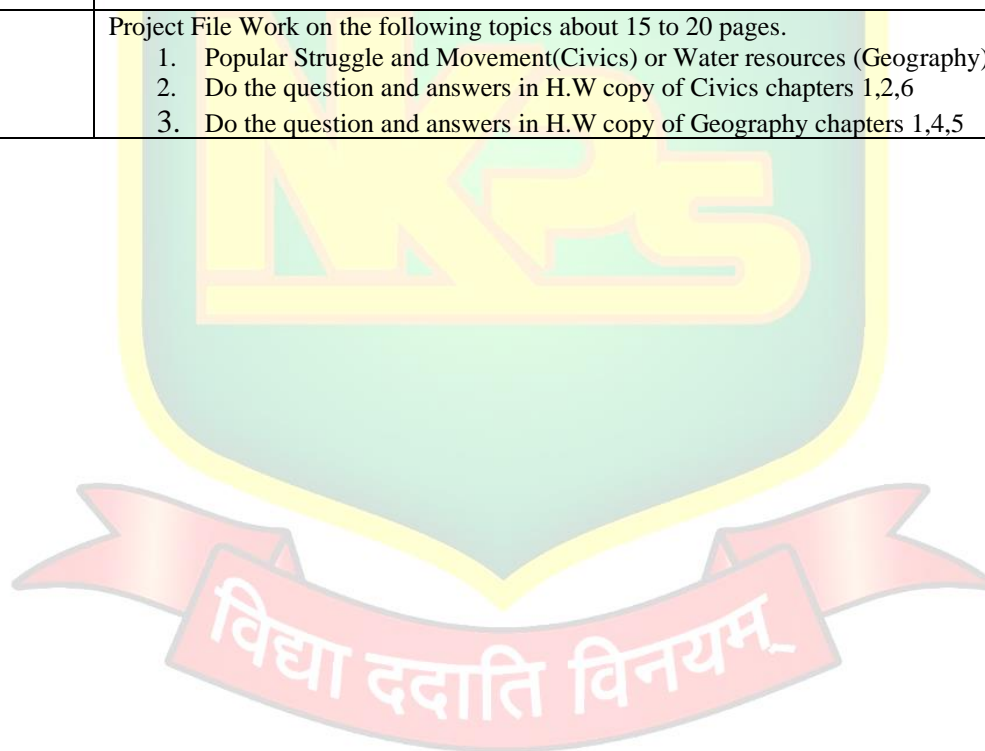
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**Class – X – A**

S.No.	Subject	Holiday Home Work
1.	Hindi	<p>"लॉकडाउन के बीच हम ?"</p> <ul style="list-style-type: none"> <li>★ लॉकडाउन क्या है ।</li> <li>★ लॉकडाउन में हमारे सामाजिक सरोकार।</li> <li>★ लॉकडाउन में मूलभूत आवश्यकताएं है।</li> <li>★ लॉकडाउन में शिक्षा ।</li> <li>★ लॉकडाउन के बीच हमारी अर्थव्यवस्था?</li> </ul> <p>इस विषय पर एक परियोजना (project) तैयार कीजिये।</p>
2.	English	<p>1. Read any book and encapsulate (outline) it in the form of the following general information: a) Author's Description   b) Character's Description   c) Summary of the story d) Moral/Conclusion of the story</p> <p>2. Shoo a video of 10 minutes about your (student's) own life and what you have been through. Write a script for the same and make a storyboard as well.</p> <p>3. listen to English news channels everyday.</p>
3.	Maths	<p>Q.1 a) Make a project file on five mathematicians of their History, Achievements in maths field. b) Write any 10 formulas(not identities) of your book and their derivation (you can google for derivation)</p> <p>Q.2 Solve the following worksheet.</p> <p><u>Topic: Real Numbers</u></p> <p>Q1. Using Euclid's division algorithm, find the HCF of the following. (a) 1288, 576      (b) 155, 1305      (c) 240, 1024</p> <p>Q2. If the HCF of 210 and 55 is expressible in the form <math>210 \times 5 + 55y</math>, find y.</p> <p>Q3. Find the largest number which divides 245 and 1029 leaving remainder 5 in each case.</p> <p>Q4. Using prime factorization, find the HCF and LCM of 72, 126 and 168. Also show that <math>HCF \times LCM \neq</math> product of the three numbers.</p> <p>Q5. The HCF of two numbers is 145 and their LCM is 2175. If one number is 725, find the other.</p> <p>Q6. The product of two numbers is 20736 and their HCF is 54, find their LCM.</p> <p>Q7. After how many places of decimals, the decimal expansion of the rational number will terminate? Q8. State the fundamental theorem of Arithmetic.</p> <p>Q9. Check whether <math>5n</math> can end with the digit 0 for any natural number n.</p> <p>Q10. Express each of the following as the product of primes. (a) 6435 (b) 8085 (c) 2184</p> <p>Q11. Show that square of an odd positive integer is of the form <math>8q + 1</math>, for some positive integer q.</p> <p>Q12. Show that every positive even integer is of the form <math>2q</math> and every positive odd integer is of the form <math>2q+1</math>, where q is some integer.</p> <p>Q13. Prove that <math>5 + 2\sqrt{3}</math> is an irrational number.</p> <p><u>Topic: Polynomials</u></p> <p>Q1. If <math>(x + k)</math> is a factor of <math>2x^2 + 2kx + 5x + 10</math>, find k.</p> <p>Q2. If <math>\alpha</math> and <math>\beta</math> are the zeroes of the polynomial <math>p(x) = 3x^2 - 5x + 6</math>, find (i) <math>(\alpha / \beta) + (\beta / \alpha)</math> (ii) <math>\alpha^3 + \beta^3</math></p> <p>Q3. Find the quadratic polynomial whose zeroes are <math>\frac{2}{3}</math> and <math>-\frac{1}{4}</math>.</p> <p>Q4. Find a polynomial whose zeros are squares of the zeroes of the polynomial <math>3x^2 + 6x - 9</math>.</p> <p>Q5. If '1' is one of the zeroes of the polynomial <math>p(x) = 7x - x^3 - 6</math> find its other zeroes.</p> <p>Q6. Find the quadratic polynomial, sum and product of whose zeroes are 2 and - 1 respectively.</p> <p>Q7. If the sum of the zeroes of the quadratic polynomial <math>kx^2 + 2x + 3k</math> is equal to their product, find k. Q8. Find a polynomial whose zeroes are 2, 1 and - 1. What is its degree?</p> <p>Q9. Find the polynomial whose zeroes are reciprocals of the zeroes of the polynomial <math>2x^2 + 3x - 6</math>.</p> <p>Q10. Find the ratio of the sum and product of the zeroes of the polynomial <math>5x^2 + 2x - 10</math>.</p> <p>Q11. If <math>\alpha</math>, <math>\beta</math> and <math>\gamma</math> are the zeroes of the cubic polynomial <math>p(x) = 3x^3 - 6x^2 + 5x - 3</math>, then, find their sum and product.</p> <p>Q12. Divide <math>3 - x + 2x^2 + x^3 - 3x^4</math> by <math>(2 - x)</math> and verify by division algorithm.</p> <p>Q13 Find all the zeroes of the polynomial <math>p(x) = x^4 - 7x^3 + 9x^2 + 13x - 4</math>, if two of its zeroes are <math>2 + \sqrt{3}</math> and</p>



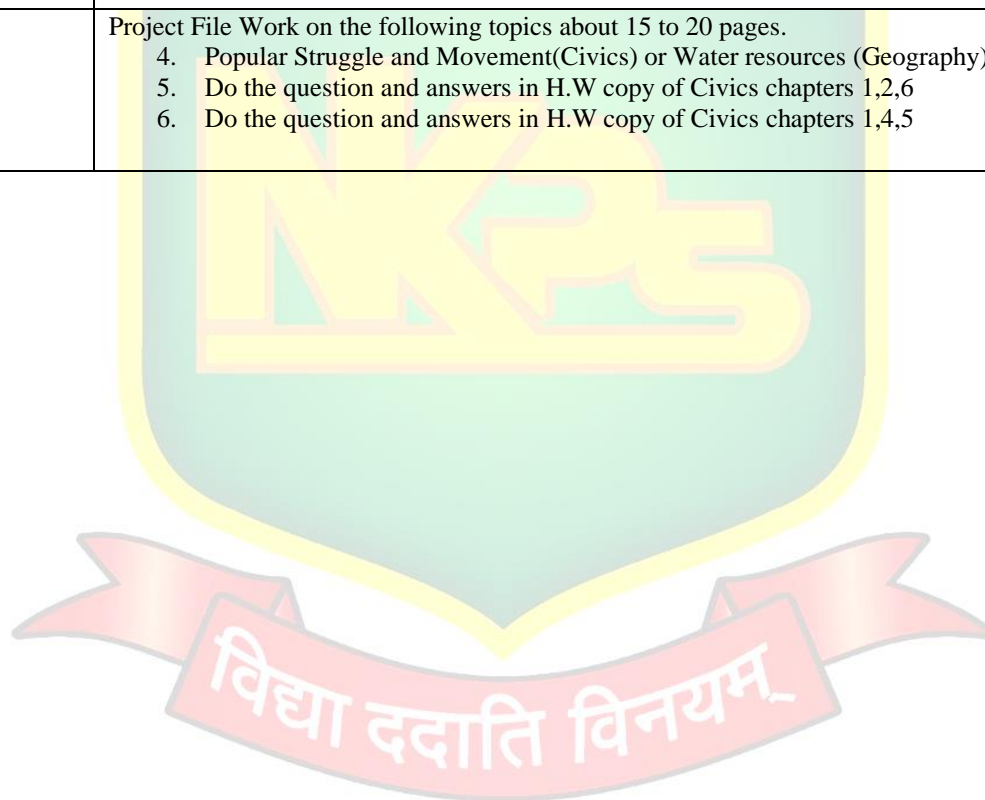
		$2 - \sqrt{3}$ . Q14. What must be subtracted from $8x^4 + 14x^3 - 2x^2 + 7x - 8$ so that the resulting polynomial is exactly divisible by $4x^2 + 3x - 2$ . Q15. Find all the zeroes of the polynomial $f(x) = 2x^4 - 3x^3 - 5x^2 + 9x - 3$ , if two of its zeroes are $\pm \sqrt{3}$ .
4.	Science	1. In human alimentary canal, name the site of complete digestion of various components of food. Explain the process of digestion. [CBSE (CCE) 2012] 2. What happens if a person has a kidney failure? [CBS (CCE) 2012] 3. List the three kinds of blood vessels of human circulatory system and write their functions in tabular form. [CBSE I CCE) 2012] 4. (a) "The breathing cycle is rhythmic whereas exchange of gases is a continuous process". Justify this statement. (b) What happens if conducting tubes of circulatory system develops a leak? State in brief, how could this be avoided? (c) How opening and closing of stomata takes place? [CBSE (CCE) 2011] 5. Draw a diagram of the front view of human heart and label any six parts including at least two that are concerned with arterial blood supply to the heart muscles. [CBSE (CCE) 2011] 6. Describe in brief the function of kidneys, ureters, urinary bladder and urethra. [Foreign 2010] 7. Explain the process of breakdown of glucose in a cell (i) In the presence of oxygen. (ii) In the absence of oxygen. [HOTS, Foreign 2010] 8. What is double circulation in human beings? Why is it necessary? Delhi 2008C] 9. (a) Name two different ways in which glucose is oxidized to provide energy in various organism. (b) Write any two differences between the two oxidation of glucose in organisms. [AI 2008] 10. (a) Name the process by which autotrophs prepare town food. (b) List the three events which occur during this process.
5.	S.St	Project File Work on the following topics about 15 to 20 pages. 1. Popular Struggle and Movement(Civics) or Water resources (Geography) 2. Do the question and answers in H.W copy of Civics chapters 1,2,6 3. Do the question and answers in H.W copy of Geography chapters 1,4,5



Class – X – B

S.No.	Subject	Holiday Home Work
1.	Hindi	<p>"लॉकडाउन के बीच हम ?"</p> <ul style="list-style-type: none"> <li>★ लॉकडाउन क्या है ।</li> <li>★ लॉकडाउन में हमारे सामाजिक सरोकार।</li> <li>★ लॉकडाउन में मूलभूत आवश्यकताएं है।</li> <li>★ लॉकडाउन में शिक्षा ।</li> <li>★ लॉकडाउन के बीच हमारी अर्थव्यवस्था?</li> </ul> <p>इस विषय पर एक परियोजना (project) तैयार कीजिये।</p>
2.	English	<p>1. Prepare a compilation of 5 Indian and Foreign poetries in file. 2. Write an essay on the world wide pandemic Covid-19 in about 200 words in the same file.</p>
3.	Maths	<p>Q.1 a) Make a project file on five mathematicians of their History, Achievements in Maths field. b) Write any 10 formulas(not identities) of your book and their derivation (you can google for derivation) Q.2 Solve the following worksheet. <u>Topic: Real Numbers</u></p> <p>Q1. Using Euclid's division algorithm, find the HCF of the following. (b) 1288, 576 (b) 155, 1305 (c) 240, 1024 Q2. If the HCF of 210 and 55 is expressible in the form <math>210 \times 5 + 55y</math>, find y. Q3. Find the largest number which divides 245 and 1029 leaving remainder 5 in each case. Q4. Using prime factorization, find the HCF and LCM of 72, 126 and 168. Also show that <math>HCF \times LCM \neq</math> product of the three numbers. Q5. The HCF of two numbers is 145 and their LCM is 2175. If one number is 725, find the other. Q6. The product of two numbers is 20736 and their HCF is 54, find their LCM. Q7. After how many places of decimals, the decimal expansion of the rational number will terminate? Q8. State the fundamental theorem of Arithmetic. Q9. Check whether 5n can end with the digit 0 for any natural number n. Q10. Express each of the following as the product of primes. (a) 6435 (b) 8085 (c) 2184 Q11. Show that square of an odd positive integer is of the form <math>8q + 1</math>, for some positive integer q. Q12. Show that every positive even integer is of the form <math>2q</math> and every positive odd integer is of the form <math>2q+1</math>, where q is some integer. Q13. Prove that <math>5 + 2\sqrt{3}</math> is an irrational number.</p> <p><u>Topic: Polynomials</u></p> <p>Q1. If <math>(x + k)</math> is a factor of <math>2x^2 + 2kx + 5x + 10</math>, find k. Q2. If <math>\alpha</math> and <math>\beta</math> are the zeroes of the polynomial <math>p(x) = 3x^2 - 5x + 6</math>, find (i) <math>(\alpha / \beta) + (\beta / \alpha)</math> (ii) <math>\alpha^3 + \beta^3</math> Q3. Find the quadratic polynomial whose zeroes are <math>\frac{2}{3}</math> and <math>-\frac{1}{4}</math>. Q4. Find a polynomial whose zeros are squares of the zeroes of the polynomial <math>3x^2 + 6x - 9</math>. Q5. If '1' is one of the zeroes of the polynomial <math>p(x) = 7x - x^3 - 6</math> find its other zeroes. Q6. Find the quadratic polynomial, sum and product of whose zeroes are 2 and -1 respectively.</p> <p>Q7. If the sum of the zeroes of the quadratic polynomial <math>kx^2 + 2x + 3k</math> is equal to their product, find k. Q8. Find a polynomial whose zeroes are 2, 1 and -1. What is its degree? Q9. Find the polynomial whose zeroes are reciprocals of the zeroes of the polynomial <math>2x^2 + 3x - 6</math>. Q10. Find the ratio of the sum and product of the zeroes of the polynomial <math>5x^2 + 2x - 10</math>.</p> <p>Q11. If <math>\alpha</math>, <math>\beta</math> and <math>\gamma</math> are the zeroes of the cubic polynomial <math>p(x) = 3x^3 - 6x^2 + 5x - 3</math>, then, find their sum and product. Q12. Divide <math>3 - x + 2x^2 + x^3 - 3x^4</math> by <math>(2 - x)</math> and verify by division algorithm. Q13. Find all the zeroes of the polynomial <math>p(x) = x^4 - 7x^3 + 9x^2 + 13x - 4</math>, if two of its zeroes are <math>2 + \sqrt{3}</math> and <math>2 - \sqrt{3}</math>. Q14. What must be subtracted from <math>8x^4 + 14x^3 - 2x^2 + 7x - 8</math> so that the resulting polynomial is exactly divisible by <math>4x^2 + 3x - 2</math>.</p>

		Q15. Find all the zeroes of the polynomial $f(x) = 2x^4 - 3x^3 - 5x^2 + 9x - 3$ , if two of its zeroes are $\pm \sqrt{3}$ .
4.	Science	<p>1. In human alimentary canal, name the site of complete digestion of various components of food. Explain the process of digestion. [CBSE (CCE) 2012]</p> <p>2. What happens if a person has a kidney failure? [CBS (CCE) 2012]</p> <p>3. List the three kinds of blood vessels of human circulatory system and write their functions in tabular form. [CBSE I CCE) 2012]</p> <p>4. (a) "The breathing cycle is rhythmic whereas exchange of gases is a continuous process". Justify this statement.</p> <p>(b) What happens if conducting tubes of circulatory system develops a leak? State in brief, how could this be avoided?</p> <p>(c) How opening and closing of stomata takes place? [CBSE (CCE) 2011]</p> <p>5. Draw a diagram of the front view of human heart and label any six parts including at least two that are concerned with arterial blood supply to the heart muscles. [CBSE (CCE) 2011]</p> <p>6. Describe in brief the function of kidneys, ureters, urinary bladder and urethra. [Foreign 2010]</p> <p>7. Explain the process of breakdown of glucose in a cell</p> <p>(i) In the presence of oxygen. (ii) In the absence of oxygen. [HOTS, Foreign 2010]</p> <p>8. What is double circulation in human beings? Why is it necessary? Delhi 2008C]</p> <p>9. (a) Name two different ways in which glucose is oxidized to provide energy in various organism.</p> <p>(b) Write any two differences between the two oxidation of glucose in organisms. [AI 2008]</p> <p>10. (a) Name the process by which autotrophs prepare their own food.</p> <p>(b) List the three events which occur during this process.</p>
5.	S.Sc.	<p>Project File Work on the following topics about 15 to 20 pages.</p> <p>4. Popular Struggle and Movement (Civics) or Water resources (Geography)</p> <p>5. Do the question and answers in H.W copy of Civics chapters 1,2,6</p> <p>6. Do the question and answers in H.W copy of Civics chapters 1,4,5</p>





**Class – XII – A**

S.No.	Subject	Holiday Home Work
1.	Pol. Sci.	<p><b><u>General instructions :-</u></b></p> <p>A. 1) Project can be individual.  2) it should be handwritten project on a A4 size colourful Sheets.( it is compulsory)  3) Project should be summed up in 25-30 pages. (In case of no. Of pages exceed on 30-35 pages)  4) It should be well researched based on facts and figures and pictorial.  5) The project must have a table of contents, title, and cover page. Acknowledgement Analysis with headings of subheadings.  6) It must include relevant news clippings, facts and figures and pictures.</p> <p><b><i>B. Read and revise the chapters taught in the class. Answer the questions sent through the worksheet.</i></b></p> <p><b>C. Read the newspaper daily especially the tutorial</b></p> <p><b>D. Knowledge based questions</b></p> <p>1) Write short notes on NATO  2) Name any two agreements signed by the two super powers With respect to arms hold strategy.  3) Name the founder leaders of NAM</p> <p><b>E. Understanding based</b></p> <p>1) Election commission - it's changing role and importance.  2) Role of regional parties                      3) Cold war                      4) Coalition politics                      5) Covid-19  6) Politics of reservation in India- Constitution -SC and ST, Mandal -OBC, NDA -EWS.  7).Any four popular movements.                      8).Partition of India and Pakistan.  9).Globalization                      10).State Reorganization  11).Short notes on--:  (i): Power sharing in India.                      (ii): The people's movement of Hyderabad.</p>
2.	Economics	Students are required to prepare a file regarding any topic from the book of Marco or Indian economic Development.
3.	Geography & History	Geography:Chapter 1to5 History: Theme 1 chapter 1to 4 do question and answers & also complete project work of Geography and History.
4.	Phy. Edu.	*Do complete and revise notes or unit 2 and 3. * Write practical no 1(fitness tests administration for all items) in practical life.
5.	English	1. Advertisement: - Classified: - To let, wanted, for sale (two two on all three topics. 2. Letter writing:- Letter to editor (two), Complain letter (one), Business letter (two) 3. Any two articles and speech. 4. Complete home work of covered topics and chapters.
6.	Painting Art	One chapter learn and 25 pencil sketches (any object).
7.	IP	Explain My SQL functions with query and output. 1. String function                      2. Date and time function

**Class – XII – B**

S.No.	Subject	Holiday Home Work
1.	English	1. Advertisement: - Classified: - To let, wanted, for sale (two two on all three topics. 2. Letter writing:- Letter to editor (two), Complain letter (one), Business letter (two) 3. Any two articles and speech. 4. Complete home work of covered topics and chapters.
2.	Physics	1. Write and learn notes of chapter 1 to 4. 2. Write and solve NCERT solved examples and exercises of chapter 1 to 4. 3. Solve <b>previous five years questions of CBSE (AI)</b> of chapter 1 to 4.
3.	Chemistry	1. Solve <b>previous five years questions of CBSE (AI)</b> of chapter 10 to 13. 2. Do solved examples and exercises questions of chapter 10 to 13. 3. Learn all reactions of chapter 10 to 13.
4.	Biology	1. Prepare and learn notes of chapter 1 to 5. 2. Write and solve exercise questions of chapter 1 to 4. 3. Solve <b>previous five years questions of CBSE (AI)</b> of chapter 1 to 4.
5.	P.ed	1. Do complete and revise notes of unit 2 and 3. 2. Write practical no. 1 (Fitness tests administration for all items) in practical file.
6.	IP	Explain MYSQL functions query and output. 1.String function 2. Date and Time functions.
7.	Painting	1.Learn chapter one 2.Pencil Sketches 25 (any objects)

विद्या ददाति विनयम्

**Class – XII – M**

S.No.	Subject	Holiday Home Work
1.	English	1. Advertisement: - Classified: - To let, wanted, for sale (two two on all three topics. 2. Letter writing:- Letter to editor (two), Complain letter (one), Business letter (two) 3. Any two articles and speech. 4. Complete home work of covered topics and chapters.
2.	Physics	1. Write and learn notes of chapter 1 to 4. 2. Write and solve NCERT solved examples and exercises of chapter 1 to 4. 3. Solve <b>previous five years questions of CBSE (AI)</b> of chapter 1 to 4.
3.	Chemistry	1. Solve <b>previous five years questions of CBSE (AI)</b> of chapter 10 to 13. 2. Do solved examples and exercises questions of chapter 10 to 13. 3. Learn all reactions of chapter 10 to 13.
4.	Mathematics	1. Learn and do the written practice of formula used in chapter 2, 5, 7. 2. Write and solve solved examples of chapter 2, 3, 4. 3. Solve <b>previous five years questions of CBSE (AI)</b> of all chapter covered.
5.	P.ed	1. Do complete and revise notes of unit 2 and 3. 2. Write practical no. 1 (Fitness tests administration for all items) in practical file.
6.	IP	Explain MYSQL functions query and output. 1.String function 2. Date and Time functions.
7.	Painting	1.Learn chapter one 2.Pencil Sketches 25 (any objects)
8.	Music hind vocal	Learn unit 1&2 Make picture of tanpura define its parts Notes of botu Unit write in notebook



**Class – XII – C**

S.No.	Subject	Holiday Home Work
1.	English	1. Advertisement: - Classified: - To let, wanted, for sale (two two on all three topics. 2. Letter writing:- Letter to editor (two), Complain letter (one), Business letter (two) 3. Any two articles and speech. 4. Complete home work of covered topics and chapters.
2.	Accountancy	<b>Prepare two charts: 1) show the format of Balance Sheet and Statement of profit and loss account. 2) Write all the formula of Accounting Ratios.</b>
3.	B.St.	<b>Solve 3 Assignment (Send to the exam department).</b>
4.	Economics	<b>Prepare a file regarding any topic from the book of macro or indian economic development.</b>
5.	Math	<b>1. Solve and write NCERT solved examples of ch --2, 3 and 4. 2. Learn and written practice formula of ch --2, 5 and 7. 3. Solve Last 5 year board questions.</b>
6.	IP	<b>Explain MySQL functions with query and output 1. String Functions 2. Date and Time Functions</b>
7.	Music Vocal	<b>1) Make Tanpura picture and define parts of tanpura. 2) Both Units (Unit 1 and 2) topics written in fair copy.</b>

**N.K. PUBLIC SCHOOL, SIKAR ROAD RAJAWAS  
CLASS- XII- BUSINESS STUDIES  
ASSIGNMENT -1  
HOLIDAY HOMEWORK 2020-21  
TOPIC-PRINCIPLES OF MANAGEMENT**

Q. 1. In your school, you observe that books are kept in office, chalks in the library and office records in the staff room.

1. Which principle of management is violated here and why?
2. How will that affect the achievement of school objectives?
3. As a manager, what steps will you take to rectify the shortcomings?

Q. 2. The production manager of an automobile company asked the foreman to achieve a target production of 200 scooters per day. But he did not give him the authority of requisition tools and materials from the stores department. Can the production manger blame the foreman if he is not able to achieve the desired target? Explain briefly the principle relating to the situation.

Q. 3. Soniya Ltd. was engaged in the business of manufacturing auto components. Lately, its business was expanding due to increased demand for cars. The competition was also increasing. In order to keep its market share intact, the company directed its workforce to work overtime. But this resulted in many problems. Due to increased



pressure of work the efficiency of workers declined. Sometimes, the subordinates had to work for more than one superior. The workers were becoming indisciplined. The spirit of teamwork, which had characterized the company previously, had begun to wane. Identify any three principles of management (as given by Henry Fayol) which were beginning to be violated, quoting the lines from the above case.

Q. 4. The production manager of Harsh Ltd. instructs a salesman to go slow in selling the product, where the marketing manager is insisting on fast selling to achieve the target. Which principle of management is being violated in this case?

Q. 5. Kanika and Priyanka are typists in a company having same educational qualifications. Kanika is getting Rs. 16000 per month and Priyanka Rs. 10000 per month as salary for the same working hours. Which principle of management is violated in this case?

Q. 6. Rishabh, a manager, very often speaks to people at all levels, passing on instructions regarding his department and also the other departments. Which principle of management is being overlooked?

Q. 7. The management and workers have entered into an agreement that workers will do overtime to cover up losses of the company. In return, the manager will increase the wages. But management later refused to increase the wages. Name the principle violated in this situation.

Q. 8. In Simran Ltd., an employee has the objective of maximizing his salary, but the organizational objective is to maximize output at competitive cost. There was some dispute on this for a while. Eventually, the organization's interest was given priority over employees' interest. Name the principle related to this situation.

Q. 9. Radhika opens a jewelry showroom in Jaipur after completing a course in jewelry designing. She has employed eleven persons in her showroom. For greater productivity, she divides the work into small tasks and each employee is trained to perform his/her specialized job. The sales persons are allowed to close a deal with a buyer by giving a maximum of 10% discount, whereas the decision to give any further discount rests with Radhika as the final authority. In the earlier days of starting of the business, five of her employees were asked to put in extra hours of work. In return she had promised to give them a special incentive within a year. Therefore, after six months when the business was doing well, she awarded a cash bonus to each of these employees to honour her commitment. However, when it comes to settling the conflicts among her employees, she tends to be more biased towards her female employees.

In context of the above case:

1. Identify and explain the various principles of management that are being applied by Radhika by quoting lines from the paragraph.
2. Identify and explain the principle of management which is being violated by Radhika by quoting lines from the paragraph.
3. State any one effect of the violation of the principle of management by Radhika as identified in part (b) of the question

Q. 10. Neeraj is selected for the post of software developer in an IT Company. On the first day of his joining Mehul, his project manager tells Neeraj that during the course of his work he will come across many such opportunities which may tempt him to misuse his powers for individual or family's benefit at the cost of larger general interest of the company. In such situations, he should rather exhibit exemplary behavior as it will raise his stature in the eyes of the company. Also, for interacting with anyone in the company on official matters, he should adopt the formal chain of authority and communication.

In context of the above case:

1. Identify and explain the various principles of management that Mehul is advising Neeraj to follow while doing his job.



Q 11. 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 this principle different from those of pure science.

In context of the above case:

1. Outline the concept of principles of management.
2. Why does Satinder find the principle of management different from those of pure science?
3. Why do the principles of management form the core of management in practice?

Explain by giving any two points highlighting the importance of principles of management.

Q. 12. Nutan Tiffin Box service was started in Mumbai by Mumbai dabbawalas. The Dabbawalas who are the soul of entire Mumbai aim to provide prompt and efficient services by providing tasty homemade Tiffin to all office goers at right time and place. The service is uninterrupted even on the days of bad weather, political unrest and social disturbances. Recently they have started online booking system through their website 'mydabbawalas.com'. Owing to their tremendous popularity amongst the happy and satisfied customers and members, the dabbawalas were invited as guest lecturers by top business schools. The Dabbawalas operate in a group of 25-30 people along with a group pleader. Each group teams up with other groups in order to deliver the Tiffin on time. They are not transferred on frequent basis as they have to remember the addresses of their customers. They follow certain rules while doing trade-No alcohol during working hours; No leave without permission; Wearing of white cap & carrying ID cards during business hours. Recently on the suggestion of a few self motivated fellow men, the dabbawalas thought out and executed a plan of providing food left in Tiffins by customers to slum children. They have instructed their customers to place red sticker if food is left in the Tiffin, to be fed to poor children later.

1. State any one principle of management given by Fayol & one characteristic of management mentioned in the above case.

Q. 13. 'Aapka Vidyalaya' believes in holistic development of students and encourages team building through a mix of curricular, co-curricular and sports activities. On its founders day a stage performance had to be put up. A committee of ten prefects was constituted to plan different aspect of the function. They all decided to use recycled paper for decoration. There was a spirit of unit and harmony and all members supported each other. With mutual trust and belongingness the programme was systematically planned and executed. Kartik, one of the prefects realized that

unknowingly the group had applied one of the principles of management while planning and executing the programme. He was so inspired by the success of the function that he asked his father to apply to same principle in his business. His father replied that he was already using this principle.

1. Identify the principle of management applied for the success of the programme.
2. State any two features of management highlighted in the above para.

Q. 14. Nikita and Salman completed the MBA and started working in a multinational company at the same level. Both are working hard and are happy with their employer. Salman had the habit of backbiting and wrong reporting about his colleagues to impress his boss. All the employees in the organization knew about it. At the time of performance appraisal the performance of Nikita was judged better than Salman. Even then their boss, Mohammed Sharif decided to promote Salman stating that being a female Nikita will not be able to handle the complications of a higher post.

1. Identify and explain the principle of management which was not followed by this multinational company.

Q. 15. Sigma Ltd. is a large company manufacturing electric motors. The company has several

departments – Production, Marketing, Finance and HR. Mr. Shashank, CEO of the company set the target sale of 10 crores in a month. To increase the sales, the marketing manager, Mr. Ishaan insists on offering 10% discount to customers. But the finance manager, Mr. Mohak does not approve such discount as it would mean loss of revenue. Because of dual subordination, the sales manager, Mr. Anshik could not achieve the sales target.

1. Which concept of management Sigman Ltd. is lacking? State it.
2. Which principles of management has been overlooked by this company? State it.

## **N.K. PUBLIC SCHOOL, SIKAR ROAD RAJAWAS**

**CLASS- XII- BUSINESS STUDIES**

**ASSIGNMENT -2**

**HOLIDAY HOMEWORK 2020-21**

**TOPIC-PRINCIPLES OF MANAGEMENT**

Q. 1. ABC Ltd. is engaged in producing electricity from domestic garbage. There is almost equal division of work and responsibility between workers and management. The management even takes workers into confidence before taking important decisions. All the workers are satisfied as the behavior of the management is very good.

1. State the principle of management described in the above para.

Q. 2. Voltech India Ltd. is manufacturing LED bulbs to save electricity and running under heavy losses. To revive from the losses, the management thought of shifting the unit to a backward area where labour is available at a low cost. The management also asked the workers to work overtime without any additional payment and promised to increase wages of the workers after achieving its mission. Within a short period the company started earning profits because both the management and the workers honoured their commitments.

1. State the principle of management described in the above para.

Q. 3. Kushal Ltd. is a leading automobile company in which the various departments are setting up their own objectives without paying any interest to the organizational objectives.

1. Which aspect of management the company is lacking? What will be its impact on the organization?
2. Identify the principle of management which has been overlooked by this organization.

Q. 4. Telco Ltd. is manufacturing files and folders from old clothes to discourage use of plastic fields and folders. For this, they employ people from nearby villages where very less job opportunities are available. An employee, Harish, designed a plan for cost reduction but it was not welcomed by the production manager. Another employee gave some suggestion for improvement in design, but it was also not appreciated by the production manager.

1. State the principle of management described in the above para.

Q. 5. Khandelwal Ltd., a tyre manufacturing concern has been established for more than ten years. Having made good profits in the past, company wanted to expand further and hence did not declare bonus for the previous year. The workers got agitated and trade union declared strike and demanded bonus and other facilities. The management decided not to give into their demands.

1. Which principle of scientific management is overlooked in the given case?

Q. 6. Hritik is desirous of setting up a small factory to manufacture different kinds of eco-friendly packaging materials. He proposes to adopt a logical approach to his business rather than hit and trial method as he knows that this can result in tremendous saving of human energy as well as wastage of time and materials. He plans to adopt paternalistic style of management in practice in order to avoid any kind of class-conflict that may emerge between

him and the workers. Moreover, he plans to seek the opinion of his workers before taking any important decisions and also offers incentives to them for providing valuable suggestions for the business.

In context of the above case:

1. Identify and explain the various principle of scientific management that Hritik plans to apply in his business.

Q. 7. Gaurika has been appointed as the chief organizer of a weeklong cultural event. Being a staunch follower of scientific management, she decides to execute her work by putting into practice the various techniques of scientific management. On the basis of several observations, she is able to determine that the standard time taken by the security officer at the gate to check the credentials of each visitor is 30 seconds. So she decides to employ two persons on this job for every function along with the other necessary support staff. She considers the fact that every day, the functions will take place in three shifts of four hours each, therefore it is important to give breaks to the support staff

even in a single shift to take her/his lunch etc. Moreover, on introspection, she determines that the best way to distribute refreshment boxes to the visitors will be to hand it over to them at the exit gate as it would help to save time and eliminate any kind of confusion.

In the context of the above case:

1. Identify and explain the various techniques of work study which have been put into practice by Gaurika.

Q. 8. 'Study Buddy Pvt.' is company dealing in stationery items. In order to establish standards of excellence and quality in materials and in the performance of men and machines, the company adheres to benchmarks during production. Moreover, its products are available in limited varieties, sizes and dimensions thereby eliminating superfluous diversity of products.

Identify the technique of scientific management which has been adopted by 'Study Buddy Pvt. Ltd.'

Q 9. Tina and Anshu completed their MBA and started working in a multinational company at the same level. Both are working hard. Anshu has the habit of backbiting and wrong reporting about his colleagues to impress the boss. All the employees in the organization know about it. At the time of performance appraisal also Tina's performance was rated better than Anshu. Even then their boss decided to promote Anshu stating that being a female, Tina will not be able to handle the complications of higher post.

1. Identify and explain the principle of management that was not followed by this company.

Q.10. In one of his principles, Taylor suggested that job performance should be based on scientific enquiry and not on will/wish or personal intuition of manager?

1. Name that principle.

Q 11. The production department of Alpha Ltd. was not performing well on detailed analysis; it was observed that the workers of that department were overburdened. They were forced to work for longer hours without any break. So the management planned to replace the production manager. They appointed Mr. Hari as the new Production Manager. He observed the average worker and note down their times. He noted down the time they worked and the time they required to be fresh to join back the work. Based on this observation, he set the break intervals for workers. He gave small breaks to workers to recharge their energy.

1. Name and explain the technique of scientific management used by Mr. Hari.

Q. 12. In the staff meeting the principle of the school raised objection that teachers start the teacher after 5 to 10 minutes in third floor classes. He warned them as students are complaining about this. The teachers explained the principle that when we climb steps from ground to third floor. We get some tiredness and need 5 to 10 minutes rest before starting the lecture. The principle planned to install a lift in school so that teachers do not waste their energy on wasteful activity of climbing steps.

1. State the techniques of scientific management used by principle.

2. State any other technique of scientific management.



Q. 13. In a factory the toolbox was kept under the table of every worker, whenever worker needs tools he had to bend tape out tool from tool box and keep it back after use. The newly appointed supervisor observed it and suggested to keep a stool near every worker's chain where toolbox can be placed so that workers do not waste their energy in bending again and again.

1. Which technique of scientific management is used by New Supervisor?
2. State the objective of motion study.

Q. 14. Mr. Mukesh used to manufacture shoes by employing labour who was easily available. When his son after completing his MBA joined the business, he analyzed that if we use capital intensive method by using a machine it will reduce the cost and the quality of shoes will also improve.

1. Which technique of scientific management is used by his son?
2. What is the objective of that technique?

Q. 15. Mr. Kapoor, Finance manager of ABC Ltd. applied for leave to attend a family function in Amritsar. The director of the company requested him to cancel his leave as there is an important meeting schedule on that date. Mr. Kapoor immediately agreed and cancelled his trip as he thought attending meeting is more important for company's benefit.

1. Which principle of Fayol is applied by Mr. Kapoor?
2. Explain that principle.

**N.K. PUBLIC SCHOOL, SIKAR ROAD RAJAWAS**

**CLASS- XII- BUSINESS STUDIES**

**ASSIGNMENT -3**

**HOLIDAY HOMEWORK 2020-21**

**TOPIC-PRINCIPLES OF MANAGEMENT**

Q. 1. The manager of ABC Ltd. asked his workers to work overtime to increase the production and earn more but he did not paid extra wages to workers for extra time worked. The workers started feeling dissatisfied and stop contributing maximum.

1. Which principle of Fayol is violated in the above case?
2. Explain that principles.

Q. 2. Mr. Rajiv is the owner of 'Laxmi Dairy.' He is producing various milk products. He always tests various ways of producing different products and chooses the best and most economical way of production. He is also very particular about fixing a place for everything and he makes sure that all the employees are given a fixed place so that there is no wastage of time and delay in production.

1. Which technique of scientific management is applied by Mr. Rajiv?
2. Which principle of Henry Fayol is followed by him?

Q. 3. Mr. Rajiv the senior manager of Unique enterprise considered himself very wise and used to take all the decisions himself without consulting the employees, he never used to help anyone nor he used to take help of anyone. The employees of unique enterprise were not working efficiently and company's profit margin started declining to tackle the problem, the company appointed a new manager from IIM Bangalore. The new manager after joining made a policy that all the decisions will be taken after consulting employees in the meeting. All employees must give some suggestions and best suggestions will be rewarded with financial and nonfinancial incentives. This policy had very positive effects on company.

1. State the principle of Henry Fayol used by new manager.
2. State the technique of scientific management related to above case.

Q. 4. In a school principle makes sure that every instruction, order or information given by him must be passed to vice-principle then Head of the department and then to teachers and students must be informed by respective teachers only. He never allows teachers to directly communicate with him.

1. State the Principle of Henry Fayol followed by the school principle.
2. In case of emergency which concept of Scalar Chain can be used by teacher to pass urgent message directly to principle.

Q. 5. Pawan is working as a Production Manager in CFL Ltd. which manufactures CFL bulbs. There is no class-conflict between the management and workers. The working conditions are very good. The company is earning huge profits. As a policy, the management shares the profits earned with the workers because they believe in the prosperity of the employees.

1. State the principle of management described in the above paragraph.

Q. 6. The principles of Taylor and Fayol are mutually complementary. One believed that management should share the gains with the workers while the other suggested that employees' compensation should depend on the earning capacity of the company and should give them a reasonable standard of living. Identify and explain the principles of Fayol and Taylor referred to in the above paragraph.

Q. 7. The principles of Taylor and Fayol are mutually complementary. One believed that management should not close its ears to constructive suggestions made by the employees while the other suggested that a good company should have an employee suggestion system whereby suggestions which result in substantial time or cost reduction should be rewarded. Identify and explain the principles of Taylor and Fayol referred to in the above paragraph.

Q. 8. Hina and Harish are typists in a company having the same educational qualifications. Hina gets Rs. 3,000 per month and Harish gets Rs. 4,000 per month as salaries for the same working hours. Which principle of management is being violated in this case? Name and explain the principle.

Q. 9. Rajveer works as a plant superintendent in a carpet making factory. In order to complete the export orders on time, the production manager asks him to make the workers work over time whereas the finance manager is strictly against this practice because it will increase the cost of production. Moreover, Rajveer feels that since the company is manufacturing handmade carpets as well as machine made carpets there is a lot of overlapping of activities. Therefore, there should be two separate divisions for both of them wherein each division should have its own in charge, plans and execution resources.

In context of the above case:

1. Identify and explain the principle of management which is being violated.
2. Also identify the principle of management that Rajveer feels should be implemented in the factory.
3. Give any two differences between the principle of management as identified in part (a) and part (b) respectively.

Q. 10. Gurpreet is running a retail mart in Varanasi to provide various types of products of daily use under one roof to the buyers. The employee turnover in his business is very high and he is perpetually on a look out for new staff. The fact of the matter is that he lacks managerial skills and assigns work to his employees on adhoc basis without letting them settle down in a specific work. This approach of his creates a sense of insecurity among the employees and they tend to leave the job very quickly. However, he is a very god fearing person and offers fair wages to his employees so they can afford a reasonable standard of living.

In context of the above case:

1. Identify and explain the principle of management which Gurpreet is unable to apply and is perpetually on look out for new staff.
2. "He is a very god fearing person and offers fair wages to his employees so they can afford a



reasonable standard of living.” Name and explain the relevant principle of management will have been brought into effect by Gurpreet.

Q. 11. After finishing her BBA degree course, Tanya gets a job of Assistant Manager in a retail company through the reference of her cousin Taruna who works in the same company as a Senior Manager. Taruna decides to guide Tanya through her experience by making her aware of the important facts about management in practice. She tells her that neither the principles of management provide any readymade, straitjacket solutions to all managerial problems nor they are not rigid prescriptions, which have to be followed absolutely.

In context of the above case:

1. Identify the two features of principles of management mentioned in the above paragraph by quoting lines from the paragraph.
2. Why do the principles of management not provide readymade, straitjacket solutions to all managerial problems?

Q. 12. Raj and Simran are both qualified eye surgeons and good friends. After obtaining a certificate of practice, they decide to pursue a career of their own choice. Raj starts an eye care centre in the city whereas Simran joins a government hospital in a small village. They meet after a long time in a party. Raj invites Simran to visit his eye care centre and she accepts his invitation. She observes at his clinic that there is a fixed place for everything and everyone and it is present there so that there is no hindrance in the activities of the clinic. Also, Raj always tends to replace ‘I’ will ‘we’ in all his conversations with the staff members. Later on Raj shares with her that he always deals with lazy staff sternly to send the message that everyone is equal in his eyes. In context of the above case:

1. Identify and explain the various principles of management that Raj is applying for the successful management of his eye care centre.

Q. 13. Anshul owns a small scale factory where utility items are prepared from waste material like paper machete items, paper and cloth bags, decorative material etc. Over the past few weeks, he was observing that the productivity of one of his very efficient worker, Ramdas, is going down. So he decides to probe into the matter and confronts Ramdas one day. On being asked, Ramdas shares with Anshul that he has deliberately slowed down in his work as many of the less efficient workers often pull his leg saying that there is no need for him to be more efficient when everybody is being paid at the same rate. Taking a lesson from this insight, Anshul decides to implement an incentive bonus plan so as differentiate between efficient and inefficient workers.

In context of the above case:

1. Name and explain the incentive bonus plan that Anshul may implement so as differentiate between efficient and inefficient workers.

Q. 14. Swaraj is running an office furniture showroom. Most of his clients are businessmen and they prefer to buy goods on credit. Keeping this in mind, he has given the power to the sales manager, Mr. Bhardwaj, to offer a credit period of only 20 days, while negotiating a deal with a buyer. On a specific day, Mr. Bhardwaj finds that if he can offer a credit period of 30 days as an exception to a prospective buyer, he is likely to finalize a highly profitable deal for the business. So Mr. Bhardwaj requests Swaraj to grant him additional authority for offering a credit period of 30 days in the interest of the business. But Swaraj refuses to extend his authority and as a result, the deal is not finalized.

In context of the above case:

1. Can Mr. Bhardwaj be held responsible for loss of the deal? Why or why not? Give a suitable reason in support of your answer.
2. Also, explain the related principle.