# DR. VIRENDRA SWARUP PUBLIC SCHOOL, KALYANPUR 

## SESSION-2022-23

## SUMMER HOLIDAY HOMEWORK

## CLASS: X

## Dear Parents,

Season's Greetings! Vacation is the most beautiful moment of every student's life. They wait eagerly for the same. They need it for relaxation and hone their skills. They feel fresh which enhances their concentration towards studies. In vacation, students try to learn new things and enjoy it with their holiday homework. We have announced our Summer Vacation from May 30, 2022; this definitely comes along with the 'Holiday Homework'! Our Holiday Homework has been carefully planned to cater to the diversified interests of students and help them revise for the upcoming assessments. We are looking forward to children coming back to school after rejuvenating holidays, with smiling faces and joy in their hearts.
marks, hence submission of work post vacation is compulsory for all the students.

1. Start the revision for all the subjects as per the syllabus of the periodic assessment which is scheduled from July onwards.
2. Written homework of all the subjects: - English, Hindi, Maths, Science, Social Science, and Computer is to be done as per the instructions.
3. The holiday homework must be done in a very neat and presentable manner. Questions must be done in the given sequence.
4. The child will be assessed for the handwriting, presentation, neatness, completion of all the given questions, indexing of the work.
5. For the project wherever it is mentioned in the question, strictly adhere to the instructions.
6. The child must present his/her work very neatly.
7. Enrich your vocabulary by learning the vocabulary words from English and Hindi textual books.
8. Subject teachers have further imparted specific instructions for their subjects. Before attempting the question, you must read them thoroughly.
9. Also download the worksheets attached herewith for practice from the schoolpad.

## English Language \& Literature

## A portfolio on "Biography of Nelson Mandela"

*Use comment sheets \& art sheets for the portfolio.

* A proper hardbound file should cover the entire project.
* Cover page should be creative depicting relevance to the topic.
* Colours \& other decorative materials can be used.
* Presentation should be neat \& innovative.
* Use pictures/ drawings for the illustration.
* Project should be completed in 10 pages.

Submit the project to the subject teacher.

## हिंदी परियोजना कार्य विजापन लेखन ( पोर्टफोलियो )

1. आवरण पृष्ठ( कवर पेज)
2. परिचय (स्वयं का)
3. विषय सूची
4. विज्ञापन का अर्थ, इतिहास, विज्ञापन का महत्व मानव जीवन में, लाभ हानि ।
5. निम्नलिखित विज्ञापनों में निर्देशानुसार कार्य करना है -

क. नीचे दिए गए पांच विज्ञापन किसी पत्रिका या समाचार पत्र से काटकर चिपकाने हैं जिनके शीर्षक निम्नलिखित हैं

- वाहन
- पेन
- जल संरक्षण
- बाल श्रम
- निशुल्क नेत्र शिविर

ख. निम्नलिखित विषय पर विज्ञापन चित्र 60 शब्दों में संवाद सहित बनाएं-

- पुस्तक मेला
- पर्यटन के लिए (कानपुर)
(उपरोक्त हिंदी परियोजना समस्त कार्य A4 शीट में किया जाएगा।)


## Mathematics

Do the following activity in inter-leave notebook.
Activity: To show the linear equations in two variables
Aim: To use the graphical method to obtain the conditions of consistency and hence to solve a given system of linear equations in two variables.

## Materials Required:

1. Three sheets of graph paper
2.A ruler
2. A pencil

Theory: The lines corresponding to each of the equations given in a system of linear equations are drawn on a graph paper. Thereafter, any one of the following three conditions can be observed.

1. If the two lines intersect at a point then the system is consistent and has a unique solution. 2. If the two lines are coincident then the system is consistent and has infinitely many solutions.
3.If the two lines are parallel to each other then the system is inconsistent and has no solution.

## Science <br> Biology:

## A project on the topic 'Ozone depletion and Green house Effects'

The depletion of the ozone layer is caused mainly by the increase in emissions of chlorineand bromine-containing compounds like CFCs, halogens, carbon tetrachloride, methyl chloroform and methyl bromide. Emissions of greenhouse gases can affect the depletion of the ozone layer through atmospheric interaction.

## Points to note

1. Use A4 size sheets
2. It should be a hand written project (blue or black pen should be used)
3. You can use diagrams and material from the web
4. Each illustration should be supported with a write up/relevance to the topic
5. You can also include a case study based on the above topics.
6. The cover page should be written in bold letters with the topic, name and roll number.

Follow the sequence of pages as given below:
a. Acknowledgement
b. Index
c. Introduction
d. Ozone depletion effects and causes
e. Greenhouse gases their effects and how to control their emission.
f. Bibliography
7. Use a hard bound cover file.

No. of Pages: 8 to 10

## Physics

Lab Manual Activity: Write down the activities mentioned as 1 and 2 in your science lab manual
1- Aim: To trace the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.
2- Aim: Find the focal length of given concave mirror
Project Work: Make a working model on the given topic:

1. Non-Conventional Source Of Energy (Roll no. 1 to 5)
2.Force and its application (Roll no. 6 to 10)
2. Pascal's Law (Roll no. 11 to 15)
3. Law of Conservation of energy (Roll no. 16 to 20)
4. Tesla Coil (Roll No. 21 to 25)

## Chemistry

Aim: Prepare strips of indicators using red cabbage and hibiscus petals and test the nature of different substances present around you. Write the process along with readings on a comment sheet. The demonstration should be given in class with proper explanation.

## Social Science

## Manual for Sustainable Development

1. Use A4 size sheets
2. It should be a hand written project (blue or black pen should be used)
3. You can use newspaper clippings, maps, diagrams and material from the web
4. Each illustration should be supported with a write up/relevance to the topic
5. The cover page should be written in bold letters with the topic.

Project should be developed and presented in this order:

* Cover page showing project title, schools name,
students name, class and section and academic session(year).
* List of contents with page number (approx... 15 pages).

Acknowledgements: Acknowledging institution, offices and libraries visited and people who have helped.

## Project Overview:

*Purpose, aim, methodology and experience while doing the project.

* Chapters with relevant headings.
* Summary and conclusions based on findings.
* Bibliography should have the title, pages referred, author, publisher, year of publication and if a website, the name of the website with a specific link which have been used. NOTE: Only eco-friendly material to be used.


## Computer

## A web page on our School using HTML.

You can include pictures of the school, also include all facilities and extra-curricular activities that are performed in the school. You need to design an impressive one by using all the appropriate tags that you have learnt so far.

## Art Integrated Activity

Subject Integrated - Computer, Social Science \& Art \& Craft
Nature of activity - Individual
Type of Activity - Visual
Procedure-Make a PowerPoint presentation of 10-15 slides on Natural water purifying techniques used by paired States (Meghalaya and Arunachal Pradesh)
DR. VIRENDRA SWARUP PUBLIC SCHOOL, KALYANPUR
SESSION -2022 - $\mathbf{2 3}$
Subject: English
Question Bank
Class: 10

Note: All these questions must be attempted and written neatly in your English pc (personal copy).

## A LETTER TO GOD

Answer the following questions briefly. (40-50 words)
Q1. Where was Lencho's house located?
Q2. Why did Lencho keep gazing at the sky?
Q3. How did Lencho feel when it started raining? Was the rain really a blessing?
Q4. How did Lencho and his family react to the calamity? What was the only hope Lencho had?
Q5. How was Lencho sure that it was going to rain?
Q6. Why did the postmaster send a reply to Lencho's first letter addressed to God?
Q7. What was Lencho's pride and possession?
Q8. Bring out instances from the story which show Lencho's immense faith in God.

Answer the following in detail. (100-120 words)
Q9. How did the hailstones affect Lencho's field? What was Lencho's only hope?
Q10. "I wish I had the faith of the man who wrote this letter." In the light of this statement, describe Lencho's character.

Q11. As the postmaster, write a page of your diary telling how you felt when Lencho accused you and your men of stealing money.
Q12. If you had been Lencho, and this incident would have happened with you, what would have you done? Describe your feelings in simple words.

## DUST OF SNOW

## Answer the following questions briefly. (40-50 words)

Q13. How did the crow change the poet's mood?
Q14. What was the reaction of the poet when the dust of snow fell on him?
Q15. Why does the poet feel that he had saved some part of the day?

## Answer the following in detail. (100-120 words)

Q16. A simple moment proves to be very significant and saves rest of the day of poet from being wasted. Explain on the basis of the poem 'Dust of Snow". Q17. The poet was sad and depressed. But one small incident lifts his spirit. He is full of joy and happiness again. Based on your reading of the poem, write a paragraph titled - Happiness is Relative.

## FIRE AND ICE

## Answer the following questions briefly. (40-50 words)

Q18. What do 'Fire' and 'Ice' symbolize in the poem 'Fire' and 'Ice'?
Q19. What message does the poet wish to convey through the poem 'Fire and 'Ice'?

## Answer the following in detail. (100-120 words)

Q20. Today's world is conflict ridden. People fight over various issues and there is no peace in the world. Explain/Describe based on your reading of the poem 'Fire and Ice'.

Q21. What does 'Fire' and 'Ice' stand for and what is the general opinion that you form regarding the world?
Q22. There are many ideas about how the world will end. Do you think the world will really end some day? Have you ever thought what would be the cause of it?

## NELSON MANDELA: LONG WALK TO FREEDOM

## Answer the following questions briefly. (40-50 words)

Q23. What ideals did Mandela set out for the future of South Africa in his speech?
Q24.How, according to Mandela, had apartheid policy affected South Africa?
Q25. What did Mandela think about the oppressor and the oppressed?
Q26. What according to Mandela, is 'true-freedom'?
Q27. How did 'hunger for freedom' change Mandela's life?
Q28. What are the 'twin obligations' referred to by Nelson Mandela?
Q29. Could a common man according to Mandela, fulfil his twin obligations in a country like South Africa where apartheid was lawfully observed?
Q30. What did South African jets, helicopters and troops demonstrate with their display at the inauguration ceremony?
Q31. What did the generals and police officers do on that day which Mandela found unusual?
Q32. What is the greatest wealth of a nation in Mandela's opinion?
Q33. What does Mandela think about the patriots? Can they be repaid?

## Answer the following in detail. (100-120 words)

Q34. Describe Mandela's life journey from a prisoner to the first black President of south Africa.
Q35. Discuss the scene of the inauguration ceremony? Who took oath in the ceremony? Why is the inauguration called a historic occasion for South Africa?

Q36. Nelson Mandela was the hero of South Africa's freedom movement. Comment.
Q37. Nelson Mandela described 'twin obligations' for a man. Do you agree with these obligations? Do you think that every person should fulfil these obligations in real life?
Q38. What does courage mean to Mandela? How did he learn the meaning of courage? What do you get about courage, love and hate from this chapter?

## A TRIUMPH OF SURGERY

## Answer the following questions briefly. (40-50 words)

Q39. Why was Dr Herriot shocked at Tricki's appearance?
Q40. What was Mrs Pumphrey's reaction when Dr Herriot suggested Tricki's hospitalization?
Q41. What were the two suggestions given for Tricki by Dr Herriot to Mrs Pumphrey at the initial stage? Did she follow them?
Q42. What did Mrs Pumphrey do to bring Tricki back to normal health? Was she successful?
Q43. Why did Mrs Pumphery make a frantic call to Dr Herriot?
Q44. What steps did Dr Herriot take to save Tricki?
Q45. Why was Tricki an uninteresting object for the other dogs at the surgery?
Q46. What evidence do you get from the text about Tricki's affluent living?
Q47. Describe the 'parting scene' between Tricki and Mrs Pumphrey's at Mrs Pumphery's house?

## Answer the following in detail. (100-120 words)

Q48. Write a brief character sketch of Mrs Pumphrey.
Q49. Give a brief character sketch of Tricki.
Q50. "Over-pampering is not only bad for human but also for animals". Explain this statement in the light of the story "A Triumph of Surgery".
Q51. Is the narrator as rich as Tricki's mistress? Support your answer with evidences from the text.
Q52.How does the doctor treat the dog?
Q53. Do you think Tricki was happy to go home? What do you think would happen now?

## THE THIEF'S STORY

## Answer the following questions briefly

Q54. When and how did Hari Singh meet Anil?
Q55. How did Hari Singh succeed in his profession?
Q56. How did the thief realise that Anil knew that he was robbed?
Q57. Why was it not easy for the thief to rob Anil?
Q58. What was the thief $s$ reaction when he took Anil's money?
Q59. How, according to Hari Singh, would the greedy man, the rich man and the poor man react. when they had lost their goods?
Q60. How did Hari Singh know that Anil had forgiven him?
Q61. Why did the thief smile without any effort towards the end of the story?
Q62. What was Hari given by Anil in return of his work?

Answer the following questions in detail. (100-120 words)
Q63. Money cannot make a man as much as education can'. Elucidate this statement.
Q64. "Love, trust and compassion transformed Hari Singh". Explain with reference to the story "The Thief s story

## DR.VIRENDRA SWARUP PUBLIC SCHOOL, KALYANPUR SESSION - 2022-23

विषय- हिन्दी
कक्षा-10
कार्यपत्रक बालगोबिन भगत

## प्रश्न1. नीचे दिए गए अपठित गद्यांश को ध्यानपूर्वक पढ़िए और उस पर आधारित प्रश्नों के उत्तर सही विकल्प से छाँटकर दीजिए।

आषाढ़ की रिमझिम है। समूचा गाँव खेतों में उतर पड़ा है। कहीं हल चल रहे हैं, कहीं रोपनी हो रही है। धान के पानी भरे खेतों में बच्चे उछल रहे हैं। औरतें कलेवा लेकर मेड़ पर बैठी हैं। आसमान बादल से घिरा, धूप का नाम नहीं है, ठंडी पुरवाई चल रही है। ऐसे ही समय आपके कानों में एक स्वर-तरंग झंकार-सी कर उठी। यह क्या है- यह कौन है! यह पूछना न पड़ेगा। बालगोबिन भगत समूचा शरीर कीचड़ में लिथड़े अपने खेत में रोपनी कर रहे हैं। उनकी अँगुली एक—एक धान के पौधे को, पंक्तिबद्ध, खेत में बिठा रही है। उनका कंठ एक-एक शब्द को संगीत के जीने पर चढ़ाकर कुछ को ऊपर स्वर्ग की ओर भेज रहा है और कुछ को इस पृथ्वी की मिट्टी पर खड़े लोगों के कानों की ओर! बच्चे खेलते हुए झूम उठते हैं, मेड़ पर खड़ी औरतों के होंठ काँप उठते हैं, वे गुनगुनाने लगती हैं, हलवाहों के पैर ताल से उठने लगते हैं, रोपनी करने वालों की अँगुलियाँ एक अजीब क्रम से चलने लगती हैं। बालगोबिन भगत का यह संगीत है या जादू!

1. गद्यांश के आधार पर बताइए कि भगत के संगीत के जादू का प्रभाव किस-किस पर पड़ता है?
क) किसानों पर
ख) आस-पास खेलते बच्चों पर
ग) मेड़ पर खड़ी औरतों पर
घ) उपरोक्त सभी
2. बालगोबिन भगत के संगीत को क्या कहा गया है?
क) रहस्य
ख) जादू
ग) संगीत
घ) ये सभी
3. भगत के संगीत को सुन हलवाहों पर क्या प्रभाव पड़ता है?
क) हलवाहे गाने लगते हैं
ख) झूम उठते हैं
ग) हलवाहों के पैर ताल से उठने लगते हैं
घ) उपरोक्त में से कोई नहीं
4. प्रस्तुत गद्यांश किस पाठ से लिया गया है? इसके लेखक का नाम बताइए।

क) नेता जी का चश्मा (स्वयं प्रकाश)
ख) बालगोबिन भगत (रामवृक्ष बेनीपुरी)
ग) लखनवी अंदाज (यशपाल)
घ) आत्मकथ्य (जयशंकर प्रसाद)
5. भगत अपने संगीत का प्रभाव बढ़ाने के लिए क्या करते थे?

क) स्वर को ऊँचा करते थे
ख) स्वर को नीचा करते थे
ग) स्वर को ऊँचा-नीचा करते थे
घ) उपरोक्त में से कोई नहीं
अतिरिक्त कार्य
प्रश्न 2. निम्नलिखित प्रश्नों के उत्तर $25-30$ शब्दों में दीजिए।

1. 'बालगोबिन भगत' पाठ के आधार पर ग्रामीण जीवन की सजीव झाँकी प्रस्तुत कीजिए।
2. गर्मियों के दिनों में बालगोबिन भगत के गीतों को सुनकर लोगों पर क्या प्रभाव पड़ता था?
3. "उनका बेटा बीमार है, इसकी खबर रखने की लोगों को कहाँ फुरसत" - कथन द्वारा लेखक क्या कहना चाहता है?
4. "किंतु मौत तो अपनी ओर सबका ध्यान खींचकर ही रहती है।" लेखक का ऐसा कहने का कारण क्या है?
5. बालगोबिन भगत के बेटे की मृत्यु का समाचार मिलने पर जब लेखक उनके घर पहुँचे, तब उन्होंने बालगोबिन भगत को क्या करते हुए देखा?
6. बालगोबिन भगत अपने इकलौते पुत्र को बहुत मानते थे, फिर उसकी मृत्यु हो जाने पर उन्होंने दु:ख व्यक्त क्यों नहीं किया?
7. बालगोबिन भगत द्वारा अपने इकलौते पुत्र की मृत्यु के समय पुत्र्वधू से कही गई बातों का क्या अर्थ निकलता है?
8. बालगोबिन भगत पतोहू के पुनर्विवाह के रूप में समाज की किस समस्या का समाधान प्रस्तुत करना चाहता है? स्पष्ट कीजिए।
9. बालगोबिन भगत की पुत्रवधू की ऐसी कौन-सी इच्छा जिसे वे पूरा न कर सके? कारण सहित स्पष्ट कीजिए।
10. बालगोबिन भगत गृहस्थ भी थे और सब चीज़ 'साहब' की मानते थे। वे दोनों बातों का पालन कैसे करते थे?
11. बालगोबिन भगत का अपनी पैदावार को कबीरपंथी मठ पर जाकर चढ़ा देना क्या प्रकट करता है?
12. लेखक ने बालगोबिन भगत के संगीत को 'संगीत है या जादू' क्यों कहा है?
13. आपके विचार में बालगोबिन भगत के गीत-संगीत को किस नाम से पुकारा जा सकता है?
14. कार्तिक मास से फाल्गुन मास तक बालगोबिन भगत की दिनचर्या क्या होती थी?
15. यह कैसे कहा जा सकता है कि बालगोबिन भगत की पतोहू एक आदर्श पतोहू थी? क्या आधुनिक समय में भी इस प्रकार का आदर्श प्रासंगिक माना जा सकता है?
16. 'यह थी उनकी आखिरी दलील'- बालगोबिन भगत ने आखिरी दलील क्या और क्यों दी?
17. बालगोबिन ने समाज सुधारक की तरह कौन-कौन से कार्य किए?
18. बालगोबिन भगत की पुत्रवधू की चरित्र की विशेषताओं में से दो प्रमुख विशेषताओं का संक्षिप्त में उल्लेख कीजिए।
19. लेखक को बालगोबिन भगत का संगीत पोखरे पर कैसे ले गया था?
20. बालगोबिन भगत की मृत्यु किस प्रकार हुई?
21. "किंतु मालूम हुआ जैसे तागा टूट गया हो माला का एक-एक दाना बिखरा हुआ।" '- पंक्ति का आशय ‘बालगोबिन भगत' पाठ के आधार पर समझाते हुए बताइए कि गाँव वालों को कैसे विदित हुआ, अब भगत नहीं रहें?
22. गर्मियों की उमस भरी शाम को भी बालगोबिन भगत किस प्रकार शीतल और मनमोहक बना देते थे?

## मूल्यपरक

प्र01. बालगोबिन भगत पाठ मनुष्यता, लोक संस्कृति तथा सामूहिक चेतना का प्रतीक है। पाठ के आधार पर सिद्ध कीजिए।
प्र02. पाठ में आये महीनों के नाम के आधार पर विक्रम संवत् के बारह महीनों के नाम क्रमबद्ध तरीके से लिखिए।

UR.VIRENDRA SWARUP PUBLIC SCHOOL, KALYANPUR
SESSION - 2022-23
विषय- हिन्दी
कक्षा-10
अलंकार कार्यपत्रक

प्र01. निम्नलिखित पंक्तियों में निहित अलंकारों की पहचान कर उनके नाम लिखिए।

1. कहती हुई यों उत्तरा के नेत्र जल से भर गए।

हिम के कणों से पूर्ण मानों हो गए पंकज नए।
2. बाँधा था विधु को किसने इन काली जंजीरों में,

मणिवाले फणियों का मुख क्यों भरा हुआ है हीरों से।
3. हनुमान की पूंछ में लगन न पायी आगि।

सगरी लंका जल गई, गये निसाचर भागि।
4. लहरें व्योम चूमती उठती।
5. आगे नदियां पड़ी अपार।

घोड़ा कैसे उतरे पार।।
राणा ने सोचा इस पार।
तब तक चेतक था उस पार।।
6. सिर फट गया उसका वहीं। मानों अरूण रंग का घड़ा हो।
7. नेत्र मानो कमल हैं।
8. सोहत ओढ़े पीत पट, स्याम सलोने गात

मनहुँ नीलमनि सैल पर, आतप परयौ प्रभात।।
9. खंजरीर नहीं लखि परत कुछ दिन साँची बात।

बाल द्रगन सम हीन को करन मनो तप जात।।
10. उस काल मारे क्रोध के, तनु काँपने उसका लगा।

मानो हवा के जोर से, सोता हुआ सागर जगा।।
11. लट लटकनि मनु मत्त,

मधुपगन माधुरी मधुर पिये।
12. अरून भये कोमल चरन,

भुवि चलबे ते मानु।
13. मैं बरजी कैबार तू, इतकत लेती करौंट।

पंखुरी लगे गुलाब की, परि है गात खरौंट।
14. तव पद समता कमो कमल,

जन सेक्त इक पाँया।
15. मानो माई घनघन अंतर दामिनि।
16. मनु द्रग फारि अनेक जमुन निरखत ब्रज शोभा।
17. मुख बाल रवि सम लाल होकर, ज्वाला-सा बोधित हुआ।
18. मानो माई घघन अंतर दामिनि।

घन दामिनी दामिनी घन अंतर, शोभित हरि-ब्रज भामिनि।
19. नील परिधान बीच सुकुमारी खुल रहा था मृदुल अधखुला अंग, खिला हो ज्यों बिजली का फूल मेघवन बीच गुलाबी रंग।
20. सीधी चलते राह जो, रहते सदा निशंक। जो करते विप्लव, उन्हें , 'हरि' का है आतंक।
21. श्रद्धानत तरूओं की अंजली से झरे पात .... खंड-खंड करताल बाजार ही विशुद्ध हवा। इस सोते संसार बीच
22. जो चाहो चटक न घटे, मैलो होय न मित्त राज राजस न छुवाइये नेह चीकने चित्त।।
23. रावण सर सरोज बनचारी। चलि रघुवीर सिलीमुख।
24. जान पड़ता है नेत्र देख बड़े

बड़े हीरो में गोल नीलम हैं जड़े।
25. पाहून ज्यों आये हो गाँव में शहर के, मेघ आये बड़े बन ठन के संवर के।
26. धनुष उठाया ज्यों ही उसने, और चढ़ाया उस पर बाण।

धरा-सिन्धु नभ काँपे सहसा, विकल हुए जीवों के प्राण।।
27. चंचला स्नान कर आये, चन्द्रिका पर्व में जैसे ।

उस पावन तन की शोभा आलोक मधुर थी ऐसे।।
28. देख लो साकेत नगरी है यही, स्वर्ग से मिलने गगन में जा रही।
29. जो घनीभूत पीड़ा थी मस्तक में स्मृति सी छाई। दुर्दिन में आंसू बनकर आज बरसने आई।
30. पी तुम्हारी मुख बास तरंग आज बोरे भौंरे सहकार।
31. चमचमात चंचल नयन, बिच घूँघट पट छीन मनहु सुरसरिता विचल, जल उछरत जुग मीन।।
32. फूले कास सकल महि छाई । जनु रसा रितु प्रकट बुढ़ाई।।
33. ले चला मैं तुझे कनक, ज्यों भिक्षुक लेकर स्वर्ण -झनक।
34. चित्रकूट जनु अचल अहेरी।
35. मधुबन की छाती को देखो, सूखी इसकी कितनी कलियाँ।
36. मेरी भव बाधा हरो राधा नागरि सोय। जा तन की झाँई परे श्याम हरित दुति होय।।
37. दिवसावसान का समय मेघ आसमान से उतर रही है.....
38. बीती विभावरी जाग री अंबर पनघट में डूबो रही...
39. आए महंत वसंत । $\qquad$
40. धीरे-धीरे उत्तर क्षितिज से आ बसंत रजनी।

प्र02. नीचे दिए गए अलंकार को व्यक्त करने वाली काव्य पंक्तियों के कोई दो-दो उदाहरण लिखिए। श्लेष अलंकार, उत्प्रेक्षा अलंकार, मानवीकरण अलंकार, अतिशयोक्ति अलंकार

## Section A

1. Customers are asked to stand in lines. If one customer is extra in a line, then there would be two less lines. If one customer is less in line, there would be three more lines. Find the number of customers in the line.
(a) 40
(b) 50
(c) 60
(d) 70
2. 8 girls and 12 boys can finish a piece of work in 10 days while 6 girls and 8 boys can finish it in 14 days. Find the time taken by one girl alone and by one boy alone to finish the work.
(a) 120,130
(b) 140,280
(c) 240,280
(d) 100,120
3. The sum of two digits and the number formed by interchanging its digits is 110 . If ten is subtracted from the first number, the new number is 4 more than 5 times of the sum of the digits in the first number. Find the first number.
(a) 46
(b) 48
(c) 64
(d) 84
4. A fraction becomes $1 / 3$ when 2 is subtracted from the numerator and it becomes $1 / 2$ when 1 is subtracted from the denominator. Find the fraction.
(a) $4 / 12$
(b) $3 / 13$
(c) $5 / 12$
(d) none
5. Five years ago, A was thrice as old as B and ten years later, A shall be twice as old as B. What is the present age of A ?
(a) 20
(b) 50
(c) 60
(d) 40
6. What will be the solution of these equations $a x+b y=a-b, b x-a y=a+b$
(a) $x=1, y=2$
(b) $x=2, y=-1$
(c) $x=-2, y=-2$
(d) $x=1, y=-1$
7. If $x=a, y=b$ is the solution of the pair of equation $x-y=2$ and $x+y=4$ then what will be value of $a$ and $b$
(a) 2,1
(b) 3,1
(c) 4,6
(d) 1,2
8. Rozy can row downstream 20 km in 2 hours, and upstream 4 km in 2 hours. What will be the speed of rowing in still water in this case ?
(a) $6 \mathrm{~km} / \mathrm{hr}$
(b) $4 \mathrm{~km} / \mathrm{hr}$
(c) $3 \mathrm{~km} / \mathrm{hr}$
(d) $7 \mathrm{~km} / \mathrm{hr}$

## Section : B

1. What types of lines do the pair of equations $x=c$ and $y=c$ represent graphically?
2. A boat is moving at the rate of $5 \mathrm{~km} / \mathrm{h}$ in still water, takes thrice as much as time in going 40 km upstream as in going 40 km downstream. Find the speed of the stream.
3. Find the value of $m$, when $(m+1) x=3 k y+15=0$ and $5 x+k y+5=0$ are coincident.
4. Write the pair of linear equations which have solutions $x=2, y=-2$.
5. Solve it on a graph $4 x-3 y+4=0,4 x+3 y-24=0$.
6. If we have two variables $x$ and $y$ when $x=a$ and $y=b$ is the solution of equations $x-y=2$ and $x+y=4$, then what will be the value of $a$ and $b$.
7. Use cross multiplication method to solve $a x+b x=a-b, b x-a y=a+b$.
8. Check whether this pair of linear equations is consistent. $\quad x-2 y=6, \quad 3 x-6 y=0$.
9. 6 men and 10 women can finish making pots in 8 days, while 4 men and 6 women can finish it in 12 days. Find the time taken by one man alone and by one woman alone to finish the same work.
10. A boat covers 14 kms in upstream and 20 kms downstream in 7 hours. Also it covers 22 kms upstream and 34 kms downstream in 10 hours. Find the speed of the boat in still water and of that the stream.
11. Draw the graph of $2 x+y=6$ and $2 x-y+2=0$. Shade the region bounded by these lines and $x$ axis. Find the area of the shaded region.
12. When you add two numbers and the number obtained by reversing the order of its digits is 165 . If both numbers differ by three, find the number.
13. A number say $z$ is exactly four times the sum of its digits and twice the product of the digits. Find the numbers.
14. Solve graphically $4 x-3 y+4=0,4 x+3 y-20=0$
15. There are two points on a highway " $A B$ ". They are 70 km apart. An auto starts from $A$ and another auto starts from B simultaneously. If they travel in the same direction, they meet in 7 hours, but if they travel towards each other they meet in 1 hour. Find how fast the two autos are?
16. A diver rowing at the rate of $5 \mathrm{~km} / \mathrm{h}$ in still water takes double the time in going 40 km upstream as in going 40 km downstream. Find the speed of the stream.
17. The larger of two supplementary angles exceeds thrice the smaller by 20 degrees. Find them.
18. The sum of the ages of two children is ' $a$ '. The age of the father is twice ' $a$ '. After twenty years, father's age will be equal to the sum of the ages of his children. Find the age of father.
19. For what values of $a$ and $b$ does the following pair of equations have an infinite numbers of solutions. $\quad 2 x+3 y=7, a(x+y)-b(x-y)=3 a+b-2$
20. For what value of k will the following equations have infinitely many solutions?
$2 x-3 y=7,(k+1) x+(1-2 k) y=5 k-4$
21. A man travels 600 km , partly by train and partly by car. It takes 8 hours and 40 minutes if he travels 320 km by train and rest by car. It would take 30 minutes more if he travels 200 km by train and the rest by car. Find the speed of the train and the car separately.
22. The sum of denominator and numerator of a fraction is 3 less than twice the denominator. If each of the numerator and denominator is decreased by 1 , the fraction becomes $1 / 2$. Find the fraction.
23. For what value of $k$ will pair of equations have no solution? $\quad 3 x+y=1,(2 k-1) x+(k-1) y=2 k+1$
24. Solve the equations graphically. $2 x+y=2,2 y-x=4$. Also find the area of a triangle formed by the two lines and the line $\mathrm{y}=0$.
25. Solve the following equation:
a. $\quad 55 x+52 y=217 ; 52 x+55 y=217$
c. $\frac{3}{2 x-y}+\frac{8}{x+2 y}=3 ; \frac{12}{x+2 y}-\frac{6}{2 x-y}=1$
b. $\mathrm{x}+\mathrm{y}=18 ; \mathrm{y}+\mathrm{z}=12 ; \mathrm{z}+\mathrm{x}=16$
d. $141 x+103 y=217 ; 103 x+141 y=27$

## CASE STUDY-1:

A test consists of 'True' or 'False' questions. One mark is awarded for every correct answer while $1 / 4$ mark is deducted for every wrong answer. A student knew answers to some of the questions. Rest of the questions he attempted by guessing. He answered 120 questions and got 90 marks.

| Type of Question | Marks given for correct answer | Marks deducted for wrong answer |
| :--- | :--- | :--- |
| True/False | 1 | 0.25 |

1. If answer to all questions he attempted by guessing were wrong, then how many questions did he answer correctly?
2. How many questions did he guess?
3. If answer to all questions he attempted by guessing were wrong and 80 were answered correctly, then how many marks did he get?
4. If answer to all questions he attempted by guessing were wrong, then how many questions were answered correctly to score 95 marks?

## CASE STUDY-2:

Amit is planning to buy a house and the layout is given below. The design and the measurement has been made such that areas of two bedrooms and kitchen together is 95 sq.m.


Based on the above information, answer the following questions:

1. Form the pair of linear equations in two variables from this situation.
2. Find the length of the outer boundary of the layout.
3. Find the area of each bedroom and kitchen in the layout.
4. Find the area of living room in the layout.
5. Find the cost of laying tiles in kitchen at the rate of Rs. 50 per sq.m.

## DR. VIRENDRA SWARUP PUBLIC SCHOOL, KALYANPUR Session 2022-23 <br> LIFE PROCESSES <br> WORKSHEET 1 <br> NUTRITION AND RESPIRATION

## Answer the following questions :

1. What is the function of stomata and how do they perform this function?
2. Which element is essential for the synthesis of proteins in plants?
3. How do the plants fulfill the requirement of nitrogen to make proteins?
4. Describe the nutrition process in Amoeba.
5. What are the secretions of gastric glands?
6. Name the muscle which regulate the exit of food from stomach.
7. Name the enzymes present in pancreatic juice.
8. What causes the formation of cramps in our muscles?
9. Why does the rate of breathing in aquatic organisms is much faster than the terrestrial organism? With the help of labeled diagram, discuss the mechanism of respiration in human beings.
10. Out of a goat and tiger, which one will have a longer small intestine? Justify your answer.
11. Chloroplasts are called energy convertors. Explain.
12. While eating you are advised not to talk Why are you advised so?
13. In the process of Photosynthesis food A is prepared which gets converted into food B . What are A and B ? Why is A converted to B?
14. Mucus is not used for churning the food or digesting it. Then why is it secreted in the stomach?
15. Due to availability of less water, how does the plant cope with lack of water in desert conditions?
16. The two openings of the pharynx, one leading to trachea and the other leading to oesophagus, lie very close to each other. Yet food we swallow normally does not enter into our trachea. Why?
17. Why the walls of trachea are supported by cartilaginous rings?
18. Name the substrates for the following enzymes.
a. trypsin b. amylase c. pepsin d. Lipase
19. Why doesn't the lungs collapse even after forceful expiration?
20. What will happen if carbon monoxide combines with hemoglobin?
21. After a vigorous exercise, you may experience cramps in your leg muscles. Why does this happen?

## MULTIPLE CHOICE QUESTIONS

22. A pair of spongy organs lying in the chest cavity is called
(a) hearts(b) kidneys(c) lungs(d) bronchioles
23. Which of the following structures increase the total surface area for the exchange of gases in the lungs?
(a) Bronchi(b) Alveoli(c) Bronchioles(d) Trachea
24. Which of the following represents the correct sequence of air passage during inhalation?
(a) Nostrils $\rightarrow$ larynx $\rightarrow$ pharynx $\rightarrow$ alveoli $\rightarrow$ lungs
(b) Nostrils $\rightarrow$ trachea $\rightarrow$ pharynx $\rightarrow$ larynx $\rightarrow$ lungs
(c) Nostrils $\rightarrow$ pharynx $\rightarrow$ larynx $\rightarrow$ trachea $\rightarrow$ alveoli
(d) Nostrils $\rightarrow$ alveoli $\rightarrow$ pharynx $\rightarrow$ larynx $\rightarrow$ lungs
25. Balloon-like structures present inside the lungs are called
(a) alveoli(b) bronchioles(c) bronchi(d) alveolar ducts
26. The rate at which oxygen moves from the alveoli of our lungs into our blood
(a) depends on the difference in oxygen concentration between the alveoli and the blood.
(b) depends on the color of the alveoli.
(c) depends on the availability of energy to transport gases across the membrane.
(d) none of the above
27. Select the correct statement?
(a) Heterotrophs do not synthesise their own food.
(b) Heterotrophs utilise solar energy for photosynthesis.
(c) Heterotrophs synthesise their own food.
(d) Heterotrophs are capable of converting carbon dioxide and water into carbohydrates.
28. During deficiency of oxygen in tissues of human beings, pyruvic acid is converted into lactic acid in the (a) cytoplasm(b) chloroplast(c) mitochondria(d) golgi body
29. Cow has a special stomach as compared to that of a lion in order to
(a) absorb food in better manner.
(b) digest cellulose present in the food.
(c) assimilate food in a better way.
(d) absorb large amount of water.
30. Which of the following is not an enzyme?
(a) Lipase(b) Amylase(c) Trypsin(d) Bilirubin
31. The opening and closing of stomatal pore is regulated by
(a) $\mathrm{O}_{2}$ concentration(b) $\mathrm{CO}_{2}$ concentration(c) temperature(d) turgidity of guard cells
32. Iodine solution is used to test the presence of
(a) proteins(b) fats(c) starch(d) enzyme
33. Nitrogen, an essential element used in the synthesis of proteins, is obtained by plants in the form of (a) atmospheric nitrogen(b) nitrates and nitrites(c) amino acids(d) peptides
34. Which part of alimentary canal receives bile?
(a) Oesophagus(b) Pharynx(c) Large intestine(d) Small intestine
35. Absence of salivary amylase in the saliva will not affect
(a) breakdown of protein in mouth(b) breakdown of fat in mouth
(c) breakdown of starch in mouth (d) assimilation of vitamins in mouth
36. The process of photosynthesis requires
(a) chlorophyll and light only(b) chlorophylls and $\mathrm{CO}_{2}$ only
(c) chlorophyll, $\mathrm{CO}_{2}$ and $\mathrm{H}_{2} \mathrm{O}$ only(d) chlorophylls, $\mathrm{CO}_{2}, \mathrm{H}_{2} \mathrm{O}$ and light

## GIVE ONE WORD ANSWER

1. The oral cavity opens into the ......
2. Name the respiratory pigments of human beings
3. In which form is food stored in plants and in animals?
4. The oxygen picked up by haemoglobin gets ...... with blood to various ...
5. Amoeba exhibits $\qquad$ nutrition
6. Chlorophyll is mainly found in the $\qquad$
7. ATP is the ...... for most cellular processes.
8. The walls of the alveoli contain an extensive network of $\qquad$
9. The oral cavity opens into the $\qquad$
10. Name the respiratory pigments of human beings
11. In which form is food stored in plants and in animals?
12. Why are heterotrophs called consumers?
13. Name the watery substance released in our mouth during eating.
14. Name the structure which prevents food from entering the passage to the lungs.

15 ...... is the muscular partition between the chest cavity and the abdominal cavity.
16. ...... serves as a storehouse of food where partial digestion takes place.
17. ...... are respiratory organs found in aquatic animals.
18. When air passes through the nose, it is warmed, moistened and $\qquad$
19. The opening leading to the larynx is called $\qquad$ .
20. From the larynx air goes to
21. Each bronchus divides and branches out in the form of thinner tubes called $\qquad$

# DR. VIRENDRA SWARUP PUBLIC SCHOOL , KALYANPUR <br> SESSION -2022-23 

Name
Subject: Physics
Class: 10
TOPIC: Light (Numerical)

## Solve the following questions neatly showing appropriate working.

Q.1. Find the focal length of a convex mirror of radius of curvature 1 m .
Q.2. If the focal length of a convex mirror is 50 cm then what is its radius of curvature?
Q.3. Radius of curvature of a concave mirror is 25 cm . What is its focal length?
Q.4. A concave mirror produces 10 cm long image of an object of height of 2 cm . What is the magnification produced?
Q.5. An object 1 cm high is held near a concave mirror of magnification 10 . How tall will the image be?
Q.6. An object 4 cm in size is placed at a distance of 25 cm from a concave mirror of focal length 15 cm . Find the position, nature and height of the image.
Q.7. A converging mirror forms a real image of height 4 cm of an object of height 1 cm placed 20 cm away from the mirror. Calculate the distance of image. What is the focal length of the mirror?
Q.8. A 4.5 cm needle is placed 12 cm away from a convex mirror of focal length 15 cm . Give the location of the image and the magnification. Describe what happens as the needle is moved farther from the mirror.
Q.9. An arrow 2.5 cm high is placed at a distance of 25 cm from a diverging mirror of focal length 20 cm ., Find the nature, position and size of the image formed.
Q.10. The image formed by a convex mirror of focal length 20 cm is a quarter of the object. What is the distance of the object from the mirror?
Q.11. Find the size, nature and position of image formed by a concave mirror, when an object of size 1 cm is placed at a distance of 15 cm . Given that the focal length of mirror is 10 cm .
Q.12. An object 2 cm high is placed at a distance of 16 cm from a concave mirror, which produces a 3 cm high inverted image. What is the focal length of the mirror? Also, find the position of the image.
Q.13. An erect image 3 times the size of the object is obtained with a concave mirror of radius of curvature 36 cm . What is the position of the object?
Q.14. A 2.5 cm candle is placed 12 cm away from a convex mirror of focal length 30 cm . Give the location of the image and the magnification.
Q.15. An object is placed in front of a concave mirror of focal length 20 cm . The image formed is 3 times the size of the object. Calculate two possible distances of the object from the mirror.
Q.16. The image formed by a convex mirror is virtual, erect and smaller in size. Illustrate with figure.
Q.17. A concave mirror produces a real image 10 mm tall, of an object 2.5 mm tall placed at 5 cm from the mirror. Calculate focal length of the mirror and the position of the image.
Q.18. An object is placed at a large distance in front of a convex mirror of radius of curvature 40 cm . How far is the image behind the mirror?
Q.19. An object is placed 15 cm from a convex mirror of radius of curvature 90 cm . Calculate position of the image and its magnification.
Q.20. The image formed by a convex mirror of focal length 30 cm is a quarter of the object. What is the distance of the object from the mirror?
Q.21. When an object is placed at a distance of 60 cm from a convex mirror, the magnification produced is $1 / 2$. Where should the object be placed to get a magnification of $1 / 3$ ?
Q.22. An object is placed 18 cm front of a mirror. If the image is formed at 4 cm to the right of the mirror, then calculate its focal length. Also, tell if the mirror is convex or concave and what is the nature of the image? What is the radius of curvature of the mirror as well?
Q.23. A convex mirror used for rear view on an automobile has a radius of curvature of 3 m . If a bus is located at 5 m from this mirror, find the position, nature and magnification of the image.
Q.24. An object 3 cm high is held at a distance of 50 cm from a diverging mirror of focal length 25 cm . Find the nature, position and size of the image formed.
Q.25. A converging mirror of focal length 20 cm forms an image which is two times the size of the object. Calculate two possible distances of the object from the mirror.
Q.26. The linear magnification of a convex mirror of focal length 15 cm is $1 / 3$. What is the distance of the object from the focus of the mirror?
Q.27. The focal length of a convex mirror is 12.5 cm . How far is its centre of curvature (i) from the pole (ii) from the focus.
Q.28. Find the focal length of a concave mirror that produces four times larger real image of an object held at 5 cm from the mirror.
Q.29. An object is held at 30 cm in front of a convex mirror of focal length 15 cm . At what distance from the convex mirror should a plane mirror be held so that images in the two mirrors coincide with each other?
Q.30. Draw any three ray diagrams to show how the size and nature of image of an object change when it moves from centre of curvature of concave mirror towards the pole of the mirror.
Q.31. Light travels through water with a speed of $2.25 \times 10^{8} \mathrm{~m} / \mathrm{s}$. What is the refractive index of water?
Q. 32 Light travels from rarer medium 1 to a denser medium 2. The angle of incidence and refraction are respectively $45^{\circ}$ and $30^{\circ}$.

Calculate- (i) refractive index of second medium with respect to the first medium
(ii) refractive index of medium 1 with respect to the medium 2.
Q.33. Calculate speed of light in water of refractive index $4 / 3$.
Q.34. A ray of light passes from air to glass $(\mathrm{n}=1.5)$ at an angle of $30^{\circ}$. Calculate the angle of refraction.
Q.35. A ray of light is incident on a glass slab at an angle of $45^{\circ}$. If refractive index of glass be 1.6 , then what is the angle of refraction?
Q.36. The refractive index of diamond is 2.47 and that of glass is 1.51 . Calculate how fast light can travel in glass than in diamond?
Q.37. The refractive index of glycerine is 1.46 . What is the speed of light in air if its speed in glycerine is $2.05 \times 10^{8} \mathrm{~m} / \mathrm{s}$ ?
Q.38. The refractive index of glass is 1.6 and that of diamond is 2.4 .

Calculate - (i) refractive index of diamond with respect to glass
(ii) refractive index of glass with respect to diamond.
Q.39. A ray of light is travelling from glass to air. The angle of incidence in glass is $30^{\circ}$ and angle of refraction in air is $60^{\circ}$. What is the refractive index of glass with reference to air?
Q.40. A ray of light is travelling from air to water. What is the angle of incidence in air, if angle of refraction in water is $45^{0}$ ? Take refractive index of water as 1.32 .

## DR. VIRENDRA SWARUP PUBLIC SCHOOL, KALYANPUR

TOPIC: LIGHT

1. A concave mirror has focal length of 20 cm . At what distance from the mirror a 5 cm tall object be placed so that it forms an image at 15 cm from the lens? Also calculate the size of the image formed.
2. An object 50 cm tall is placed on the principal axis of a convex mirror. Its 20 cm tall image is formed on the screen placed at a distance of 10 cm from the mirror. Calculate the focal length of the mirror.
3. Draw the ray diagram in each case to show the position and nature of the image formed when the object is placed:
(i) at the centre of curvature of a concave mirror
(ii) between the pole P and focus F of a concave mirror
(iii) in front of a convex mirror
4. The refractive indices of four media $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D are given in the following table:

| Medium | A | B | C | D |
| :--- | :---: | :---: | :---: | :---: |
| Refractive Index | $\mathbf{1 . 3 3}$ | $\mathbf{1 . 5 0}$ | $\mathbf{1 . 5 2}$ | $\mathbf{2 . 4 0}$ |

If light, travels from one medium to another, in which case the change in speed will be (i) minimum, (ii) maximum?
5. "The refractive index of diamond is 2.42 ". What is the meaning of this statement in relation to speed of light?
6. An object 2 cm in size is placed 30 cm in front of a concave mirror of focal length 15 cm . At what distance from the mirror should a screen be placed in order to obtain a sharp image? What will be the nature and the size of the image formed? Draw a ray diagram to show the formation of the image in this case.
7. It is desired to obtain an erect image of an object, using a concave mirror of focal length 20 cm .
(i) What should be the range of distance of the object from the mirror?
(ii) Will the image be bigger or smaller than the object?
(iii) Draw a ray diagram to show the image formation in this case.
8. What is the minimum number of rays required for locating the image formed by a concave mirror for an object.

Draw a ray diagram to show the formation of a virtual image by a concave mirror.
9. The refractive index of water is 1.33 and the speed of light in air is $3 \times 10^{8} \mathrm{~ms}^{-1 .}$. Calculate the speed of light in water.
10. Explain why a ray of light passing through the centre of curvature of a concave mirror, gets reflected along the same path.
11. A ray of light enters a rectangular glass slab of refractive index 1.5. It is found that the ray emerges from the opposite face of the slab without being displaced. If its speed in air is $3 \times 10^{8} \mathrm{~ms}^{-1}$ then what is its speed in glass?
12. Read the following passage and answer the questions

The spherical mirror forms different types of images when the object is placed at different locations. When the image is formed on screen, the image is real and when the image does not form on screen, the image is virtual. When the two reflected rays meet actually, the image is real and when they appear to meet, the image is virtual.

A concave mirror always forms a real and inverted image for different positions of the object. But if the object is placed between the focus and pole. the image formed is virtual and erect.

A convex mirror always forms a virtual, erect and diminished image. A concave mirror is used as doctor's head mirror to focus light on body parts like eyes, ears, nose etc., to be examined because it can form erect and magnified image of the object. The convex mirror is used as a rear view mirror in automobiles because it can form a small and erect image of an object.
(i) When an object is placed at the centre of curvature of a concave mirror, the image formed is
(a) larger than the object
(b) smaller than the object
(c) same size as that of the object
(d) highly enlarged.
(ii) No matter how far you stand from a mirror, your image appears erect. The mirror is likely to be
(a) plane
(b) concave
(c) convex
(d) either plane or convex.
(iii) A child is standing in front of a magic mirror. She finds the image of her head bigger, the middle portion of her body of the same size and that of the legs smaller. The following is the order of combinations for the magic mirror from the top.
(a) Plane, convex and concave
(b) Convex, concave and plane
(c) Concave, plane and convex
(d) Convex, plane and concave
(iv) To get an image larger than the object, one can use
(a) convex mirror but not a concave mirror
(b) a concave mirror but not a convex mirror
(c) either a convex mirror or a concave mirror
(d) a plane mirror.
(v) A convex mirror has wider field of view because
(a) the image formed is much smaller than the object and large number of images can be seen.
(b) the image formed is much closer to the mirror
(c) both (a) and (b)
(d) none of these.
13. Read the following passage and answer the questions

The lenses form different types of images when object is placed at different locations. When a ray is incident parallel to the principal axis, then after refraction, it passes through the focus or appears to come from the focus.

When a ray goes through the optical centre of the lens, it passes without any deviation. If the object is placed between focus and optical center of the convex lens, erect and magnified image is formed.

As the object is brought closer to the convex lens from infinity to focus, the image moves away from the convex lens from focus to infinity. Also the size of image goes on increasing and the image is always real and inverted.

A concave lens always gives a virtual, erect and diminished image irrespective to the position of the object.
(i) The location of image formed by a convex lens when the object is placed at infinity is
(a) at focus
(b) at 2 F
(c) at optical center
(d) between F and 2 F
(ii) When the object is placed at the focus of concave lens, the image formed is
(a) real and smaller
(b) virtual and inverted
(c) virtual and smaller
(d) real and erect
(iii) The size of image formed by a convex lens when the object is placed at the focus of convex lens is
(a) small
(b) point in size
(c) highly magnified
(d) same as that of the object
(iv) When the object is placed at 2 F in front of convex lens, the location of image is
(a) at F
(b) at 2 F on the other side
(c) at infinity
(d) between F and optical center
(v) At which location of object in front of concave lens, the image between focus and optical centre is formed
(a) anywhere between centre and infinity
(b) at F
(c) at 2 F
(d) infinity

# DR. VIRENDRA SWARUP PUBLIC SCHOOL, KALYANPUR SESSION -2022-23 <br> CLASS: $10^{\text {th }}$ 

Subject: Computer Applications (165)
Holiday Homework Worksheet 1

## Q1: Tick $(\sqrt{ })$ the correct option.

Q1. HTML is a
(a) package
(b) software
(c) markup language
(d) None of these

Q2. HTML tags are enclosed in
(a) curly brackets
(b) square brackets
(c) double quotes
(d) angular brackets

Q3. Which of the following tag identifies the document as an HTML document?
(a) <HTML>
(b) <HEAD>
(c) <BODY>
(d) <P>

Q4. Container elements in HTML require
(a) starting tag
(b) ending tag
(c) starting and ending tags
(d) None of the above

Q5. HTML tags are
(a) written in uppercase
(b) case sensitive
(c) written in lowercase
(d) not case sensitive

Q6. Which type of tags are used by HTML?
(a) tags only for image
(b) user defined tags
(c) tags only for linking
(d) fixed tags defined by the language

Q7. Which program do you need to write HTML code?
(a) Spreadsheet
(b) Access
(c) Notepad
(d) None of these

Q8. An example of HTML editor is
(a) Notepad
(b) Dreamweaver
(c) Microsoft FrontPage
(d) All of these

Q9. To create an HTML page, you need
(a) text editor
(b) Web browser
(c) Both (a) and (b)
(d) None of these

Q10. Tags and text that are not displayed directly on the page are placed in
(a) body
(b) table
(c) head
(d) title

Q11. A Web page normally consists of
(a) head and body
(b) top and bottom
(c) body and font
(d) body and title

Q12. Which section is used for text and tags that are shown directly on your Web pages?
(a) Meta
(b) Head
(c) Body
(d) Table

Q13. Where do you place the <TITLE> tag in a HTML?
(a) BODY
(b) HEAD
(c) TITLE
(d) FONT

Q14．Which attribute is not supported by a＜BODY＞tag？
（a）bgcolor
（b）size
（c）text
（d）link

Q15．What will happen if the background image is smaller than the browser＇s window？
（a）It will leave a blank space at the bottom of your page
（b）It will be repeated
（c）It will be stretched
（d）It will not be displayed

Q16．Which attribute of＜BODY＞tag specifies the color of visited links in a document？
（a）vlink
（b）alink
（c）link
（d）None of these

Q17．Choose the correct HTML tag for the largest heading．
（a）＜H2＞
（b）＜H4＞
（c）＜H6＞
（d）＜H1＞

Q18．Which of the following will give smallest size of the text？
（a）＜H3＞
（b）＜H6＞
（c）＜H2＞
（d）＜ $\mathrm{H} 4>$

Q19．In a Web page，you can place
（a） 2 levels of headings
（b） 6 levels of headings
（c） 4 levels of headings
（d） 7 levels of headings

Q20．The default alignment for paragraph is
（a）left
（b）right
（c）center
（d）justified

Q21．Which of the following HTML container tags do you apply to text for formatting the text as a paragraph？
（a）$<$ PARAGRAPH $>$
．．．．．．．／PARAGRAPH＞
（b）$<$ PARA $>\ldots \ldots \ldots .</$ PARA $>$
（c）$<$ P $>$ ＜／P＞
（d）None of the above

Q22．Which of the following is not a container element？
（a） P
（b）B
（c） OL
（d） HR

Q23．Which of the following tag is used to make a list that lists the items with numbers？
（a）＜DL＞
（b）〈UL＞
（c）〈OL〉
（d）None of these

Q24．Which of the following is not HTML list？
（a）Ordered
（b）Unordered
（c）Definition
（d）Detailed

Q25．Which option do you have while making bulleted lists？
（a）Disc，circle，square
（b）Square，polygon
（c）Disc，circle，rectangle
（d）Disc，oval，polygon

## Q2：Fill in the blanks：

Q1．HTML is a subset of
Q2．An element that only has a starting tag and no ending tag is $\qquad$ element．
Q3．The tag that requires an opening as well as closing tag is called $\qquad$
Q4．The attribute topmargin sets a margin alongwith the top of your $\qquad$ element．
Q5． $\qquad$ attribute of BODY tag helps to set background color．
Q6．The $\qquad$ tag is used to define basic font size for the HTML page．
Q7．The ．．．．．．．．．．．tag is used to make the Web browser ignore anything that the tag contains．
Q8． $\qquad$ tag is used to bring the text to new line．
Q9．HR tag is used for

Q10. $\qquad$ and $\qquad$ tags break the line flow.
Q11. $\qquad$ attribute of $\langle\mathrm{HR}>$ tag specifies the width of a horizontal line.
Q12. $\qquad$ tag is used to make the text bold.
Q13. $\langle\mathrm{LI}>$ tag is an $\qquad$ element tag.
Q14. To display the text in italics, $\qquad$ tag is used and to display in type writer font, $\qquad$ tag is used.
Q15. $\qquad$ tag is used to underline the text.
Q16. $\qquad$ tag creates a bulleted list.
Q17. NOSHADE is an attribute of $\qquad$ tag.
Q18. The unordered list starts with $\qquad$ tag.
Q19. $\qquad$ value of type attribute displays a hollow circle for an unordered lists.
Q20. If you want to display uppercase alphabets instead of numbers, $\qquad$ ordered type you should use.

## Q3: State True/False:

Q1. HTML is a case sensitive Web language.
Q2. HTML is a programming language.
Q3. <Head> tag is used to define document body.
Q4. <TITLE> tag is one of the structural tags of HTML document.
Q5. There should be only one <BODY> tag in each Web page.
Q6. All HTML document contains only <BODY> tag.
Q7. bgcolor is an attribute of <FONT> tag.
Q8. background attribute is used to display image.
Q9. topmargin is used to specify the distance between the top of the document and top of the browser window.

Q10. color is an attribute of < FONT> tag.

Worksheet

## I. Multiple Choice Question.

Q1. Which is the most common method of measuring economic development?
A. Profit loss
B. Income
C. Sale
D. Import-export

Q2. What are the developmental goals of landless rural labourers?
A. More days of work and better wages
B. Acquirement of land for self tilling
C. More hours of work
D. Self-reliance

Q3. What brings about stable income?
A. Better wages
B. Work opportunities
C. Regular work
D. Decent price for the crops or other products

Q4. Besides seeking more income, there is something people resent, what is it?
A. Getting fewer wages for more work
B. Discrimination
C. No work
D. Poverty

Q5. What is that one factor on which our life depends?
A. employment
B. Security of work
C. Money, or material things that one can buy with it
D. Freedom

Q6. If women are engaged in paid work, what difference does it make?
A. Their dignity in the household and society decreases
B. No difference
C. No dignity
D. Their dignity in the household and society increases

Q7. Different persons can have $\qquad$ .notions about a country's development.
A. different as well as conflicting
B. Same
C. Indifferent
D. No

Q8. What is considered to be one of the most important attributes when we compare countries at the level of development?
A. Industrial development
B. Resources of the country
C. Income
D. Import-export

Q9. More income means $\qquad$
A. More savings
B. more of all things that human beings need.
C. No effect on the common man
D. More business

Q10. $\qquad$ is the total income of the country divided by its total population?
A. per capita income
B. Gross income
C. Net income
D. Total income

## II. Short Answer Type Questions

Q1. Why do different persons have different notions of development?
Q2. Give an example of conflicting desires/aspirations.
Q3. State two points about the developmental goals that are observed in day to day life.
Q4. Which are the common things that are desired by most of the people ?
Q5. Besides seeking more, what other goals can be sought by people?
Q6. How do we generally compare two persons ?
Q7. What is India's rank in HDI in the world ?
Q8. What is HDI ? Which institution publishes it ?
III. On the basis of the given table answer the following questions :

COMPARISON OF TWO COUNTRIES

| Country |  | Monthly Income of Citizens in 2007 (in Rupees) |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | II | HI | IV | V | Average |  |  |  |
| Country A | 9,500 | 10,500 | 9,800 | 10,000 | 10,200 |  |  |  |  |
| Country B | 500 | 500 | 500 | 500 | 48,000 |  |  |  |  |

(a) Calculate the average income of country A and B
(b) Are both the countries equally developed?
(c) Which country is better and why?
IV. Study the table given below and answer the following questions :

| State | Infant Mortality <br> Rate per 1000 <br> (2003) | Literacy <br> Rate (\%) <br> (2001) |
| :---: | :---: | :---: |
| Punjab | 49 | 70 |
| Kerala | 71 | 97 |
| Bihar | 60 | 47 |

(a) Calculate the difference in the infant mortality rate of Punjab and Kerala.
(b) Calculate the difference in literacy rate of Kerala and Bihar.
(c) Which state has the lowest HDI and why?

