**Sarbanam Shikshyalaya**

Gokarneshwor-06, Jorpati, Kathmandu

 **Third Terminal Examination-2079**

**Class: 10 F.M=75**

**Subject: Accountancy P.M=30**

**Time:2hrs 15min**

**Group A   [5×1=5]**

**Answer the following in one sentence.**

1. What is the full form of GATT?
2. Which is the first bank of Nepal?
3. Which account is prepared before balance sheet?
4. Which institution does the internal audit of district level offices of government?
5. What is the budget head number of salary and furniture and fixtures?

**Group B    [8×5=40]**

**Give Short answer to the following questions.**

1. What is Tippani? Mention any four points to be considered while drafting a Tippani.
2. What is horizontal filing? Write its four advantages and disadvantages.
3. Define home trade. Describe its four procedure orderly.
4. Introduce auditing and mention any three difference between internal audit and final audit.
5. Mention and explain all five accounts in bank cash book.
6. Prepare a trial balance of Sarbanam Shikshyalaya on 31 Mangsir 2079 from the following particulars.

|  |  |  |  |
| --- | --- | --- | --- |
| Particulars | Amount | Particulars | Amount |
| Capital | 2,50,000 | Purchase | 3,00,000 |
| Discount | 5,000 | Sales | 4,60,000 |
| Rent | 70,000 | Stationery | 30,000 |
| Furnitures | 3,23,000 | Loan | 18,000 |

1. From the following particulars, prepare a profit and loss of Nepal Book House for the fiscal year 2078/79.

|  |  |  |  |
| --- | --- | --- | --- |
| Particulars | Amount | Particulars | Amount |
| Gross profit | 11,00,000 | Depreciation | 75,000 |
| Advertisement | 63,000 | Interest received | 25,000 |
| Insurance | 10,000 | Bonus received | 50,000 |
| Salary | 1,40,000 | Legal expenses | 27,000 |

1. Prepare a balance sheet of Bhatbhateni Super Market as on 31 Poush, 2078 on the basis of following particulars.

|  |  |  |  |
| --- | --- | --- | --- |
| Particulars | Amount | Particulars | Amount |
| Capital | 2,50,000 | Goodwill | 55,000 |
| Outstanding wages | 10,000 | Furniture | 25,000 |
| Reserve fund | 60,000 | Closing stock | 1,50,000 |
| Bank and Cash | 1,20,000 | Net profit | 30,000 |

**Group C    [3**×10=30]

**Give long answer to the following questions.**

1. Introduce financial institutions and describe in brief any eight functions of commercial bank.
2. Prepare a Goswara voucher (AGF No.203) of District Education office, Bardiya from the following transactions.
3. On 2079/4/7, paid Rs. 25000 for house rent through cheque no. 015.
4. On 2079/4/10, paid for computer purchase by cheque No. 015.
5. On 2079/4/15, section officer Mr.Suman puri was paid Rs.6,000 in advance for TADA by cheque No. 016.
6. On 2079/4/20, a petty cash fund of Rs. 1000 established.
7. On 2079/5/25, the avance given to section officer, Suman Puri, was cleared as per submitted documents and the excess expenditure of Rs.  500 was paid by cheque No. 035.
8. The details of expenses in District Education Office, gulmi are as follows.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Budget Head No. | Budget Heads | Annual appropriation (Rs.) | Expenditure upto  Baisakh (Rs.) | Expenditure of Jestha (Rs.) |
| 21111 | Salary | 1,60,000 | 80,000 | 48,000 |
| 21123 | Medical treatment | 15,000 | 7,000 | 2,000 |
| 22112 | Communication charge | 10,000 | 4,000 | 1,000 |
| 22231 | Repair and Maintenances | 8,000 | 3,000 | 1,500 |
| 22711 | Miscellaneous expenditure | 6,000 | 2,000 | 500 |
| 31121 | Means of transport | 21,000 | 4,000 | 3,000 |
|  | **Total** | **2,20,000** | **1,00,000** | **56,000** |

**Additional Information**

* Advance for vehicle, Rs. 2,000 is paid out of Rs.7000.

Prepare a statement of expenditure for the month of Jestha, 2078 showing the following information.

-Budget release upto Jestha

-Total expenditure upto Jestha

-Balance of budget

-Net expenditure

**BEST OF LUCK**

**Sarbanam Shikshyalaya**

**Gokarneshwor-06, Jorpati, Kathmandu**

**Second Terminal Examination-2079**

**Class: 10 F.M=100**

**Subject: C. Math P.M=40**

**Time:2 hrs 15 min**

**(Group'A') [(3(1+1)=6]**

1. **(a) A village has present population (PT). If the population growth rate is R% per annum, write the formula for finding the population (PO) after T years.**

A

3cm

5 cm

4cm

B

C

**(b) Find the area of the given triangle.**

1. **(a) Solve: 4x=64.**

**(b) In the given data, what will be the cumulative**

**frequency corresponding to class 40-50?**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **x** | **10-20** | **20-30** | **30-40** | **40-50** | **50-60** | **60-70** |
| **F** | **3** | **6** | **10** | **14** | **11** | **5** |

1. **(a) In the given figure, the length and breadth of rectangle ABCD are 10cm and 8 cm respectively, what will be the area of parallelogram ABEF?**

D

A

B

C

E

F

**(b) In the adjoining figure, O is the centre of the circle.**

D

O

A

C

B

**If OABC is a parallelogram, and ADC=60, find the**

**measure of OCB.**

**(Group'B') [4(2+2)+3(2+2+2)=34]**

1. **(a) The selling price of a watch is Rs. 270. If this watch was sold at 10% discount o marked price, what was the marked price?**

**(b) A sum of Rs. 2400 compounded to Rs. 2646 in 2 years. Find the rate of interest.**

1. **(a) The volume of a prism having its base a right angled triangle is 864cm3. If the length of the sides containing the right angle are 6 cm and 8 cm, calculate the height of the prism.**

**(b) The surface area of a sphere is 16cm2, find its volume.**

**(c) Find the total surface area of a cone whose radius of base is 6cm and slant height is 8cm.**

1. **(a) Find the L.C.M of:**

**a2-a-5 and a2-9**

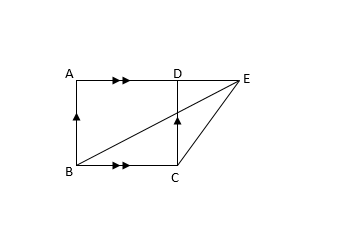
**(b) Solve: = (-1)**

1. **(a) Evaluate: 10-1**

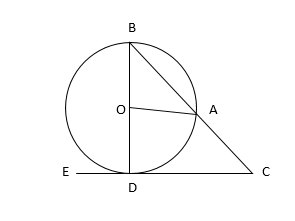
**(b) Simplify: -**

**(c) If the sum of three consecutive numbers is 36, find the numbers.**

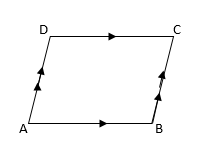
1. **(a) In the given figure, AEBC, square ABCD are standing on the same base BC and between the same parallels. If AC=3cm, find the area of EBC.**

****

**(b) In the given figure MNOP is a cyclic quadrilateral. If MNO =120 and PM = PO, find the value of x.**

****

**(c) O is the centre of circle, CE is the tangent at the point D of the circle ABD, AOD=72, find the value of BCD.**

1. **(a) The area of given parallelogram ABCD is 48cm2, AB=12cm and BC=8cm, find the value of ABC. **

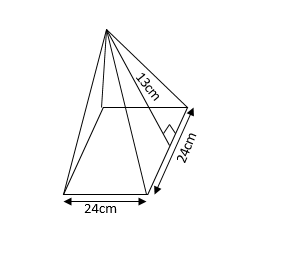
**(b) In a continuous series, if mean=30, sum of the frequencies (N)=40+a and the sum of product, frequency and mid-value ()=1550+20a, then find the value of a.**

1. **(a) Find the probability of getting a number divisible by 5 or 7 from the numbers of cards numbered from 1 to 40.**

**(b) A bag contains 4 white balls and 6 yellow balls. Two balls are drawn randomly one after another (without replacement). By drawing a venn-diagram, show all the possible outcomes.**

**Group'C' [104=40]**

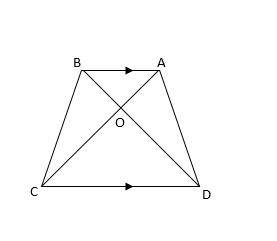
1. **In a village of 140 houses, 70 believe in hindu religion, 60 in Buddhism, and 45 in other religion. Among them 17 houses don’t find any difference in Hindu and Buddhism, 18 houses don’t find difference in Hindu and other religion in whwhile 16 houses don’t find any difference between Buddhism and other religion, find how many houses do not find any difference in any religion. Show in Venn-diagram.**
2. **The marked price of a mobile phone set is Rs. 7760.50 after allowing a certain discount and levying 10% VAT on it, find the discount percent and amount of VAT.**
3. **Find the total surface area of given pyramid.**

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**14. Simplify: - + +**

**15. The sum of the ages of a man and his son is 40 years and the product of their ages is 256. Find their present ages.**

**16. In the given figure ABCD is a trapezium in which ABDC. Prove that:**

**i) Area of ACD = Area of BCD ii) Area of AOD = Area of BOC**

**17. Construct a parallelogram ABCD in which AB=5cm, BC=4cm and B=120. Construct another rectangle equal in area to the parallelogram ABCD.**

**18. Verify experimentally that the opposite angles of a cyclic quadrilateral are supplementary. (Two circles of atleast 3cm radii are necessary).**

**19. A tower on the bank of a river is of 20 meter high and the angles of elevation of the top of tower from the opposite bank is 30. Find the breadth of the river.**

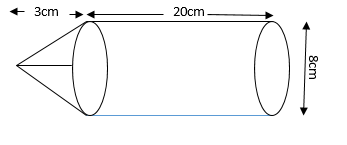
**20. Marks obtained by the students of grade 10 in an experiment is given below.**

**Find the median.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **(Marks obtained)** | **25-35** | **35-45** | **45-55** | **55-65** | **65-75** | **75-85** | **85-above** |
| **(No. of students)** | **4** | **9** | **12** | **14** | **10** | **8** | **3** |

**21. The difference between annual compound interest on a certain sum of money for two years at 20% p.a. and semi-annual compound interest on the same sum of money at the same rate of interest and for the same period of time is Rs. 482. Calculate the sum.**

**22. Find the cost of painting the surface of the pencil shaped solid object given alongside at Rs. 10 per cm2.**

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**23. In a cyclic quadrilateral PQRS, RS is produced to T. If QR = ST, and QRP=PRS, prove that PRT is an isosceles triangle.**

**Sarbanam Shikshyalaya**

Gokarneshwor-06, Jorpati, Kathmandu

 **Third Terminal Examination-2079**

**Class: 10 F.M=75**

**Subject: English/Ess/Gram P.M=30**

**Time:2hrs 15min**

***Attempt all the questions.***

1. **Read the poem given and do the activities that follow:**

***The Rivals***

I heard a bird at dawn

Singing sweetly on a tree,

That the dew was on the lawn,

And the wind was on the lea;

But I didn't listen to him,

For he didn't sing for me!

I didn't listen to him,

For he didn't sing to me

That the dew was on the lawn

And the wind was on the lea!

I was singing at the time,

Just as prettily as he!

I was singing at the time,

Just as prettily as he,

I was singing at the time,

As prettily as he,

About the dew upon the lawn,

And the wind upon the lea!

So I didn't listen to him,

As he sang upon the tree!

**- James Stephens**

1. **Read the poem and find the similar meaning of the following: (2)**
2. beautifully b. breeze

c. occasion d. morning

1. **Read the poem and answer these questions: (3×1=3)**
2. What were the bird and the speaker singing about?
3. Who was singing more sweetly, the poet or the bird?
4. Did the poet listen to the bird?
5. **Read the following passage and answer the questions given**

**below:**

Once there lived a great hermit, who was famous for telling the truth. He had taken a vow not to lie and was said, everyone believed him because he had earned a great reputation in the community where he lived and did his spiritual practices.

One evening, a robber was chasing a merchant to rob him. The merchant was running for his life. To escape from the robber, the merchant ran toward the forest where the hermit lived outside the village.

The robber came to the hermit's cottage and paid his respects. The robber knew that hermit would tell only the truth and could be trusted, so he asked him whether he had seen somebody running away. The hermit knew that the robber must be looking for somebody to rob, so he faced a big problem. If he holds the truth, the merchant would certainly be killed. If he lied, he would incur the sin of lying and lose his reputation, any immoral act that may harm others is called sin. Ahimsa (nonviolence) and truthfulness are two most important teachings of all regions that we must follow. If we have to choose between these two, which one should we choose?...

1. **State whether the statements are true or false.   (0.5×5=2.5)**
2. The hermit was reliable.
3. The robber didn't talk to hermit.
4. Non-violence and tolerance are important teaching.
5. The hermit had high prestige
6. The merchant ran towards river.
7. **Write the antonyms of the following.               (0.5×5=2.5)**

  Lie, nobody, house, inside, protect

1. **Answer the following question.                               (5×1=5)**
2. Why was the robber chasing the merchant?
3. How did the hermit earn a good reputation?
4. Who had seen the merchant in the jungle?
5. Was the hermit in dilemma? Write.
6. Give a suitable title of the story.
7. **Read the following text and do the activities that follow:**

An Englishman was once travelling in Italy and one day went into a

small restaurant. He wanted to order dinner. He understood very little Italian

and was unable to read the menu. He knew the word eggs and so the man ordered eggs. Italy is famous, however, for its mushrooms, and so the man wanted to try some mushroom. The waiter did not speak a word of English and, therefore, could not help him. At last, the man took out a piece of paper and a pencil and very carefully drew a picture of a mushroom on the piece of paper. The waiter looked at the picture of the mushroom for a long time. He did not understand very well, but at last he went away. He was absent for a long time. Eventually he returned. Instead of an order of mushrooms, however, he brought the man a large, black umbrella!

1. **Write 'True' for the true statement and 'False' for the false ones:**

**(4**×**0.5 = 2)**

1. The man went into a restaurant in Italy.
2. He was good at Italian language.
3. He wanted to try mushroom with eggs.
4. The waiter brought mushroom and gave it to the man.
5. **Put the following sentences in the correct order: (4**×**0.5 = 2)**
6. He wanted to taste some mushroom too.
7. Finally, the waiter came up with a large black umbrella.
8. An Englishman visited a small restaurant.
9. He drew a picture of mushroom.
10. **Answer the following questions:       (3**×**2 = 6)**
11. What is Italy famous for?
12. Why did the Englishman draw a picture of mushroom on the paper?
13. Did the waiter understand the drawing? Why/Why not?
14. **Read the following text and do the activities that follow:**

**Vacancy Announcement**

We are looking for some competent teachers having fluency over written and spoken English for the following positions.

**Qualification Required:**

1. English teacher: Bachelor's Degree in related subject

2. Science teacher: Bachelor's Degree in related subject

3. Social Studies teacher: Bachelor's Degree in related subject

Preference will be given to those who are energetic, dynamic and

flexible in their work. Interested candidates can apply with a bio-data, copies of certificates, citizenship, and passport sized photo along with a covering letter to:

**The Montessori House High School Kumaripati, Lalitpur.**

**Phone No: 5539067, 5523132**

1. **Match the words in column 'A' with their meaning in column 'B': (4**×**1=4)**

**Column 'A' Column 'B'**

preference             skillful

required able to adapt

competent             needed

dynamic priority

1. **Complete the following sentences using appropriate words /**

**phrases from the text: (3**×**1 = 3)**

1. The Montessori House High School demands some \_\_\_\_\_\_\_.
2. The school is located at\_\_\_\_\_\_\_\_\_\_\_\_ .
3. The candidates must have fluency in \_\_\_\_\_\_\_\_\_\_\_ and spoken English.
4. **Answer the following questions:         (4**×**2 = 8)**
5. Who has advertised the post?
6. What are the required posts?
7. What are the essential documents to be submitted along with the application?
8. Mention the inherent qualities in candidates for getting priority?

**5. Write a set of your school's rules and regulations to paste assignments on your classroom wall.**  **(5)**

1. **Write a short readable story with the help of the following outlines and give a suitable title to it:         (6)**

A school boy \_\_\_\_\_\_\_ has bad company \_\_\_\_\_\_\_ learns to smoke

\_\_\_\_\_\_\_ teachers and parents advise him to give up smoking \_\_\_\_\_\_ doesn't listen to them \_\_\_\_\_\_\_ hides and smokes \_\_\_\_\_\_\_ goes to a doctor \_\_\_\_\_\_\_ knows that he's suffered from TB \_\_\_\_\_\_\_ becomes upset \_\_\_\_\_\_\_ regrets badly \_\_\_\_\_\_\_ promises to give up smoking \_\_\_\_\_\_\_ moral.

7. **Complete the following dialogue with the correct expressions given in the box below:         (6)**

Bina : Hi, Bishal. How do you do?

Bishal : Oh, hi \_\_\_\_\_\_\_? What's that you are taking?

Bina : Oh, \_\_\_\_\_\_\_ . Do you also love reading stories?

Bishal : \_\_\_\_\_ . Could you lend me this book for a couple of days?

Bina : Sorry Bishal, but \_\_\_\_\_\_\_ . It's about science.

Bishal: \_\_\_\_\_\_\_? I love reading about the universe.

Bina : Then, \_\_\_\_\_\_\_? Please, do not forget to return it soon, ok?

*- It's story book. - Why don't you take it?*

*- I will give you another one. - Oh, is it about the universe.*

*- How do you do? - Of course. I do.*

**8. Write an essay on 'Travelling in Nepal ' in about 200 words using the clues given below:       (8)**

Introduction \_\_\_\_\_\_\_ Advantages \_\_\_\_\_\_\_ present situation \_\_\_\_\_\_

Conclusion.

**9. Reproduce the following sentences as indicated in the brackets: (6x1=6)**

a. He will do the task, ………..? (Supply the correct question tag)

b. She's done her homework. (Change into Yes/No question)

c. He always works in the morning. (Change into negative)

d. Don’t cross the road! The bus …….(come) (Supply appropriate verb forms)

e. Pratik said to her, ''I never drink coffee''. (Change into indirect speech)

f. The work is done by her. (Change into active voice)

**10. Choose and copy the best answer. (Rewriting is not compulsory:)**

**(10**×**0.5 = 5)**

Humming birds are the smallest \_\_\_\_\_\_\_(of / in / at) all birds and \_\_\_\_\_\_\_ (weigh / are weighing /weighs) less than a penny. The Bee Humming bird, at barely more than two inches long \_\_\_\_\_\_\_ ( is / are / have) the smallest bird in the world. Most humming birds are often dazzling combinations of greens and reds or greens or blues, however, some are violet, orange or other combinations only \_\_\_\_\_\_\_ (no article / a / the) Mother Nature could dream up. All of them have long bills to insert \_\_\_\_\_\_\_ (on / onto / into) flowers, so that they can drink nectar form flowers. \_\_\_\_\_\_\_ (Although / Because / So that) humming birds are so small they are the only birds that \_\_\_\_\_\_\_ (can be flown / can fly/are flying) backwards. If you prepare special feeders filled with sugar water, you \_\_\_\_\_\_\_ (attract /can attract/ have attracted) them to your yard. It \_\_\_\_\_\_\_ (says /is said/ has said) that humming birds are attracted to red so it's wiser to get the feeders

\_\_\_\_\_\_ (paint / to paint / painted) bright red.

***\* Best of Luck \****

**Sarbanam Shikshyalaya**

Gokarneshwor-06, Jorpati, Kathmandu

**Third Terminal Examination-2079**

**Class: 10**

**Subject: EPH F.M=75 P.M=30**

**Time:2 hrs 15 min**

**Group ‘A’**

1. **Write very short answer of the following questions.        (11x1=11)**

1. Give an example of ‘Science and Technology aspect’ that has interrelationship with other aspects of health, population, and environment.

2. Why is John Graunt of Great Britain considered as ‘Father of demography’?

3. How is the general fertility period 34 years?

4. How did the Brundtland Commission define ‘Sustainable development’?

5. How much percent of people of Nepal live in the Terai region?

6. What are the major indicators used to calculate Human Development Index (HDI)?

7. Write any one utility of *Cordyceps* (Yarchagumba).

8. What causes amoebic dysentery and what causes bacillary dysentery?

9. What are the best options for a sex worker to prevent transmission of HIV/AIDS to self- and to others?

10. What does community health entail? Mention any one scope.

11. How is Cardiopulmonary resuscitation (CPR) performed?

**Group ‘B’**

1. **Write short answers to the following questions.         (9 x 4 = 36)**

12. List the aspects of health, population, and environment education. Elaborate any one of them in two sentences.

13. Mention any four direct measures of population management and any four indirect measures of population management.

Or,

How is Total Fertility Rate (TFR) calculated? Clarify with formula.

14. Why is balanced regional development needed?

15. How does the biological aspect of mountain region depend upon its physical aspect? Present in brief.

16. Clarify the elements of quality of life.

17. Highlight the importance of biodiversity in human life .Describe it briefly.

Or,

  How are rare plants and animals preserved? Mention any four suggestion.

18. Illustrate four differences between communicable and non-communicable diseases.

19. Mention the precautions for safe abortion.

20. Illustrate the importance of community health in brief.

Or,

 Discriminate between the meanings of drug use, drug misuse, drug abuse and drug addiction.

**Group ‘C’**

1. **Write long answers to the following questions.      (4x 7 = 28)**

21. How can we measure ‘Quality of life’ of general population of a country? Discuss various ideas of measuring it.

22. How should the newly born baby be cared? Mention any seven effective suggestions.

23. Introduce the diseases with causes, symptoms, and preventive measures:

a. Roundworm

b. Myocardial infarction

24. Introduce one horned rhinoceros. Write the causes of its rareness and ways of conservation.

**Sarbanam Shikshyalaya**

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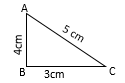
**Second Terminal Examination-2079**

**Class: 10 F.M=100**

**Subject: C.Math P.M=40**

**Time:3hrs**

**(Group'A') [3(1+1)=6]**

1. (a) A village has present population (PT). If the population growth rate is R% per annum, write the formula for finding the population (PO) after T years.

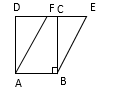
(b) Find the area of the given triangle.

2. (a) Solve: 4x=64.

(b) In the given data, what will be the cumulative

frequency corresponding to class 40-50?

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| x | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 |
| F | 3 | 6 | 10 | 14 | 11 | 5 |



3. (a) In the given figure, the length and breadth of rectangle

ABCD are 10cm and 8 cm respectively, what will be the area

of parallelogram ABEF?

(b) In the adjoining figure, O is the centre of the circle.

D

O

A

C

B

If OABC is a parallelogram, and ADC=60, find the

measure of OCB.

**(Group'B') [4(2+2)+3(2+2+2)=34]**

4. (a) The selling price of a watch is Rs. 270. If this watch was sold at 10% discount

on marked price, what was the marked price?

(b) A sum of Rs. 2400 compounded to Rs. 2646 in 2 years. Find the rate of interest.

5. (a) The volume of a prism having its base a right angled triangle is 864cm3. If

the length of the sides containing the right angle are 6 cm and 8 cm, calculate

the height of the prism.

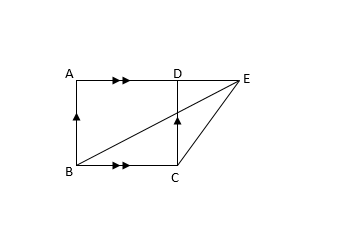
(b) The surface area of a sphere is 16cm2, find its volume.

(c) Find the total surface area of a cone whose radius of base is 6cm and slant

height is 8cm.

6. (a) Find the L.C.M of: a2-a-5 and a2-9 (b) Solve: = (-1)

7. (a) Evaluate: 10-1 (b) Simplify: -

(c) If the sum of three consecutive

numbers is 36, find the numbers.

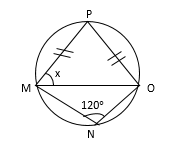
8. (a) In the given figure, AEBC, square

ABCD and are standing on

the same base BC and between

the same parallels. If AC=3cm,

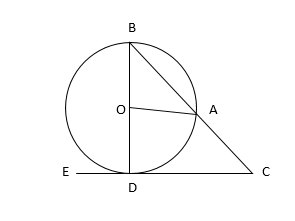
find the area of EBC.



(b) In the given figure MNOP is a

cyclic quadrilateral. If MNO =120

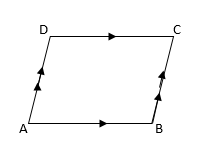
and PM = PO, find the value of x.



(c) O is the centre of circle, CE is the tangent

at the point D of the circle ABD,

AOD=72, find the value of BCD.

9. (a) The area of given parallelogram ABCD

is 48cm2, AB=12cm and BC=8cm, find

the value of ABC.

(b) In a continuous series, if mean=30, sum of the frequencies (N)=40+a and

the sum of product of frequency and mid-value ()=1550+20a, then find

the value of a.

10. (a) Find the probability of getting a number divisible by 5 or 7 from the numbers of cards numbered from 1 to 40.

(b) A bag contains 4 white balls and 6 yellow balls. Two balls are drawn randomly one after another (without replacement). By drawing a venn-diagram, show all the possible outcomes.

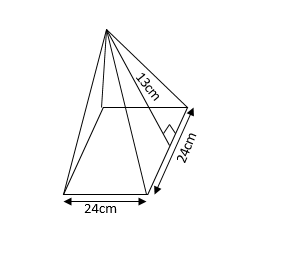
**Group'C' [104=40]**

11. In a village of 140 houses, 70 believe in hindu religion, 60 in Buddhism, and 45 in other religion. Among them 17 houses don’t find any difference in Hindu

and Buddhism, 18 houses don’t find difference in Hindu and other religion

while 16 houses don’t find any difference between Buddhism and other

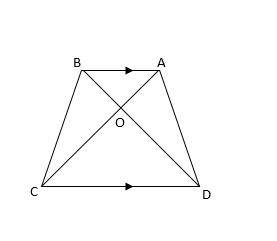
religion. If 6 houses don’t believe in any religion, find how many houses do not find any difference in any religion. Show in Venn-diagram.

12. The marked price of a mobile set is Rs. 8500. If it is sold at Rs. 7760. 50 after allowing a certain discount and levying 10% VAT on it, find the discount percent and amount of VAT.

13. Find the total surface area of given pyramid.

14. Simplify: - + +

15. The sum of the ages of a man and his son is 40 years and the product of their ages is 256. Find their present ages.

16. In the given figure ABCD is a trapezium in which ABDC. Prove that:

i) Area of ACD = Area of BCD

ii) Area of AOD = Area of BOC

17. Construct a parallelogram ABCD in which AB=5cm, BC=4cm and B=120. Construct another rectangle equal in area to the parallelogram ABCD.

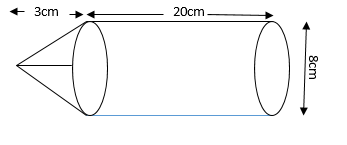
18. Verify experimentally that the opposite angles of a cyclic quadrilateral are supplementary. (Two circles of at least 3cm radii are necessary).

19. A tower on the bank of a river is of 20 meter high and the angles of elevation of the top of tower from the opposite bank is 30. Find the breadth of the river.

20. Marks obtained by the students of grade 10 in an examination is given below. Find the median.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| (Marks.obtained) | 25-35 | 35-45 | 45-55 | 55-65 | 65-75 | 75-85 | 85-above |
| (No. of students) | 4 | 9 | 12 | 14 | 10 | 8 | 3 |

**Group'D' [4X5=20]**

21. The difference between annual compound interest on a certain sum of money for two years at 20% p.a. and semi-annual compound interest on the same sum of money at the same rate of interest and for the same period of time is Rs. 482. Calculate the sum.

22. Find the cost of painting the surface of the pencil shaped solid object given alongside at Rs. 10 per cm2.

23. If l3+m3+n3=1, then prove that:

24. In a cyclic quadrilateral PQRS, RS is produced to T. If QR = ST, and QRP=PRS, prove that PRT is an isosceles triangle.

**Sarbanam Shikshyalaya**

Gokarneshwor-06, Jorpati, Kathmandu

**Second Terminal Examination-2079**

**Class: 10 F.M=75**

**Subject: O. Math P.M=30**

**Time:2 hrs 15 min**

**Attempt all the questions:**

**Group'A' [5(1+1)=10]**

1. (a) If (x)=c is a constant function, what are the values of f(2) and f(3)?

(b) Is (x-2) a factor of the polynomial f(x) =x3-2?

1. (a) For what value of x, the function f(x)= is a continuous series?

(b) If A is a singular matrix, what will be the determinant of A?

1. (a) Write the equation of the line perpendicular to the line px+qy+r=0.

(b) If the angle between pair of lines represented by the equation ax2+2hxy+by2=0 is 90, write the relation between a and b.

1. (a) Prove that: 2sin2

**Sarbanam Shikshyalaya**

Gokarneshwor-06, Jorpati, Kathmandu

**Third Terminal Examination-2079**

**Class: 10 F.M=100**

**Subject: O. Math P.M=30**

**Time: 3 Hrs.**

**Attempt all the questions:**

**Group'A' [5(1+1)=10]**

1. **(a) If (x)=c is a constant function, what are the values of f(2) and f(3)?**

**(b) Is (x-2) a factor of the polynomial f(x) =x3-2?**

1. **(a) For what value of x, the function f(x)= is a continuous series?**

**(b) If A is a singular matrix, what will be the determinant of A?**

1. **(a) Write the equation of the line perpendicular to the line px+qy+r=0.**

**(b) If the angle between pair of lines represented by the equation ax2+2hxy+by2=0 is 90, write the relation between a and b.**

1. **(a) Prove that: 2(sin2 –)=cos2.**

**(b) If cos=, find the value of cos.**

1. **(a) If =3, = 4 and angle between and is 60, find**

**(b) Find the value image of the point (3, -4) when reflected on x-axis followed by rotation about .**

**Group 'B' [3(2+2+2)+2(2+2)=26]**

1. **(a) If f(x)=2x-1 and fog(x)=6x+3, find g(2).**

**(b) If (x+1) is a factor of the polynomial x3-6x2-x+a, prove that (x-1) is also the factor of polynomial.**

**(c) Find the 8th term of the series 2 + 1 + + + + ……………**

1. **(a) If A= , B=, and determinant of A-B-5I is 14, find the value of a.**

**(b) If A = , find A-1.**

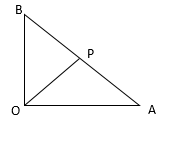
1. **(a) If the lines a1x+b1y+c1=0 and a2x+b2y+c2=O are perpendicular to each other, prove that + =0.**

**(b) Find the separate equations of the lines represented by the equation 6x2+5xy-6y2-3x+2y=0.**

1. **(a) Prove that: sin15+sin75 =.**

**(b) Prove that: cosecA – cot A = tan .**

**(c) Solve: 3tan2 -1=0 (090)**

1. **(a) If**  = 30, =6 and angle between **and**  **is 60, find the magnitude of vetor**  .

**(b) In the given figure, If**  =  prove that:

= + ).

**(c) If the quartile deviation of any data is 5, and coefficient of quartile deviation is , find Q1+Q3.**

**Group 'C' [114=44]**

1. **(a) The sum of three natural numbers of an A.P. is 18. If 1, 2 and 7 are added respectively to them, the numbers will be in G.P. Find the numbers.**
2. **Solve: x3-9x2+24x-20=0.**
3. **Test continuity of the function f(x) = at x=6 by calculating left hand limit, right hand limit and the value of the function.**
4. **Solve by using Cramers rule:**

**2y=3x, 4x=1+3y**

1. **Find the equation of the circle which passes through the point (5,1) and is concentric with the circle x2+y2-4x+8y=16.**
2. **If A+B+C= c, prove that: Sin2A + Sin2B= Sin2C = 4SinA.SiB.SinC.**
3. **Solve: Sin**=(1-c0s) **(090)**
4. **The angle of depression of the top of a pole of 10 m high from the top of a building is 45 and the angle of elevation of the top of the building from the foot of the pole is 60. Find the height of the building.**
5. **Find a 22 matrix which transforms PQR with vertices P(-4,3), Q(2,2) and R(0,4) onto the P'Q'R' with P'(2,-3), Q'(6,12) and R'(8,12).**
6. **Find the mean deviation and its coefficient from median of the data given below:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **C.I** | **5-15** | **15-25** | **25-35** | **35-45** | **45-55** |
| **Frequency** | **2** | **6** | **5** | **4** | **3** |

**21. Calculate the standard deviation from the given data:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Class-interval** | **10-20** | **20-30** | **30-40** | **40-50** | **50-60** | **60-70** |
| **Frequency** | **1** | **5** | **3** | **3** | **4** | **4** |

**Group'D' [4x5=20]**

**22. Find the minimum value of the objective function F=10x+12y under the given constraints: 4x+3y24, x+244, x0, y0.**

**23. Find the single equation of a pair of straight lines passing through the origin and perpendicular to the lines represented by the single equation 2x2-3xy-5y2=0.**

**24. Prove by vector method that the quadrilateral formed by joining mid-points of adjacent sides of a quadrilateral is a parallelogram.**

**25. A triangle ABC having vertices A(2,3), B(0,1) and C(3,-2) is rotated through +90about the origin and then enlarged with centre origin and the scale factor 2. Find the images and show them in the same graph paper.**

**\*\*\*The End\*\*\***

**Sarbanam Shikshyalaya**

Gokarneshwor-06, Jorpati, Kathmandu

**Third Terminal Examination-2079**

**Class: 10 F.M=75**

**Subject: Science P.M=30**

**Time:2 hrs 15 min**

**Clear and neat handwriting represent good and beautiful mental state.**

**Group 'A' [15×1=15]**

1. **Answer the short question.**
2. What is free fall?
3. State principle of floatation. Name an instrument based on it.
4. What is meant by ‘magnification is less than one’?
5. What is the relation between up thrust and density of liquid?
6. Write down the position of alkali metal and inert gas in modern periodic table.
7. Which metal can be obtained from haematite?
8. What is carbonization?
9. List the raw materials of cement.
10. What is chromosomal disorder?
11. What is grafting?
12. Define internal fertilization.
13. Where is cerebro-spinal fluid? Write its one function.
14. Write two factors responsible for mutation?
15. What is nuptial flight?
16. Define hydrated salt with one example.

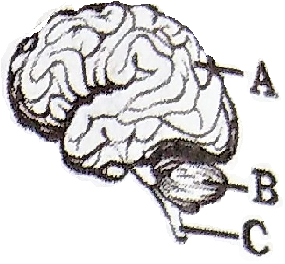
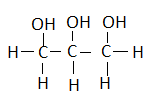
**Group 'B' [13×2=26]**

1. Water is used to cool engines, why?
2. What is an optical instrument? Write one use of each of concave and convex lens.
3. Write difference between step-up and step-down transformer.
4. It is easier to lift a smaller object but not the large one on the surface of the earth, why?
5. Write the structural formula of ethyl alcohol and write one uses of it.
6. What is the importance of potassium to plants? Write two examples of fertilizers that contain potassium.
7. How is glass made coloured? Write with examples.
8. Choose two ores each of iron and copper from the list of ore given below.

Cuprite, Magnetite, Siderite, Bauxite, Argentite, Chalcocite.

1. Write two differences between RBC and WBC.
2. “Air pollution causes inhibition in biological growth of plants” justify the statement.
3. Write two differences between drone bee and worker bee.
4. Write down any four advantages of tissue culture.
5. How is silk thread obtained from silkworm?

**Group 'C' [6×3=18]**

1. Write any two uses of mercury in the thermometer. Calculate the specific heat capacity of substance having mass 5 kg whose temperature increases from 15°C to 25°C by the supply of 19KJ heat.
2. A figure of human brain is given below. Answer the following question.
3. Write any two differences between part A and B.
4. In the given figure write the function of C.
5. Write two differences between PVC and Bakelite. Draw a structural formula of acetylene.
6. Study the given condensed formula and answer the question
7. Write name, molecular formula and structural formula of given compound.
8. Write name and molecular formula of a compound which is formed by the replacement of three hydroxyl radical of given compound by three hydrogen.
9. Show a chart with Mendal’s result of cross between long winged dorsophila(LL) and short winged dorsophila(ll) upto second generation showing phenotype and genotype.
10. Which era is called the time of reptiles? Write in short about natural an artificial satellites.

**Group 'D' [4×4=16]**

1. In hostel, five bulb each of 60W are used for 10 hours a day and two electric iron each of 70W are used 2 hours a day. Calculate the total electricity consumed in a month and its total cost at the rate of Rs 10 per unit.
2. A student at last bench cannot see anything written in a board but can read book easily. On the basis of this answer the following question.
3. What type of defect does he/she have?
4. Write the causes of such defect.
5. Which lens should be used to remove such defect?
6. Draw a defect corrected diagram on the basis of eye by using lens.
7. Draw internal structure of human heart and describe blood circulation in it.
8. How does CFCSs deplete ozone layer? Write with the chemical equation. Also give any two points on the negative effects of global warming.

What we know is a drop, What we don't know is an ocean.

-Sir Isaac Newton

\*\*Best of luck\*\*

**Sarbanam Shikshyalaya**

Gokarneshwor-06, Jorpati, Kathmandu

**Third Terminal Examination-2079**

**Class: 10**

**Subject: Social Studies F.M=75 P.M=30**

**Time:2 hrs 15 min**

**(Group ‘A’)**

**(Write very short answer of the following questions.) (7x1=7)**

1. What is meant by human resource management? Write in sentence.

2. Suggest a way to our country Nepal to overcome the problem of ‘Brain Drain’.

3. When is education day observed in Nepal?

4. Write any two similarities in between Red Cross Society and Scout?

5. What do you understand by Bargenia Conference?

6. What is the bank of Nepal?

7. What can be method to make localization effective? Write any one method.

**(Group ‘B’)**

**(Write short answer of the following questions.) (10x4=40)**

8. The economically backward nation ,Nepal felt the necessary of Federalism. Why ? Present your views in four points.

9. Is the foreign investment needed for the physical development of Nepal? Present your views in four point.

10. The destroyed national heritage should be build in their own structure. Why ? Write a letter to the Chief Executive Officer (CEO) of Reconstruction Authority suggesting the causes to built in their own structure.

11. State any four roles to be performed by the citizens to preserve or traditional folk songs and dances.

12. Differentiate between House of Representatives and Nation Assembly in four points.

13. Nepal is located in earthquake prone zone . Write the activities to be carried out by the general people and the government in two points each.

14. Present the socio-economic life of the Savanna Climate region in short.

15. Write the causes behind the downfall of Constitutional Monarchy established by the People’s Movement I , 2046.

16. There is a great contribution of remittance in the economic sector of Nepal .Give any four suggestions to use it ,properly.

17. Present in brief the effects caused by the Corona Virus (COVID-19) in the world.

**(Group ‘C’)**

**(Write long answer of the following questions.) (4x7=28)**

18. Why do you consider the constitutional provisions related to register political party appropriate in Nepal? Mention your analytical opinions in points.

19. Draw a full page map of Nepal and insert the following facts using appropriate symbols.

(Nepalgunj), (Mt .Ganesh) ,(Koshi Tappu) , (Muktinath Temple),

Or,

Draw a map of North America and insert the following facts in it:

a. Golf of Mexico b. Lake Superior

c. Washington D.C c. Prairies grassland

20. The voices against Panchayat were raised highly by people with its foundation. Justify it on the basis of political events and evidences.

21. Mention the features of cooperatives and write its contribution to the economic growth of the country.

**Sarbanam Shikshyalaya**

Gokarneshwor-06, Jorpati, Kathmandu

**Third Terminal Examination-2079**

**Class: 10**

**Subject: English F.M=75 P.M=30**

**Time:2 hrs 15**

**Class:-Ten               F.M. 75**

**Sub:- English Time: 2:15hrs**

***Attempt all the questions.***

1. **Read the poem given and do the activities that follow:**

***The Rivals***

I heard a bird at dawn

Singing sweetly on a tree,

That the dew was on the lawn,

And the wind was on the lea;

But I didn't listen to him,

For he didn't sing for me!

I didn't listen to him,

For he didn't sing to me

That the dew was on the lawn

And the wind was on the lea!

I was singing at the time,

Just as prettily as he!

I was singing at the time,

Just as prettily as he,

I was singing at the time,

As prettily as he,

About the dew upon the lawn,

And the wind upon the lea!

So I didn't listen to him,

As he sang upon the tree!

**- James Stephens**

1. **Read the poem and find the similar meaning of the following:         (2)**
2. beautifully **b.** breeze **c.** occasion **d.** morning

**B. Read the poem and answer these questions: (3×1=3)**

1. What were the bird and the speaker singing about?
2. Who was singing more sweetly, the poet or the bird?
3. Did the poet listen to the bird?
4. **Read the following passage and answer the questions given**

**below:**

Once there lived a great hermit, who was famous for telling the truth. He had taken a vow not to lie and was said, everyone believed him because he had earned a great reputation in the community where he lived and did his spiritual practices.

One evening, a robber was chasing a merchant to rob him. The merchant was running for his life. To escape from the robber, the merchant ran toward the forest where the hermit lived outside the village.

The robber came to the hermit's cottage and paid his respects. The robber knew that hermit would tell only the truth and could be trusted, so he asked him whether he had seen somebody running away. The hermit knew that the robber must be looking for somebody to rob, so he faced a big problem. If he holds the truth, the merchant would certainly be killed. If he lied, he would incur the sin of lying and lose his reputation, any immoral act that may harm others is called sin. Ashima (nonviolence) and truthfulness are two most important teachings of all regions that we must follow. If we have to choose between these two, which one should we choose?...

1. **State whether the statements are true or false.   (0.5×5=2.5)**

i. The hermit was reliable.

ii. The robber didn't talk to hermit.

iii. Non-violence and tolerance are impotent teaching.

iv. The hermit had high prestige

v. The merchant ran towards river.

**B. Write the antonyms of the following.               (0.5×5=2.5)**

  Lie, nobody, house, inside, protect

**C. Answer the following question.                               (5×1=5)**

i. Why was the robber chasing the merchant?

ii. How did the hermit earn a good reputation?

iii. Who had seen the merchant in the jungle?

iv. Was the hermit in dilemma? Write.

v. Give a suitable title of the story.

1. **Read the following text and do the activities that follow:**

An Englishman was once travelling in Italy and one day went into a

small restaurant. He wanted to order dinner. He understood very little Italian and was unable to read the menu. He knew the word eggs and so the man ordered eggs. Italy is famous, however, for its mushrooms, and so the man wanted to try some mushroom. The waiter did not speak a word of English and, therefore, could not help him. At last, the man took out a piece of paper and a pencil and very carefully drew a picture of a mushroom on the piece of paper. The waiter looked at the picture of the mushroom for a long time. He did not understand very well, but at last he went away. He was absent for a long time. Eventually he returned. Instead of an order of mushrooms, however, he brought the man a large, back umbrella!

1. **Write 'True' for the true statement and 'False' for the false ones:       (4**×**0.5 = 2)**
2. The man went into a restaurant in Italy.
3. He was good at Italian language.
4. He wanted to try mushroom with eggs.
5. The waiter brought mushroom and gave it to the man.
6. **Put the following sentences in the correct order: (4**×**0.5 = 2)**
7. He wanted to taste some mushroom too.
8. Finally, the waiter came up with a large black umbrella.
9. An Englishman visited a small restaurant.
10. He drew a picture of mushroom.
11. **Answer the following questions:       (3**×**2 = 6)**
12. What is Italy famous for?
13. Why did the Englishman draw a picture of mushroom on the paper?
14. Did the waiter understand the drawing? Why/Why not?

1. **Read the following text and do the activities that follow:**

**Vacancy Announcement**

We are looking for some competent teachers having fluency over written and spoken English for the following positions.

**Qualification Required:**

**1. English teacher:** Bachelor's Degree in related subject

**2. Science teacher:** Bachelor's Degree in related subject

**3. Social Studies teacher:** Bachelor's Degree in related subject

Preference will be given to those who are energetic, dynamic and

flexible in their work. Interested candidates can apply with a bio-data, copies of certificates, citizenship, and passport sized photo along with a covering letter to:

**The Montessori House High School Kumaripati, Lalitpur.**

**Phone No: 5539067, 5523132**

1. **Match the words in column 'A' with their meaning in column 'B': (4**×**1=4)**

**Column 'A' Column 'B'**

preference             skillful

required able to adapt

competent             needed

dynamic priority

1. **Complete the following sentences using appropriate words / phrases from the text:         (3**×**1 = 3)**
2. The Montessori House High School demands some \_\_\_\_\_\_\_.
3. The school is located at\_\_\_\_\_\_\_\_\_\_\_\_ .
4. The candidates must have fluency in \_\_\_\_\_\_\_\_\_\_\_ and spoken English.
5. **Answer the following questions:         (4**×**2 = 8)**
6. Who has advertised the post?
7. What are the required posts?
8. What are the essential documents to be submitted along with the application?
9. Mention the inherent qualities in candidates for getting priority?
10. **Complete the following dialogue with the correct expressions given in the box below:         (6)**

Bina : Hi, Bishal. How do you do?

Bishal : Oh, hi \_\_\_\_\_\_\_? What's that you are taking?

Bina : Oh, \_\_\_\_\_\_\_ . Do you also love reading stories?

Bishal : \_\_\_\_\_ . Could you lend me this book for a couple of days?

Bina : Sorry Bishal, but \_\_\_\_\_\_\_ . It's about science.

Bishal: \_\_\_\_\_\_\_? I love reading about the universe.

Bina : Then, \_\_\_\_\_\_\_? Please, do not forget to return it soon, ok?

*- It's story book. - Why don't you take it?*

*- I will give you another one. - Oh, is it about the universe.*

*- How do you do? - Of course. I do.*

1. **Write a short readable story with the help of the following outlines and give a suitable title to it:         (6)**

A school boy \_\_\_\_\_\_\_ has bad company \_\_\_\_\_\_\_ learns to smoke

\_\_\_\_\_\_\_ teachers and parents advise him to give up smoking \_\_\_\_\_\_ doesn't listen to them \_\_\_\_\_\_\_ hides and smokes \_\_\_\_\_\_\_ goes to a doctor \_\_\_\_\_\_\_ knows that he's suffered from TB \_\_\_\_\_\_\_ becomes upset \_\_\_\_\_\_\_ regrets badly \_\_\_\_\_\_\_ promises to give up smoking \_\_\_\_\_\_\_ moral.

1. **Write an essay on 'Travelling in Nepal ' in about 200 words using the clues given below:       (12)**

Introduction \_\_\_\_\_\_\_ Advantages \_\_\_\_\_\_\_ present situation \_\_\_\_\_\_

Conclusion.

1. **Choose and copy the best answers: (Re – writing is not compulsory)       (12**×**0.6 =6)**
2. I need \_\_\_\_\_\_\_ eraser? I've made a mistake. (a / an / the)
3. Hari is so merciful. He is reality true \_\_\_\_ his name. (by / of / to)
4. I'd rather have tea, \_\_\_\_\_\_\_? (haven't / wouldn't / hadn't)
5. The cost of all articles \_\_\_\_\_\_\_ risen sharply. (has / is / have)
6. The affirmative transformation of 'The Eskimos didn't used to go to schools is: 'The Eskimos \_\_\_\_\_\_\_ go to school.' (did used to / used to / used not to)
7. A: \_\_\_\_\_\_\_ to USA? (You have been, Have you been, Are you being)

B: No, I haven't.

1. While we \_\_\_\_\_\_\_, they interrupted us intentionally. (danced / had danced/ were dancing)
2. The talkative fellow claims that he \_\_\_\_\_\_\_ several aircraft. (flying / has flown / are flying)
3. My nails\_\_\_\_\_\_\_ trimmed. (have to, have to be, had)
4. Students are getting well prepared \_\_\_\_\_\_\_ the exam is coming soon. (although /because /therefore)
5. The curry \_\_\_\_\_\_\_ better, if she added some more salt. (tasted / would taste / would have tasted)
6. The powerful \_\_\_\_\_\_ the weak follow them. (makes / make / get)

**9. Choose and copy the best answer. (Rewriting is not compulsory:)**

**(10**×**0.5 = 5)**

Humming birds are the smallest \_\_\_\_\_\_\_(of / in / at) all birds and \_\_\_\_\_\_\_ (weigh / are weighing /weighs) less than a penny. The Bee Humming bird, at barely more than two inches long \_\_\_\_\_\_\_ ( is / are / have) the smallest bird in the world. Most humming birds are often dazzling combinations of greens and reds or greens or blues, however, some are violet, orange or other combinations only \_\_\_\_\_\_\_ (no article / a / the) Mother Nature could dream up. All of them have long bills to insert \_\_\_\_\_\_\_ (on / onto / into) flowers, so that they can drink nectar form flowers. \_\_\_\_\_\_\_ (Although / Because / So that) humming birds are so small they are the only birds that \_\_\_\_\_\_\_ (can be flown / can fly/are flying) backwards. If you prepare special feeders filled with sugar water, you \_\_\_\_\_\_\_ (attract /can attract/ have attracted) them to your yard. It \_\_\_\_\_\_\_ (says /is said/ has said) that humming birds are attracted to red so it's wiser to get the feeders \_\_\_\_\_\_\_ (paint / to paint / painted) bright red.

***\* Best of Luck \****