

Series A

1. Which of these is not a symptom of Pulmonary Tuberculosis:
 - a) Fever.
 - b) Night Sweats.
 - c) Loss of Weight.
 - d) Nausea/vomiting.
2. Tuberculin test is done on:
 - a) Skin.
 - b) Blood.
 - c) Sputum.
 - d) None of these.
3. All are first line drugs for tuberculosis except:
 - a) Isoniazid.
 - b) Rifampicin.
 - c) Moxifloxacin.
 - d) Pyrizanamide.
4. MDR Tuberculosis is an infection caused by bacteria resistant to:
 - a) Isoniazid.
 - b) Rifampin.
 - c) Both A and B.
 - d) None of these.
5. TB is transmitted through:
 - a) Sexual Contact.
 - b) Air.
 - c) Blood.
 - d) All of above.
6. Which of the following is a protozoal infection:
 - a) Dengue.
 - b) Poliomyelitis.
 - c) Malaria.
 - d) None of these.
7. All can help in stopping transmission of Covid except:
 - a) Social Distancing.
 - b) Hand Hygiene.
 - c) Wearing Masks.
 - d) None of these.

8. 1st dose of BCG vaccine is given at:
- a) Birth.
 - b) 1 Week.
 - c) 2 Weeks.
 - d) 4 Weeks.
9. Estimated prevalence of latent Tuberculosis infection in India is:
- a) 5%.
 - b) 10%.
 - c) 40%.
 - d) 80%.
10. Following adverse event is a Contraindication of rechallenge:
- a) Hepatotoxicity.
 - b) Vomiting.
 - c) Drug Rash.
 - d) Drug Induced Thrombocytopenia.
11. Following drug should be given on empty stomach for better bioavailability:
- a) Isoniazid.
 - b) Rifampicin.
 - c) Ethambutol.
 - d) Both (a) and (b).
12. Pyridoxine deficiency can occur d/t:
- a) Isoniazid.
 - b) Rifampicin.
 - c) Ethambutol.
 - d) Pyrazinamide.
13. DOTS stands for:
- a) Direct Occurring Treatment Service.
 - b) Directly Observed Treatment Strategy.
 - c) Directly Observed Treatment Short Course.
 - d) Directly Observed Treatment Services.
14. BCG Vaccine is administered to the infant at:
- a) Birth.
 - b) 6 months.
 - c) 9 months.
 - d) 1 year.

15. RNTCP was started in:
- a) 1988.
 - b) 1990.
 - c) 1992.
 - d) 1994.
16. A patient with Tuberculosis should avoid which foods:
- a) Orange, Mango.
 - b) Red Meat.
 - c) Caffeinated Drinks.
 - d) Both B & C.
17. For completion of treatment of a patient with simple TB, the amount of money a and DOTS provider gets:
- a) 500.
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18. The theme of TB day 2020 was:
- a) It's time.
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- a) 24th April.
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- a) Dharmendra.
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 - c) Deepika Padukone.
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- a) 2016.
 - b) 2017.
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22. AIDS stands for:

- a) Acute Inflammatory Demyelination Syndrome.
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23. Which of the following is a component of Health:

- a) Social.
- b) Mental.
- c) Physical.
- d) All of the above.

24. Who is the current Minister of Ministry of Health & Family Welfare:

- a) Harsh Mohan.
- b) Harsh Vardhan.
- c) Gh. Nabi Azad.
- d) None of these.

25. Mode of transmission of Covid-19 is:

- a) Food.
- b) Sewage.
- c) Sexual contact.
- d) None of these.

26. Polio is caused by:

- a) Virus.
- b) Bacteria.
- c) Fungi.
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- a) 2012.
- b) 2013.
- c) 2014.
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- a) Amitabh Bachan.
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29. Which of the following is not a Fundamental Duty as enshrined in the Constitution of India:

- (a) To develop scientific temper
- (b) To promote brotherhood and strive to be a good human being
- (c) To respect the ideals of the Constitution
- (d) To develop spirit of enquiry.

30. With reference to 73rd amendment act of the constitution, a Gram Sabha is a body consisting of:

- (a) All the adult population of the villages under the Panchayat.
- (b) The whole population of the villages under the Panchayat other than Children of less than five years.
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31. 40. A meteorite is:

- (a) a comet with a bright gaseous tail.
- (b) a piece of matter which burns and gets converted into ash as it enters the Earth's atmosphere from outer space.
- (c) a piece of matter which does not burn completely and reaches the surface of the earth.
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32. Which of the following climate type does not enjoy rainfall all-round the year:

- (a) Steppe type.
- (b) China type.
- (c) Laurentian type.
- (d) British type.

33. Which of the following are you likely to find in the Vale of Kashmir:

- (a) Chars.
- (b) Karewas.
- (c) Bils.
- (d) Buggyals.

34. Consider the following pairs:

Population

Interaction

Feature

1. Mutualism : Both the species are benefited
2. Competition : Both the species are harmed
3. Commensalism : One species is harmed and the other is unaffected
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Which of the pairs given above is/are correctly matched?

- (a) 1 and 2 only.
- (b) 3 and 4 only.
- (c) 1, 2 and 3 only.
- (d) 1, 2, 3 and 4.

35. Which of the following are the sources of renewable energy?

1. Geo-thermal energy.
2. Biofuels.
3. Biomass energy.
4. Nuclear energy.

Select the correct answer using the codes given below

- (a) 1 and 3 only.
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- (a) Mangroves.
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1. Carbon Dioxide.
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38. Which of the following gases is/are associated with acid rain:

1. Sulphur Dioxide.
2. Nitrogen Oxides.
3. Methane.
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Select the correct answer using the code given below.

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1. Biomass burning.
2. Landfills.
3. Rice fields.
4. Coal mining.
5. Permafrost.

Select the correct answer using the code given below:

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(c) 1, 2 and 5 only.

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40. Which among the following regions in India is/are biodiversity hotspots:

1. Eastern Ghats.
2. Eastern Himalayas.
3. Nicobar Islands.

Select the correct answer using the code given below.

(a) 1 and 3 only.

(b) 2 only.

(c) 2 and 3 only.

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41. complete the given series:

2, 14, 98, 286.

a) 1976.

b) 2548.

c) 980.

d) 4802.

42. If 15 Horses eat 15 bags of grain in 15 days, in how many days will one horse eat one bag of grain:

a) 15 Days.

b) 1/15 Days.

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d) 30 Days.

Directions (Qs. 43-46) : Read the following passages and answer the questions that follow. Your answer to these question should be based on passage only.

PASSAGE-1

A team of Canadian and American researchers has reached a step closer to developing effective treatments to prevent the brain from diseases like Alzheimer's

and Parkinson's by identifying a gene that controls the normal and pathological aging of neurons in the central nervous system. The team has revealed that the BMI-1 gene, which is responsible for aging of neurons, has been identified in mice and in humans as well while they were carrying out experiments on mice. The researchers highlighted the fact that the primary risk factor for diseases like macular degeneration, Parkinson's and Alzheimer's is aging of neurons.

43. An assumption taken by researchers is that

- (a) no significant study focused on the basic molecular mechanisms that control neuronal aging, has been conducted to date.
- (b) the BMI-1 gene behaves in a similar fashion in humans as in mice.
- (c) manipulating the BMI-1 gene could result in curing people suffering from Parkinson's or Alzheimer's.
- (d) Neurons in the brain age at a slower rate as compared to other cells in the human body.



PASSAGE-2

Leonardo da Vinci's masterpiece the Mona Lisa's smile has repeatedly been a subject of many - greatly varying - interpretations. Some have described the smile as both innocent and inviting. Many researchers have tried to explain why the smile is seen so differently by people. Professor Margaret Livingstone of Harvard University has argued that the smile is mostly drawn in low spatial frequencies, and so can best be seen from a distance or with one's peripheral vision. Thus, for example, the smile appears more striking when looking at the portrait's eyes than when looking at the mouth itself. 2.

44. Which of the following statements would strengthen Prof Margaret's claim?

- (a) Different people have different interpretations for the same portrait because of their different mental makeup.
- (b) A smile may appear to be a neutral expression depending on your mood.
- (c) Research has proved that different people focus on different areas while viewing a portrait.
- (d) People try to see themselves in a portrait; what they interpret is dependent on their personal qualities.



PASSAGE-3

Akbari is no architect and his grand plan is no conceptual art project. Based at the prestigious Lawrence Berkeley National Laboratory in California, Akbari is a scientist who has come up with a new way to fight global warming. It could be the easiest solution you've ever heard of. His big idea is based on principles as old as the whitewashed villages that scatter the hills of southern Europe and North Africa. Turn

enough of the world's black urban landscape white, he says, and it would reflect enough sunlight to delay global warming, and grant us some precious breathing space in the global struggle to control carbon emissions.

45. It can be inferred from the above paragraph that

- (a) global warming occurs because of poisonous gases like carbon monoxide.
- (b) the whitewashed villages in the hills of Europe and North Africa were meant to counter global warming.
- (c) global warming probably occurs due to the earth absorbing sunlight.
- (d) global warming could spell doom for all of us on this earth.

PASSAGE-4

In modern times, the meaning of the word metaphysics has become confusing because of popular beliefs that are really unrelated to metaphysics or ontology per se, viz. esotericism and occultism. Esotericism and occultism, in their many forms, are not concerned with inquiries into first principles or the nature of being, though they do tend to proceed on the metaphysical assumption that all being is "one".

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- (a) Esotericism and Occultism explain the meaning of metaphysics with a lot of confusion.
- (b) Esotericism does not believe in the first principle that metaphysics believes in.
- (c) Metaphysics is concerned with inquiries into the nature of being.
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47. What should come in the place of question mark in the following letter number combination:

F6, H8, J 10, L12?

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- (a) Dal.
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- (c) Manasbal.
- (d) Anchar.

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- (a) Shyok.
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- a) High Speed Calculations.
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Rough Work Sheet

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- g) Both A and B.
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- e) 1988.
- f) 1990.
- g) 1992.
- h) 1994.

Rough Work Sheet

Series C

1. A meteorite is:
- (a) a comet with a bright gaseous tail.
 - (b) a piece of matter which burns and gets converted into ash as it enters the Earth's atmosphere from outer space.
 - (c) a piece of matter which does not burn completely and reaches the surface of the earth.
 - (d) None of the above.
2. Which of the following climate type does not enjoy rainfall all-round the year:
- (a) Steppe type.
 - (b) China type.
 - (c) Laurentian type.
 - (d) British type.
3. Which of the following are you likely to find in the Vale of Kashmir:
- (a) Chars.
 - (b) Karewas.
 - (c) Bils.
 - (d) Buggyals.
4. Consider the following pairs:
- | | |
|--------------------|--|
| Population | |
| Interaction | |
| Feature | |
1. Mutualism : Both the species are benefited
 2. Competition : Both the species are harmed
 3. Commensalism : One species is harmed and the other is unaffected
 4. Amensalism : One species is benefited and the other is unaffected
- Which of the pairs given above is/are correctly matched?
- (a) 1 and 2 only.
 - (b) 3 and 4 only.
 - (c) 1, 2 and 3 only.
 - (d) 1, 2, 3 and 4.
5. Which of the following are the sources of renewable energy?
1. Geo-thermal energy.
 2. Biofuels.
 3. Biomass energy.
 4. Nuclear energy.
- Select the correct answer using the codes given below
- (a) 1 and 3 only.
 - (b) 1, 2 and 3 only.

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6. Which of the following is known as the Rain forests of the oceans?
(a) Mangroves.
(b) Coral reefs.
(c) Sea grass.
(d) Oysters.
7. Which of the following pollutants are present in the motor vehicle exhaust emissions?
1. Carbon Dioxide.
2. Carbon Monoxide.
3. Nitrous Oxide.
4. Hydrocarbons.
Select the correct answer using the code given below:
(a) 1, 2 and 4 only.
(b) 2, 3 and 4 only.
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8. 38. Which of the following gases is/are associated with acid rain:
1. Sulphur Dioxide.
2. Nitrogen Oxides.
3. Methane.
4. Ozone.
Select the correct answer using the code given below.
(a) 1 and 2 only.
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9. Which of the following are the sources of Methane?
1. Biomass burning.
2. Landfills.
3. Rice fields.
4. Coal mining.
5. Permafrost.
Select the correct answer using the code given below:
(a) 3 and 4 only.
(b) 1, 3 and 4 only.
(c) 1, 2 and 5 only.
(d) 1, 2, 3, 4 and 5.

10. Which among the following regions in India is/are biodiversity hotspots:

1. Eastern Ghats.
2. Eastern Himalayas.
3. Nicobar Islands.

Select the correct answer using the code given below.

- (a) 1 and 3 only.
- (b) 2 only.
- (c) 2 and 3 only.
- (d) 1, 2 and 3.

11. complete the given series:

2, 14, 98, 286.

- a) 1976.
- b) 2548.
- c) 980.
- d) 4802.

12. If 15 Horses eat 15 bags of grain in 15 days, in how many days will one horse eat one bag of grain:

- a) 15 Days.
- b) 1/15 Days.
- c) 1 Day.
- d) 30 Days.

Directions (Qs. 13-16) : Read the following passages and answer the questions that follow. Your answer to these question should be based on passage only.

PASSAGE-1

A team of Canadian and American researchers has reached a step closer to developing effective treatments to prevent the brain from diseases like Alzheimer's and Parkinson's by identifying a gene that controls the normal and pathological aging of neurons in the central nervous system. The team has revealed that the BMI-1 gene, which is responsible for aging of neurons, has been identified in mice and in humans as well while they were carrying out experiments on mice. The researchers highlighted the fact that the primary risk factor for diseases like macular degeneration, Parkinson's and Alzheimer's is aging of neurons.

13. An assumption taken by researchers is that

- (a) no significant study focused on the basic molecular mechanisms that control neuronal aging, has been conducted to date.
- (b) the BMI-1 gene behaves in a similar fashion in humans as in mice.
- (c) manipulating the BMI-1 gene could result in curing people suffering from

Parkinson's or Alzheimer's.

(d) Neurons in the brain age at a slower rate as compared to other cells in the human body.

PASSAGE-2

Leonardo da Vinci's masterpiece the Mona Lisa's smile has repeatedly been a subject of many - greatly varying - interpretations. Some have described the smile as both innocent and inviting. Many researchers have tried to explain why the smile is seen so differently by people. Professor Margaret Livingstone of Harvard University has argued that the smile is mostly drawn in low spatial frequencies, and so can best be seen from a distance or with one's peripheral vision. Thus, for example, the smile appears more striking when looking at the portrait's eyes than when looking at the mouth itself. 2.

14. Which of the following statements would strengthen Prof Margaret's claim?

- (a) Different people have different interpretations for the same portrait because of their different mental makeup.
- (b) A smile may appear to be a neutral expression depending on your mood.
- (c) Research has proved that different people focus on different areas while viewing a portrait.
- (d) People try to see themselves in a portrait; what they interpret is dependent on their personal qualities.

PASSAGE-3

Akbari is no architect and his grand plan is no conceptual art project. Based at the prestigious Lawrence Berkeley National Laboratory in California, Akbari is a scientist who has come up with a new way to fight global warming. It could be the easiest solution you've ever heard of. His big idea is based on principles as old as the whitewashed villages that scatter the hills of southern Europe and North Africa. Turn enough of the world's black urban landscape white, he says, and it would reflect enough sunlight to delay global warming, and grant us some precious breathing space in the global struggle to control carbon emissions.

15 . It can be inferred from the above paragraph that

- (a) global warming occurs because of poisonous gases like carbon monoxide.
- (b) the whitewashed villages in the hills of Europe and North Africa were meant to counter global warming.
- (c) global warming probably occurs due to the earth absorbing sunlight.
- (d) global warming could spell doom for all of us on this earth.

PASSAGE-4

In modern times, the meaning of the word metaphysics has become confusing

because of popular beliefs that are really unrelated to metaphysics or ontology per se, viz. esotericism and occultism. Esotericism and occultism, in their many forms, are not concerned with inquiries into first principles or the nature of being, though they do tend to proceed on the metaphysical assumption that all being is "one".

16. It can be inferred that

- (a) Esotericism and Occultism explain the meaning of metaphysics with a lot of confusion.
- (b) Esotericism does not believe in the first principle that metaphysics believes in.
- (c) Metaphysics is concerned with inquiries into the nature of being.
- (d) Many forms of esotericism are related to metaphysics.

17. What should come in the place of question mark in the following letter number combination:

F6, H8, J 10, L12?

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- b) O 14.
- c) N 14.
- d) O 13.

18. The deepest lake in Kashmir is

- (a) Dal.
- (b) Wular.
- (c) Manasbal.
- (d) Anchar.

19. Vishav, Rambhara and Romshi are left bank tributaries of the river:

- (a) Shyok.
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22. Which of the following pass joins Poonch and the Uri sector:

- (a) Baramulla Pass.
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23. Which of the following companies is awarded with 690 MW Rattle Project in the state of Jammu and Kashmir?

- (a) Reliance Power.
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24. In which of the following districts of Jammu and Kashmir their first Wind power project will be installed by the Jammu and Kashmir Energy Development Department?

- (a) Doda.
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- a) High Speed Calculations.
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Rough Work Sheet

Series D

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5. Permafrost.

Select the correct answer using the code given below:

- (a) 3 and 4 only.
- (b) 1, 3 and 4 only.
- (c) 1, 2 and 5 only.
- (d) 1, 2, 3, 4 and 5.

54. Which among the following regions in India is/are biodiversity hotspots:

1. Eastern Ghats.
2. Eastern Himalayas.
3. Nicobar Islands.

Select the correct answer using the code given below.

- (a) 1 and 3 only.
- (b) 2 only.
- (c) 2 and 3 only.
- (d) 1, 2 and 3.

55. complete the given series:

2, 14, 98, 286.

- a) 1976.
- b) 2548.
- c) 980.
- d) 4802.

56. If 15 Horses eat 15 bags of grain in 15 days, in how many days will one horse eat one bag of grain:

- a) 15 Days.
- b) 1/15 Days.
- c) 1 Day.
- d) 30 Days.

Directions (Qs. 57-60) : Read the following passages and answer the questions that follow. Your answer to these question should be based on passage only.

PASSAGE-1

A team of Canadian and American researchers has reached a step closer to developing effective treatments to prevent the brain from diseases like Alzheimer's and Parkinson's by identifying a gene that controls the normal and pathological aging

of neurons in the central nervous system. The team has revealed that the BMI-1 gene, which is responsible for aging of neurons, has been identified in mice and in humans as well while they were carrying out experiments on mice. The researchers highlighted the fact that the primary risk factor for diseases like macular degeneration, Parkinson's and Alzheimer's is aging of neurons.

57. An assumption taken by researchers is that

- (a) no significant study focused on the basic molecular mechanisms that control neuronal aging, has been conducted to date.
- (b) the BMI-1 gene behaves in a similar fashion in humans as in mice.
- (c) manipulating the BMI-1 gene could result in curing people suffering from Parkinson's or Alzheimer's.
- (d) Neurons in the brain age at a slower rate as compared to other cells in the human body.



PASSAGE-2

Leonardo da Vinci's masterpiece the Mona Lisa's smile has repeatedly been a subject of many - greatly varying - interpretations. Some have described the smile as both innocent and inviting. Many researchers have tried to explain why the smile is seen so differently by people. Professor Margaret Livingstone of Harvard University has argued that the smile is mostly drawn in low spatial frequencies, and so can best be seen from a distance or with one's peripheral vision. Thus, for example, the smile appears more striking when looking at the portrait's eyes than when looking at the mouth itself. 2.

58. Which of the following statements would strengthen Prof Margaret's claim?

- (a) Different people have different interpretations for the same portrait because of their different mental makeup.
- (b) A smile may appear to be a neutral expression depending on your mood.
- (c) Research has proved that different people focus on different areas while viewing a portrait.
- (d) People try to see themselves in a portrait; what they interpret is dependent on their personal qualities.



PASSAGE-3

Akbari is no architect and his grand plan is no conceptual art project. Based at the prestigious Lawrence Berkeley National Laboratory in California, Akbari is a scientist who has come up with a new way to fight global warming. It could be the easiest solution you've ever heard of. His big idea is based on principles as old as the whitewashed villages that scatter the hills of southern Europe and North Africa. Turn enough of the world's black urban landscape white, he says, and it would reflect

enough sunlight to delay global warming, and grant us some precious breathing space in the global struggle to control carbon emissions.

59. It can be inferred from the above paragraph that

- (a) global warming occurs because of poisonous gases like carbon monoxide.
- (b) the whitewashed villages in the hills of Europe and North Africa were meant to counter global warming.
- (c) global warming probably occurs due to the earth absorbing sunlight.
- (d) global warming could spell doom for all of us on this earth.



PASSAGE-4

In modern times, the meaning of the word metaphysics has become confusing because of popular beliefs that are really unrelated to metaphysics or ontology per se, viz. esotericism and occultism. Esotericism and occultism, in their many forms, are not concerned with inquiries into first principles or the nature of being, though they do tend to proceed on the metaphysical assumption that all being is "one".

60. It can be inferred that

- (a) Esotericism and Occultism explain the meaning of metaphysics with a lot of confusion.
- (b) Esotericism does not believe in the first principle that metaphysics believes in.
- (c) Metaphysics is concerned with inquiries into the nature of being.
- (d) Many forms of esotericism are related to metaphysics.

