

147 PU Ph.D Disaster Management

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200 PU_2016_147_E

Petrology is the study of:-

- Minerals
- Rock
- water
- None of the above

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118 PU_2016_147_E

Electrons can be accelerated to very high energies by means of:-

- cyclotrons
- thyratrons
- betatrons
- magnetrons

3 of 100

158 PU_2016_147_E

Hodgkin's disease is associated with:-

- Leucocytes
- Lymphocytes
- Erythrocytes
- All the above

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173 PU_2016_147_E

Which one of the following can one come across if one travels through the Strait of Malacca:-

- Brunei
- Singapore
- Java
- Bali

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204 PU_2016_147_E

Mangrove forest are present in:-

- Lakes
- Mountain
- Coast

- Desert

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122 PU_2016_147_E

What happens when dilute hydrochloric acid is added to iron fillings? Select the correct answer.

- Chlorine gas and iron hydroxide are produced.
- No reaction takes place.
- Hydrogen gas and iron chloride are produced.
- Iron salt and water are produced.

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189 PU_2016_147_E

The major irritant in Indo-Pak relations is:-

- Issue of Disarmament
- Division of River Water
- Sir Creek Line
- Kashmir Issue

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172 PU_2016_147_E

Which one of the following is the appropriate reason for considering the Gondwana rocks as most important of rock systems of India?

- More than 90% of India's coal reserves are found in them.
- More than 90% of fertile black cotton soils are spread over them.
- More than 90% of limestone reserves of India are found in them.
- None of the reasons given above is appropriate in this context.

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134 PU_2016_147_E

Consider the following which can be found in the ambient atmosphere:-

1. Soot
2. Sulphur hexafluoride
3. Water vapour.

Which of the above contribute to the warming up of the atmosphere?

- 3 only
- 1, 2 and 3
- 1 and 2 only
- 2 and 3 only

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174 PU_2016_147_E

With reference to the river Luni, which one of the following statements is correct?

- It flows into Gulf of Khambhat.
- It flows into Pakistan and merges with a tributary of Indus.
- It is lost in the marshy land of the Rann of Kuchchh.
- It flows into Gulf of Kuchchh.

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185 PU_2016_147_E

NATO was set up in the year:-

- 1951
- 1952
- 1948
- 1949

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131 PU_2016_147_E

Excessive release of the pollutant carbon monoxide (CO), into the air may produce a condition in which oxygen supply in the human body decreases. What causes this condition?

- The inhaled CO destroys the chemical structure of haemoglobin.
- When inhaled into the human body, CO is converted into CO₂.
- The inhaled CO has much higher affinity for haemoglobin as compared to oxygen.
- The inhaled CO adversely affects the respiratory centre in the brain.

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209 PU_2016_147_E

Gemstones are:-

- Minerals
- Purified rocks
- Coloured rocks
- None of the above

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205 PU_2016_147_E

Earth's satellite is:-

- Moon
- Sun
- Mars
- Venus

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206 PU_2016_147_E

Rocks can be classified into:-

- Igneours, metamorphic and sediments
- Igneous, metamorphic and marbles
- Igneours, metamorphic and sedimentation
- Igneous, metamorphic and sedimentary

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203 PU_2016_147_E

Earth surface layer is made up of:-

- Rocks
- Sial & sima
- Minerals
- Sand

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151 PU_2016_147_E

Consider the following statements

1. Every individual in the population is equally susceptible host for Swine Flu.
2. Antibiotics have no role in the primary treatment of Swine Flu.
3. To prevent the future spread of Swine Flu in the epidemic area, the swine (pigs) must all be culled.

Which of the statement given above is/are correct?

- 1 and 2 only
- 2 and 3 only
- 1, 2 and 3.
- 2 only

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159 PU_2016_147_E

In humans, which side of cerebral hemisphere recognises the faces of friends and family members?

- Top cerebral hemisphere
- Left and top cerebral hemisphere
- Left cerebral hemisphere
- Right cerebral hemisphere

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111 PU_2016_147_E

Which of the following actions will double the period of a simple pendulum?

- double the mass of the bob 2 times greater
- double the mass of the bob

- double the length of the pendulum
- make the pendulum four times long.

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207 PU_2016_147_E

Remote sensing is the subject used to study:-

- Earth resources
- Interior of the earth
- Earth mantle
- None of the above

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180 PU_2016_147_E

Indian Institute of Public Administration is situated at:-

- Bombay
- Calcutta
- Delhi
- Madras

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182 PU_2016_147_E

The minimum age for becoming President of India is:-

- 21 years
- 35 years
- 25 years
- 18 years

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144 PU_2016_147_E

A pesticide which is a chlorinated hydrocarbon is sprayed on a food crop. The food chain is: Food crop - Rat - Snake - Hawk. In this food chain, the highest concentration of the pesticide would accumulate in which one of the following?

- Rat
- Snake
- Food crop
- Hawk

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150 PU_2016_147_E

Which one of the following processes in the bodies of living organisms is a digestive process?

- Conversion of amino acids into proteins.

- Breakdown of glucose into CO₂ and H₂O.
- Breakdown of proteins into amino acids
- Conversion of glucose into glycogen.

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132 PU_2016_147_E

Which of the following metals are present in the Bimetallic strip that can be used in a thermostat to break an electrical circuit?

- Iron and Copper
- Iron and Brass
- Iron and Nickel
- Iron and Cobalt

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119 PU_2016_147_E

The size of the atomic nucleus is:-

- 10⁻¹⁰m
- 10⁻¹⁴m
- 10⁻⁶m
- 10⁻²⁴m

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166 PU_2016_147_E

Match the following rivers with the correct statements and select the answer from the options given:-

- | | |
|----------------|--|
| (i) Kosi | (a) Once known as the 'Sorrow of Bengal' |
| (ii) Alaknanda | (b) Also known as the "Sorrow of Bihar" |
| (iii) Damodar | (c) Flows through the Rift Valley |
| (iv) Tapi | (d) Its tributary Mandakini is also called as Kali Ganga |

- (i) - c (ii) - d (iii) - a (iv) - b
- (i) - b (ii) - d (iii) - a (iv) - c
- (i) - b (ii) - a (iii) - d (iv) - c
- (i) - c (ii) - a (iii) - d (iv) - b

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210 PU_2016_147_E

Aerial Photography deals with:-

- Earth interior

- Earth core
- Earth mantle
- Earth surface

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181 PU_2016_147_E

Who was the author of 'Arthasastra'?

- Kautilya
- Adam Smith
- Malthus
- Patanjali

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162 PU_2016_147_E

Match the following and select the correct answer from the options given.

- | | |
|------------------------|---|
| (i) Mumbai Port | (a) It is a tidal port and requires constant dredging |
| (ii) Kandla Port | (b) It is a natural harbour and is the biggest in the country |
| (iii) Kolkata Port | (c) It is the deepest landlocked and protected port |
| (iv) Visakapatnam Port | (d) The first port developed soon after the independence |

- (i) - b (ii) - d (iii) - c (iv) - a
- (i) - c (ii) - d (iii) - a (iv) - b
- (i) - b (ii) - d (iii) - a (iv) - c
- (i) - d (ii) - b (iii) - c (iv) - a

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141 PU_2016_147_E

The vaccination DPT stands for:-

- Diphtheria, Polio, Tetanus
- Diphtheria, Pertussis, Tetanus
- Dengue, Polio, Typhoid
- Dengue, Pylaria, Typhoid

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208 PU_2016_147_E

Oxbow lakes are formed by:-

- River
- Wind
- Glacier

- Wind and river

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154 PU_2016_147_E

King Cobra is the only snake that makes its own nest. Why does it make its nest?

- It is a viviparous snake and needs a nest to give birth to its offspring.
- It is an oviparous snake and lays its eggs in the nest and guards the nest until they are hatched.
- It is a snake - eater and the nest helps attract other snakes
- It is a large, cold blooded animal and needs a nest to hibernate in the cold

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186 PU_2016_147_E

Who heads the Meeting of Committee of Secretaries?

- Cabinet Secretary
- Home Secretary
- Defence Secretary
- Prime Minister

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201 PU_2016_147_E

Anticline fold is:-

- Vertical
- Elongated
- Convex
- Circular

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188 PU_2016_147_E

The Indo-US Nuclear Agreement is related to:-

- Civil Nuclear Cooperation
- Military and Civil Nuclear Cooperation
- Capping of Indian Nuclear Programme
- None of the above

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170 PU_2016_147_E

In India, during the last decade the total cultivated land for which one of the following crops has remained more or less stagnant?

- Rice
- Sugarcane

- Oil Seeds
- Pulses

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127 PU_2016_147_E

An element reacts with oxygen to give a compound with a high melting point. This compound is also soluble in water. The element is likely to be:-

- silicon
- iron.
- calcium
- carbon

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114 PU_2016_147_E

The density of pure water will be:-

- minimum at 0 ° C
- maximum at 4 ° C
- minimum at 4 ° C
- maximum at 0 ° C

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110 PU_2016_147_E

Arrange in descending order of wave length (long to short)

- I. Infra - red
- II. Ultra violet
- III. Gamma rays
- IV. Micro waves:-

The correct order is:-

- III, II, I, I
- I, II, III, IV
- I, IV, II, III
- IV, I, II III

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133 PU_2016_147_E

Which of the following are natural polymers? Choose the correct answer from the options?

- (i) Glyptal
 - (ii) Silk
 - (iii) Protein
 - (iv) Bakelite
- (i) and (ii) are correct

- (iii) and (iv) are correct
- (ii) and (iii) are correct
- (i) and (iii) are correct

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140 PU_2016_147_E

From the point of view of evolution of living organisms, which one of the following is the correct sequence of evolution?

- Shark - Tortoise - Otter
- Shark - Otter - Tortoise
- Otter - Tortoise - Shark
- Tortoise - Shark - Otter

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102 PU_2016_147_E

Which of the following waves can propagate in vacuum:-

1. Radio waves
2. Light waves
3. X - rays
4. Ultrasonic waves

- 1, 2 and 3
- 1, 2, 3 and 4
- 1 and 4
- 2, 3 and 4

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171 PU_2016_147_E

When you travel in certain parts of India, you will notice red soil. What is the main reason for this colour?

- Accumulated humus
- Presence of ferric oxides
- Abundance of phosphates
- Abundance of magnesium

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202 PU_2016_147_E

Morains are formed by:-

- Water
- Air
- Wind
- Glacier

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126 PU_2016_147_E

Which of the following methods is suitable for preventing an iron frying pan from rusting?

- Applying grease
- Applying a coating of zinc
- Applying paint
- All of the above.

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115 PU_2016_147_E

When a vehicle passes, TV reception gets distorted due to?

- metal reflecting radio waves
- sparkplug creating electromagnetic disturbances
- use of electronic ignition system
- passing vehicle affecting TV components

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107 PU_2016_147_E

When a ship enters a sea from a river, it rises a little because:-

- sea water being denser than river water, exerts a greater upthrust on the ship
- density of sea water is less than that of river water
- sea has more water than river
- sea is deeper than river

49 of 100

187 PU_2016_147_E

Indian Administration is influenced by which of the following factors?

- Federalism
- Parliamentary Democracy
- Planning
- All of these

50 of 100

106 PU_2016_147_E

The density of sea water increase as:-

- depth increases and salinity decreases
- depth and salinity increase
- depth decreases and salinity increases
- depth and salinity decrease

51 of 100

167 PU_2016_147_E

Pedology is the study of:-

- Microbes
- Soil
- Worms
- Fungus

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103 PU_2016_147_E

Choose the scalar quantity from the following:-

- energy
- force
- momentum
- torque

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155 PU_2016_147_E

T8 cells are related with:-

- Helper and Suppressor T cells
- Cytotoxic T cells
- Helper T cells
- Suppressor T cell

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123 PU_2016_147_E

A solution turns red litmus blue, its pH is likely to be:-

- 5
- 4
- 1
- 10

55 of 100

163 PU_2016_147_E

India is situated in the Northern Hemisphere of the Earth between:-

- 8°4' and 37°6' Northern Latitude and 68°7' and 97°2' East Longitude
- 8°6' and 37°4' Northern Latitude and 67°8' and 96°2' East Longitude
- 8°6' and 39°4' Northern Latitude and 64°6' and 96°3' East Longitude
- 8°3' and 37°8' Northern Latitude and 66°8' and 97°2' East Longitude

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183 PU_2016_147_E

Why did Gandhiji abruptly stop the Non-cooperation Movement of 1922?

- Because of unanimous decision of Congress
- For the harsh attitude of British
- Because of violence broke at Chauri-Chaura
- Because of pact between Congress and British

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142 PU_2016_147_E

Match the following Biosphere reserves with their location. Select the correct answer from the options given

- | | |
|---------------------|--|
| (i) Nokrek | (a) Part of North and west Sikkim |
| (ii) Similipal | (b) Part of Siang and Debang Valley In Arunachal Pradesh |
| (iii) Dihang Dibang | (c) Part of Garo Hills (Meghalaya) |
| (iv) Kanchenjunga | (d) Part of Mayurbhanj district (Orissa) |

- (i) - a, (ii) - b, (iii) - d, (iv) - c
- (i) - c, (ii) - d, (iii) - b, (iv) - a
- (i) - d, (ii) - a, (iii) - b, (iv) - c
- (i) - c, (ii) - d, (iii) - a, (iv) - b

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130 PU_2016_147_E

In the salts mentioned below which of the following added to ice to get lower temperature than 0C?

- KOH
- NaCl
- NH₄Cl
- All the above

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184 PU_2016_147_E

Indian system is:-

- Federal with unitary bias
- Quasi-federal
- Unitary
- Federal

60 of 100

143 PU_2016_147_E

The poison of a cobra affects which of the following first?

- Heart
- Brain
- Central nervous system
- Blood vessels and its linking

61 of 100

245 PU_2016_147_M

Air is a/an:-

- Element
- Compound
- Mixture
- Electrolyte

62 of 100

234 PU_2016_147_M

A block of mass 0.50 kg is moving with a speed of 2.00 m/s on a smooth surface. It strikes another mass of 1.00 kg and then they move together as a single body. The energy loss during the collision is:-

- 0.16 J
- 0.67 J
- 0.34 J
- 1.00 J

63 of 100

244 PU_2016_147_M

German Silver is an alloy of:-

- Copper, Silver & Nickel
- Silver, Copper & Aluminium
- Silver, Zinc & Nickel
- Zinc, Copper & Nickel

64 of 100

230 PU_2016_147_M

A planet in a distant solar system is 10 times more heavier than the earth and its radius is 10 times smaller. Given that the escape velocity from the earth is 11 km/s, the escape velocity from the surface of the planet would be:-

- 0.11 km/s
- 11 km/s
- 1.1 km/s
- 110 km/s

65 of 100

232 PU_2016_147_M

Consider a uniform square plate of side 'a' and mass 'm'. The moment of inertia of this plate about an axis perpendicular to its plane and passing through one of its corners is:-

- $4/6 ma^2$
- $2/3 ma^2$
- $3/4 ma^2$
- $1/5 ma^2$

66 of 100

233 PU_2016_147_M

A body of mass $m = 3.513$ kg is moving along the x-axis with a speed of 5.00 m/s. The magnitude of its momentum is recorded as:-

- 17.56 kg m/s
- 17.6 kg m/s
- 17.565 kg m/s
- 17.57 kg m/s

67 of 100

222 PU_2016_147_M

Memory is made up of:-

- Large number of cells
- Set of wires
- Set of circuits
- All of these

68 of 100

224 PU_2016_147_M

EPROM can be used for:-

- Erasing the contents of ROM
- Erasing and reconstructing the contents of ROM
- Duplicating ROM
- Reconstructing the contents of ROM

69 of 100

221 PU_2016_147_M

The programs which are as permanent as hardware and stored in ROM is known as:-

- Hardware
- Software
- Firmware

- ROMware

70 of 100

241 PU_2016_147_M

The most important ore of Aluminium is:-

- Calcite
- Calamine
- Bauxite
- Galena

71 of 100

248 PU_2016_147_M

The charcoal used to decolourise raw sugar is:-

- Animal charcoal
- Cocoanut charcoal
- Wood charcoal
- Sugar charcoal

72 of 100

231 PU_2016_147_M

The dimension of magnetic field in M, L, T and C (Coulomb) is given as:-

- $MLT^{-1}C^{-1}$
- $MT^{-1}C^{-1}$
- MT^2C^{-2}
- $MT^{-2}C^{-1}$

73 of 100

246 PU_2016_147_M

Which of the following is the best conductor of Electricity?

- Sea water
- Ordinary water
- Distilled water
- Boiled water

74 of 100

240 PU_2016_147_M

Which of the following is the lightest metal?

- Mercury
- Lithium
- Silver

- Lead

75 of 100

249 PU_2016_147_M

The most abundant metal in the earth's crust is:-

- Zinc
- Aluminium
- Iron
- Copper

76 of 100

220 PU_2016_147_M

The memory location address are limited to:-

- 10000 to 9ffff(16)
- 00001 to 9ffff(16)
- 00000 to 9ffff(16)
- 00010 to 9ffff(16)

77 of 100

223 PU_2016_147_M

Primary memory stores:-

- Programs alone
- Data alone
- Results alone
- All of these

78 of 100

243 PU_2016_147_M

An alloy used in making heating elements for electric heating devices is:-

- German Silver
- Nichrome
- Solder
- Alloysteel

79 of 100

247 PU_2016_147_M

Balloons are filled with:-

- Nitrogen
- Oxygen
- Helium

- Argon

80 of 100

242 PU_2016_147_M

The element present in the largest amount in rocks and minerals is:-

- Aluminium
- Carbon
- Hydrogen
- Silicon

81 of 100

283 PU_2016_147_D

Given below are the names of four energy crops. Which one of them can be cultivated for ethanol?

- Pongania
- Jatropha
- Maize
- Sunflower

82 of 100

274 PU_2016_147_D

The most suitable metal for making permanent magnets is:-

- copper
- steel
- aluminum
- soft iron

83 of 100

280 PU_2016_147_D

Cadmium rods are used in a nuclear reactor for:-

- speeding up slow neutrons
- absorbing neutros
- slowing down the neutrons
- regulating the power level of the reactor

84 of 100

262 PU_2016_147_D

Stainless steel is an alloy of:-

- Iron and Manganese
- Iron, Chromium and Nickel
- Iron, Carbon and Nickel

- Iron, Chromium and Zinc

85 of 100

272 PU_2016_147_D

What is the source of electrical energy in an artificial satellite?

- a thermopile
- solar cells
- a Van de Graff generator
- a dynamo

86 of 100

263 PU_2016_147_D

Which of the following is not correctly matched?

- Plaster of Paris : Calcium sulphate
- Calomel : Mercurous Chloride
- Galena : Lead Sulphide
- Green vitriol : Copper sulphate

87 of 100

261 PU_2016_147_D

Which form of phosphorus is used in safety metals?

- Yellow Phosphorus
- Black Phosphorous
- Red Phosphorus
- White Phosphorus

88 of 100

282 PU_2016_147_D

Due to their extensive rice cultivation, some regions may be contributing to global warming. Which of the following reasons is true?

1. The anaerobic conditions associated with rice cultivation cause the emission of methane.
2. When nitrogen based fertilizers are used, nitrous oxide is emitted from the cultivated soil.

Which of the statements given above is/are correct?

- Neither 1 nor 2
- 1 only
- Both 1 and 2
- 2 only

89 of 100

291 PU_2016_147_D

There are only two known examples of cave paintings of the Gupta period in ancient India. One of these is paintings of Ajanta Caves. Where is the other surviving example of Gupta paintings:-

- Nasik caves
- Ellora Caves
- Lomas Rishi cave
- Bagh Caves

90 of 100

294 PU_2016_147_D

Consider the following statements:-

The satellite Oceansat - 2 launched by India helps in

1. Estimating the water vapour content in the atmosphere.
2. predicting the onset of monsoons.
3. monitoring the pollution of coastal waters.

Which of the statements given above is/are correct?

- 1 and 3 only
- 2 only
- 1 and 2 only
- 1,2 and 3

91 of 100

293 PU_2016_147_D

A new type of El Nino called El Nino Modoki appeared in the news, In this context, consider the following statements:-

1. Normal El Nino forms in the Central Pacific ocean whereas El Nino Modoki forms in Eastern Pacific ocean.
2. Normal El Nino results in diminished hurricanes in the Atlantic ocean but El Nino Modoki results in a greater number of hurricanes with greater frequency.

Which of the statements given above is/are correct?

- Neither 1 nor 2
- 1 only
- Both 1 and 2
- 2 only

92 of 100

260 PU_2016_147_D

Which of the following is used as a material for making protective windows in space probes?

- Tungsten
- Graphite
- Steel

- Diamond

93 of 100

270 PU_2016_147_D

The centre of the Newton's rings pattern is dark since:-

- the light undergoes a phase change π
- the glass plate and the plano - convex lens are in contact with each other at the centre
- the light undergoes a phase change 2π
- the light undergoes a phase change $\pi/2$

94 of 100

284 PU_2016_147_D

Consider the following pairs:-

	<i>Protected Area</i>	<i>Well Known for</i>
1.	Bhiterkanika, Orissa	— Salt Water Crocodile
2.	Desert National Park, Rajasthan	— Great Indian Bustard
3.	Eravikulam, Kerala	— Hootak Gibbon

Which of the pairs given above is/are correctly matched?

- 2 only
- 1 and 2 only
- 1, 2 and 3
- 1 only

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292 PU_2016_147_D

Which features of some species of blue - green algae helps promote them as bio -fertilizers?

- They induce the roots of the crop plants to absorb the soil nitrates in larger quantities.
- They convert atmospheric methane into ammonia which the crop plants can absorb readily.
- They induce the crop plants to produce the enzymes which help convert atmospheric
- They have the mechanism to convert atmospheric nitrogen into a form that the crop plants can absorb readily.

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273 PU_2016_147_D

A filament bulb has a rating of 220 V 40 W. The resistance (in ohms) of its filament is:-

- 1210
- 1110
- 1310
- 1410

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290 PU_2016_147_D

With reference to the mineral sources of India, consider the following pairs:-

	<u>Mineral</u>		<u>90% National Sources in</u>
1.	Copper	—	Jharkhand
2.	Nickel	—	Orissa
3.	Tungsten	—	Kerala

Which of the pairs given above is/are correctly matched?

- 1 and 3 only
- 1, 2 and 3
- 2 only
- 1 and 2 only

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281 PU_2016_147_D

If there were no Himalayan ranges, what would have been the most likely geographical impact on India:-

1. Much of the country would experience the cold waves from Siberia.
2. Indo - gangetic plain would be devoid of such extensive alluvial soils.
3. The pattern of monsoon would be different from what it is at present.

Which of the statements given above is/are correct?

- 1, 2 and 3
- 1 only
- 1 and 3 only
- 2 and 3 only

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264 PU_2016_147_D

Which of the following metals forms an amalgam with other metals?

- Tin
- Zinc
- Lead
- Mercury

100 of 100

271 PU_2016_147_D

Which planet has the maximum number of known satellites?

- Mars
- Uranus
- Saturn

○ Jupiter