

21 दिन का स्टडी प्लान

दिन - 2



1. निम्नलिखित में से कौन सा एक बायो डीजल पौधा (जैव डीजल पादप) है?

- A. जटरोफा
B. गुलाब
C. काली मिर्च
D. नोनी

Ans. A

Sol. **Jatropha**, the **wonder plant** produces seeds with an oil content of **37%**. The oil can be combusted as fuel without being refined. It burns with clear **smoke-free flame**, tested successfully as **fuel** for simple diesel engine.

2. 20 जनवरी 2020 को भारतीय स्टेट बैंक (SBI) का प्रबंध निदेशक (MD) किसे नियुक्त किया गया?

- A. देवेन्द्र चंद्र सिन्हा
B. चल्ला श्रीनिवासुलु सेट्टी
C. राहुल भटनागर
D. सत्येंद्र मोहन रावत

Ans. B

Sol.

• चल्ला श्रीनिवासुलु सेट्टी को 20 मार्च 2020 को भारतीय स्टेट बैंक (एसबीआई) का प्रबंध निदेशक (एमडी) नियुक्त किया गया है।

- उन्हें तीन साल की अवधि के लिए नियुक्त किया गया है।
- वह वर्तमान में एसबीआई के डिप्टी मैनेजिंग डायरेक्टर (DMD) के रूप में सेवारत हैं।
- 1988 में, वह एसबीआई के अहमदाबाद सर्कल में परिवीक्षाधीन अधिकारी के रूप में शामिल हुए थे।

3. नेपोलियन बोनापार्ट _____ सैनिक और राजनीतिक नेता था?

- A. अमेरिकन
B. ब्रिटिश
C. जर्मन
D. फ्रेंच

Ans. D

Sol. **Napoleon Bonaparte** was a **French** military and political leader who rose to prominence during the **French Revolution** and led several successful campaigns during the Revolutionary Wars.

4. किस भारतीय समकालीन कलाकार को सातवें जोन मिरो पुरस्कार 2019 से सम्मानित किया गया?

- A. नलिनी मालानी
B. अतुल डोडिया
C. अर्पिता सिंह
D. विवान सुंदरम

Ans. A

Sol.

- **समकालीन कलाकार नलिनी मालानी को जोन मिरो पुरस्कार के सातवें संस्करण से सम्मानित किया गया।**
- जोन मिरो पुरस्कार एक अंतरराष्ट्रीय पुरस्कार है जिसमें विजेता को **70,000-यूरो (78,000 डॉलर)** नकद पुरस्कार के साथ पुरस्कार प्रदान किया जाता है।
- इसे दुनिया के सबसे प्रतिष्ठित कला पुरस्कारों में से एक माना जाता है।
- जोन मिरो पुरस्कार जोन मिरो फाउंडेशन और ला कैक्सो फाउंडेशन द्वारा प्रदान किया जाता है।

5. मनुष्य में गुर्दे ____ प्रणाली का एक हिस्सा हैं।

- A. परिसंचरण
B. श्वसन
C. मलत्याग
D. परिवहन

Ans. C

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Sol.

- उत्सर्जन वह प्रक्रिया है जिसके द्वारा चयापचय और अन्य गैर-उपयोगी सामग्रियों के अपशिष्ट उत्पादों को एक जीव से समाप्त कर दिया जाता है।
- कशेरुक में यह मुख्य रूप से फेफड़े, गुर्दे और त्वचा द्वारा किया जाता है।

6. किस देश ने वन्य जीवों (सीएमएस) के प्रवासी प्रजाति के संरक्षण पर सम्मेलन के 13वें सम्मेलन की मेजबानी की?

- A. भारत
B. स्विट्जरलैंड
C. जापान
D. दक्षिण अफ्रीका

Ans. A

Sol.

- भारत ने वन्य जीवों के प्रवासी प्रजाति (सीएमएस) के संरक्षण पर सम्मेलन के 13वें सम्मेलन (सीओपी) की मेजबानी की।
- यह सम्मेलन 17 से 22 फरवरी 2020 तक गुजरात के गांधीनगर में आयोजित किया गया था।
- सीएमएस सीओपी13 (CMS COP13) का विषय "प्रवासी प्रजातियां ग्रह को जोड़ती हैं और हम उनका घर में स्वागत करते हैं" था।
- इस सम्मेलन का उद्घाटन 17 फरवरी, 2020 को प्रधानमंत्री नरेंद्र मोदी द्वारा किया गया था।

7. नई आर्थिक नीति (1991) के दौरान भारत के वित्त मंत्री कौन थे?

- A. मनमोहन सिंह
B. उमा कपिला
C. प्रणव मुखर्जी
D. जसवंत सिंह

Ans. A

Sol.

Manmohan Singh was the Finance Minister of India during the New Economic Policy (1991). He was also the Prime Minister of India during 2004 to 2014.

8. अजातशत्रु _____ का बेटा था।

- A. बिम्बिसार
B. उदयिन
C. शिशुनाग
D. उपरोक्त में से कोई नहीं

Ans. A

Sol.

- Ajatashatru was a king of the Haryanka dynasty of Magadha in North India. He was the son of King **Bimbisara** and was a contemporary of both Mahavira and Gautama Buddha.
- He forcefully took over the kingdom of Magadha from his father and imprisoned him.

9. एमओयू, प्रमुख घोषणाओं आदि पर हस्ताक्षर करने हेतु 7 फरवरी को डिफेंस एक्सपो, 2020 में आयोजित समारोह का नाम क्या है?

- A. साथ
B. बंधन
C. हथियार
D. कुटुम्ब

Ans. B

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Sol.

7 फरवरी, 2020 को बंधन समारोह का आयोजन किया गया था।

- समारोह का उद्देश्य एमओयू पर हस्ताक्षर करना, महत्वपूर्ण घोषणा करना, उत्पादों को लॉन्च करना आदि था।
- इस समारोह में DRDO ने DRDO विकसित प्रौद्योगिकियों पर 17 उद्योगों को प्रौद्योगिकी के हस्तांतरण हेतु 15 लाइसेंस सौंपे।
- इसकी अध्यक्षता रक्षा मंत्री राजनाथ सिंह ने की।
- इस डेफएक्स में, DRDO ने रोसोबोरोनएक्सपोर्ट रूस के साथ प्रौद्योगिकी विकास अनुबंध पर हस्ताक्षर किए।

10. यूरोपीय यूनियन की आम मुद्रा को क्या नाम दिया गया है?

- A. रुपया B. रूबल
C. फ्रैंक D. यूरो

Ans. D

Sol.

- The currency, Euro, is officially used by the institutions of the European Union and four other **European countries**.
- The European Union is a political and economic union of 27 member states that are located primarily in Europe. Its members have a combined area of 4,233,255.3 km² and an estimated total population of about 447 million.

11.

Read the following passage and fill in each blank with words chosen from options given.

In traditional Chinese culture, qi or chi is believed to be a vital force forming part of any living _____ (###Q1###). There is widespread belief in the reality of qi, with believers describing it as a vital energy whose flow must be _____ (###Q2###) for health. Qi is a non-scientific, _____ (###Q3###) concept, which has never been directly observed, and is unrelated to the concept of energy used in science. Qi is the central underlying _____ (###Q4###) in Chinese traditional medicine and in Chinese martial arts. Qi is a _____ (###Q5###) word. The unabridged Chinese dictionary lists 23 similar meanings for it.

Select the most appropriate option to fill in blank No.1

- A. syndicate B. organization
C. quintessence D. entity

Ans. D

Sol. The passage implies that Qi is vital for any living organism. 'Syndicate' is used to refer to a group of individuals or organizations combined to promote a common interest. It is usually used in the context of 'institutions' than in 'living organisms'. 'Organization' is an organized group of people with a particular purpose, such as a business or government department. It can be eliminated on a similar line of reasoning. 'Quintessence' is the most perfect or typical example of a quality or class. It is the 'best of the batch'. Hence, it also does not cater to the requirement of representing generic living organisms. 'Entity' is used to refer to the existence of a thing or an organism. When 'entity' is preceded with 'living', it refers to every living organism, as required by the passage. Therefore, option D is the required answer.



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12. Select the most appropriate option to fill in blank No.2

- A. imperative
B. balanced
C. impeded
D. sundered

Ans. B

Sol. The passage talks about the relation between the energy flow and health of the organism. 'Imperative' is used to refer to something which is of vital importance; crucial. The word does not structurally fits in the sentence. It should have been 'is imperative', instead of 'must be imperative'. 'Impede' is to delay or prevent (someone or something) by obstructing them. This goes against the flow of the sentence. The passage aims to imply the importance of the energy flow (and not undermine it). With similar reasoning, 'Sunder', which is used to imply that something has split apart, can also be eliminated. 'Balance' is keeping or showing a balance; in good proportions. Using it in the passage would imply that in order to be healthy, the flow of energy must be balanced, which is what the passage hints at. Therefore, option B is the correct answer.

13. Select the most appropriate option to fill in blank No.3

- A. consequential
B. authenticated
C. unverified
D. unspecified

Ans. C

Sol. The passage mentions the lack of scientific base of the concept of 'Qi'. It mentions the absence of scientific background. 'Authenticate' is to prove or show something to be true, genuine, or valid. It is completely against the meaning implied by the passage, and hence can be eliminated. 'Consequential' is something which follows as a result or effect. As the passage mentions that the concept is not scientific, it implies that there is no causation link established between the concept and the actual results. 'Unspecified' is something which is not stated clearly or exactly. It is not apt to use 'unspecified' in the blank, as it would imply that the concept is itself unknown. What the passage rather implies, is that the concept is specified, but not backed by any observation. 'Unverified' is something which is not having been proven to be true, accurate, or justified. It fits the blank, as using it in the blank would support the passage's claim that the theory is not backed by science. Therefore, option C is the correct answer.

14. Select the most appropriate option to fill in blank No.4

- A. theorem
B. principle
C. principal
D. deduction

Ans. B

Sol. The passage mentions the importance of the concept of "Qi" in Chinese medicine and martial arts. 'Deduction' is the inference of particular instances by reference to a general law or principle. As the passage has already mentioned that the concept has no scientific base, 'deduction' can be eliminated. On similar reasoning, 'theorem', which is a general proposition not self-evident but proved by a chain of reasoning, can be eliminated as well. 'Principal' is something which is first in order of importance. It does not fit structurally in the blank. It could've replaced 'central underlying', but it does not fit in the blank. 'Principle' is a fundamental source or basis of something. Using it in the blank would imply that the concept of 'Qi' is starting point over which medicine and martial arts are based, as is hinted by the passage. Therefore, option B is the correct answer.

15. Select the most appropriate option to fill in blank No.5

- A. homonymy
B. ambiguous
C. monosemous
D. polysemous

Ans. D



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Sol. The passage talks about the fact that there are various definitions of the word 'Qi'. 'Ambiguous' is something which is not having one obvious meaning. It could've fit the blank, but as it begins with a vowel, and the blank is preceded with the article 'a', hence, 'ambiguous' can be eliminated. 'Monosemous' is used to describe words that have only one meaning. It is completely opposite to what the passage hints at. Amongst the remaining two options, 'Homonymy' are words which sound alike or are spelled alike, but have different meanings, while 'Polysemous' is the capacity for a word, phrase, or symbol to have multiple meanings, which are usually related. In the case of 'Homonymy', it is an accidental similarity as two distinct meanings arise from the same word, while 'polysemy' is not accidental. As the passage mention that the meanings are related to one another, therefore option D is the required answer.

16. Read the following passage and fill in each blank with words chosen from options given.

An ocean current is a seasonal directed movement of seawater generated by forces acting upon it, like wind, the Coriolis effect, _____ (Q1) waves on the surface, temperature differences, while tides are caused by the gravitational pull of the Sun and Moon. Depth _____ (Q2), shoreline configurations, and interactions with other currents influence a current's direction and strength. Ocean currents are _____ (Q3) horizontal water movements, and because they flow for great distances, they create the global conveyor belt which plays a _____ (Q4) role in determining the climate of many regions. For example, warm currents travelling along temperate coasts increase the _____ (Q5) of the area.

Select the most appropriate option to fill in blank No.1

- A. tidal
- B. underwater
- C. breaking
- D. electromagnetic

Ans. C

Sol. The passage talks about the causes of ocean currents. As the clause mentions that the waves are on the surface, 'underground' can be eliminated. Further, the passage mentions that 'tidal waves are caused by gravitational pull of the Sun and Moon'. The connector used to join the two phenomenon is 'while', which is used to express a mild contrast. Therefore, 'tidal' can be eliminated as well. 'Electromagnetic' waves refer to the waves of the electromagnetic field, carrying electromagnetic radiant energy. It is not used in the context of 'ocean waves'. 'Breaking' waves are waves whose amplitude reaches a critical level at which simple physical models that describe wave dynamics often become invalid, and waves tend to acquire huge kinetic energies. It is phenomenon majorly occurring on ocean surface and can hence affect ocean currents. Therefore, option C is the correct answer.

17. Select the most appropriate option to fill in blank No.2

- A. contours
- B. silhouette
- C. acreage
- D. delimit

Ans. A

Sol. The passage talks about the factors which influences an ocean current's strength and direction. 'Silhouette' is the image of a person, animal, object or scene represented as a solid shape of a single color, usually black. It is seldom used in the context of ocean and ocean waves. 'Acreage' is an area of land, typically when used for agricultural purposes. It can be eliminated too. 'Contour' is an outline representing the shape or form of something. 'Depth contour' would, hence imply, the outline of seabed or the variations of the ocean depth. 'Delimit' is to determine the limits or boundaries of something. Although both mean essentially the same thing, contour is used as a noun, while delimit is a verb, As per the context of the blank, a noun is required to fill the blank. Hence, option A is the correct answer.



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18. Select the most appropriate option to fill in blank No.3

- A. inheritedly
C. acumen
B. tropically
D. primarily

Ans. D

Sol. The passage talks about the relation between ocean current and horizontal water movements. 'Acumen' is the ability to make good judgements and take quick decisions. It is out of context, and hence can be eliminated. 'Tropical' is used to refer to the region close to the equator. As the passage has already mentioned that the currents are global, 'tropical' could be eliminated as well. 'Inherited' is to derive qualities or characteristics from one's parents or ancestors. Using it in the passage would again be out of context, inheritance is a field unrelated to ocean currents. Further, if a connection even exists, the passage does not hints at any. Therefore, it can be eliminated. 'Primarily' means something to be essentially be associated with something else. Using it in the passage would mean that 'Ocean currents' mainly consist of horizontal waves, which is what the passage hints at too. Hence, option D is the correct answer.

19. Select the most appropriate option to fill in blank No.4

- A. trifling
C. picayune
B. dominant
D. indispensable

Ans. B

Sol. The passage talks about the ocean currents and how they influence the climate of the regions that they pass through. The fact that it finds its mention in the passage, implies that the ocean currents are consequential in determining the climate of the regions. 'Picayune' is something of little value or significance, and it can hence be eliminated. The passage further mentions the currents impact on the temperate regions. As 'Trifling' is referred to something which is unimportant or trivial, it can be eliminated using the above mentioned reasoning. Amongst the remaining two options, 'Indispensable' is something which is absolutely necessary, while 'Dominant' is something having power and influence over other things. Both imply that currents have a major role in determining the climate, which is what the passage hints at too. As 'indispensable' starts from a vowel, it must be preceded with the article 'an'. As the blank is preceded with 'a', 'dominant' is the required answer. Therefore, option B is the correct answer.

20. Select the most appropriate option to fill in blank No.5

- A. weather
C. temperature
B. climate
D. clime

Ans. C

Sol. The passage talks about how the currents affect the region they flow through. It is evident from the passage that the currents play an important role in influencing the climate those regions. 'Weather' is the state of the atmosphere at a particular place and time, while 'climate' is the weather conditions prevailing in an area in general or over a long period. Both these are qualitative in nature. They are used to describe the state of atmosphere, but no numerical value can be ascertained with them. It is obvious from the structure of the sentence that a quantitative measure would be used to fill the blank. 'Clime' is a region considered with reference to its climate. As it is used to refer to an area instead of the climate of the area, it can be eliminated as well. 'Temperature' is the degree or intensity of heat present in a substance or its surroundings. As temperature is a quantitative measure, 'increase in temperature' makes perfect logical and contextual sense. Hence, option C is the correct answer.



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21. दो कथन दिए गए हैं, उनके बाद तीन निष्कर्ष I, II और III दिए गए हैं। कथनों को सत्य मानते हुए, भले ही वे आम तौर पर ज्ञात तथ्यों से भिन्न प्रतीत होते हों, निर्णय कीजिये कि कौन सा/से निष्कर्ष कथनों का तार्किक रूप से अनुसरण करता है/करते हैं।

कथन:

कुछ जानवर स्तनधारी हैं।

कोई स्तनधारी शाकाहारी नहीं है।

निष्कर्ष:

I. कोई शाकाहारी स्तनधारी नहीं है।

II. कुछ स्तनधारी जानवर हैं।

III. कोई भी जानवर शाकाहारी नहीं है।

A. केवल निष्कर्ष I और II अनुसरण करते हैं।

B. केवल निष्कर्ष II और III अनुसरण करते हैं।

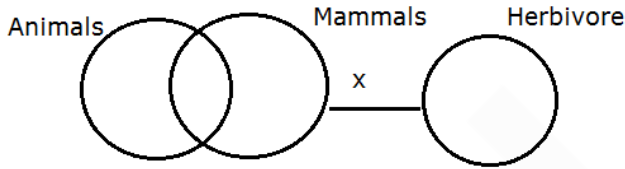
C. कोई भी निष्कर्ष अनुसरण नहीं करता है।

D. केवल निष्कर्ष I और III अनुसरण करते हैं।

Ans. A

Sol.

The least possible Venn-diagram is-



Conclusions:

I. No herbivore is mammal - (It follows as its obvious from the above diagram.)

II. Some mammals are animals - (It also follows as its obvious from the above diagram.)

III. No animal is herbivore - (It does not follows as some parts of animal is mammal and no mammal is herbivore.)

So, only conclusions I and II follow.

Hence, option (A) is the correct response.

22. निम्नलिखित कथनों को सत्य मानते हुए भले ही वे सामान्यतः ज्ञात तथ्यों से भिन्न प्रतीत होते हों, यह निर्णय लें कि कौन सा निष्कर्ष दिए गए कथनों का तार्किक रूप से अनुसरण करता है।

कथन:

सभी सड़कें वाहन हैं।

कुछ वाहन पेड़ हैं।

निष्कर्ष:

I. कुछ पेड़ सड़कें हैं।

II. सभी वाहन पेड़ हैं।

A. दोनों निष्कर्ष I और II अनुसरण करते हैं

B. केवल निष्कर्ष I अनुसरण करता है

C. न तो निष्कर्ष I न ही निष्कर्ष II अनुसरण करता है

D. केवल निष्कर्ष II अनुसरण करता है

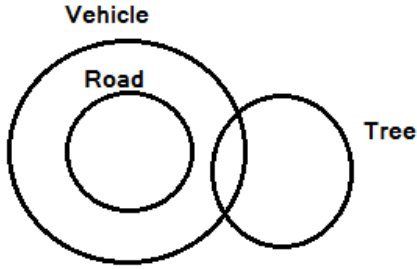
Ans. C



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Sol.

The least possible Venn-diagram is-



Conclusions:

- I. Some trees are roads. (It does not follow as it shows surety.)
 - II. All vehicle are trees. (It also does not follow as it shows surety.)
- So, Neither conclusion I nor conclusion II follow.
Hence, option(C) is the correct response.

23. नीचे दिए गए प्रश्न में कुछ कथन और उनके बाद उन कथनों पर आधारित कुछ निष्कर्ष दिए गए हैं, हालांकि उनमें सामान्य ज्ञात तथ्यों से भिन्नता हो सकती है। सभी निष्कर्ष पढ़ें और फिर निर्धारित करें कि दिए गए कौन से निष्कर्ष, दिए गए कथनों के आधार पर युक्तिसंगत हैं।

कथन:

सभी शिक्षक चित्रकार हैं।
कुछ चित्रकार अमीर हैं।

निष्कर्ष:

- I. सभी चित्रकार शिक्षक हैं।
- II. कुछ अमीर चित्रकार नहीं हैं।
- A. न तो निष्कर्ष I न ही निष्कर्ष II अनुसरण करता है
- B. केवल निष्कर्ष I अनुसरण करता है
- C. या तो निष्कर्ष I या II अनुसरण करता है
- D. केवल निष्कर्ष II अनुसरण करता है

Ans. A

Sol.

The least possible Venn diagram is:



Conclusions:

- I. All painters are teachers - (false) it is not a definite case.
 - II. Some rich are not painters - (false) it is not a definite case.
- So, neither I nor II follows.
Hence, the correct response is option (A).

24. नीचे दिए गए प्रश्न में कुछ कथन और उनके बाद उन कथनों पर आधारित कुछ निष्कर्ष दिए गए हैं, हालांकि उनमें सामान्य ज्ञात तथ्यों से भिन्नता हो सकती है। सभी निष्कर्ष पढ़ें और फिर निर्धारित करें कि दिए गए कौन से निष्कर्ष, दिए गए कथनों के आधार पर युक्तिसंगत हैं।



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कथन:

कुछ फल सब्जियाँ हैं।
सभी सब्जियाँ पौधे हैं।

निष्कर्ष:

I. कुछ पौधे सब्जियाँ हैं।

II. कुछ फल पौधे हैं।

A. केवल निष्कर्ष II तर्कसंगत है

B. I और II दोनों तर्कसंगत हैं

C. केवल निष्कर्ष I तर्कसंगत है

D. न तो I न ही II तर्कसंगत है

Ans. B

Sol.

The least possible Venn diagram is:



Conclusions:

I. Some plants are vegetables - True, it is a definite case.

II. Some fruits are plants - True, it is a definite case.

Hence, option (B) is correct.

25. तीन कथनों के बाद चार निष्कर्ष I, II, III और IV दिए गए हैं, कथनों को सत्य मानते हुए, भले ही वे सामान्यतः ज्ञात तथ्यों के साथ भिन्नता रखते हों, यह निर्णय लें कि कौन सा निष्कर्ष कथनों का तार्किक रूप से अनुसरण करता है।

कथन:

कुछ रिंग फोन हैं

सभी फोन लैपटॉप हैं

कुछ लैपटॉप स्टेशन हैं

निष्कर्ष:

i. कुछ स्टेशन रिंग हैं

ii. कुछ फोन स्टेशन हैं

iii. कुछ लैपटॉप रिंग हैं

iv. सभी रिंग के स्टेशन होने की संभावना है

A. कोई अनुसरण नहीं करता है

B. केवल निष्कर्ष III एवं IV अनुसरण करते हैं

C. केवल निष्कर्ष I एवं III अनुसरण करते हैं

D. केवल निष्कर्ष II और या तो निष्कर्ष I एवं IV अनुसरण करता है



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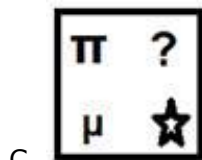
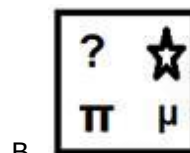
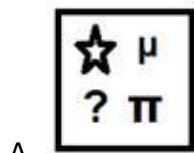
Ans. B
Sol.



Conclusions:

- i. Some stations are rings. – (FALSE) as there is no relation between them.
 - ii. Some phones are stations. –(false) it is a possibility case not a definite one
 - iii. Some laptops are rings – (true) it is clearly shown in the diagram.
 - iv. All rings are station is a possibility.- (True) as there is no definite relation between rings and stations so it might be possible.
- Hence, option B is the correct response.

26. दी गई आकृतियों में से विषम आकृति की पहचान करें।



Ans. D
Sol.

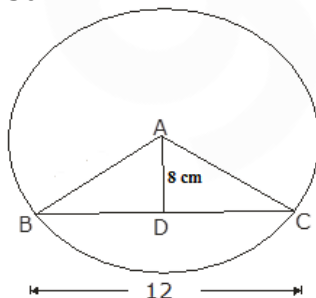
विकल्प A, B और C में, प्रतीक दक्षिणावर्त दिशा में चल रहे हैं। प्रतीकों का क्रम '☆', 'μ', 'pie' और '?' के क्रम में है।

अतः, विकल्प D सही उत्तर है।

27. किसी वृत्त के केन्द्र से 12 से.मी. लम्बे जीवा तक एक 8 से.मी.लम्बा लम्ब खींचा जाता है | वृत्त का व्यास ज्ञात कीजिए?

- A. 10 से.मी.
- B. 12 से.मी.
- C. 16 से.मी.
- D. 20 से.मी.

Ans. D
Sol.



31. ΔABC , B पर समकोण है | यदि $m \angle A = 60^\circ$ है, तो $1/\sqrt{3} \operatorname{Cosec} C$ का मान क्या है?

- A. $2/\sqrt{3}$
- B. $2/3$
- C. $\sqrt{2}/\sqrt{3}$
- D. $\sqrt{2}/3$

Ans. A

Sol. Triangle ABC is a right angle

$$\angle B = 90^\circ$$

$$\angle A = 60^\circ$$

$$\angle C = 180 - 90 - 60 = 30^\circ$$

$$\frac{1}{\sqrt{3}} \operatorname{cosec} 30^\circ = \frac{1}{\sqrt{3}} \times 2 = \frac{2}{\sqrt{3}}$$

32. A, B से 50% अधिक कार्यकुशल है। साथ कार्य करते हुए वे किसी कार्य को 15 घंटों में समाप्त करते हैं। यदि B अकेले कार्य करे, तो उसे उसी कार्य को पूरा करने में कितना समय लगेगा?

- A. 24 घंटे
- B. 36 घंटे
- C. $37 \frac{1}{2}$ घंटे
- D. $32 \frac{1}{4}$ घंटे

Ans. C

Sol.

कार्य क्षमता का अनुपात

$$A : B = 150 : 100 = 3 : 2$$

लिए गए समय का अनुपात

$$A : B = 2 : 3$$

B की कार्यक्षमता

$$= \frac{1}{\frac{1}{15} + \frac{1}{3}} \times \frac{1}{3} = \frac{2}{75}$$

B द्वारा लिया गया समय

$$= \frac{75}{2} \text{ hrs} = 37 \frac{1}{2} \text{ hrs}$$

33. दो साइकिल चालक एक ही समय पर एक-दूसरे की ओर चलना शुरू करते हैं और 3 घंटे 20 मिनट बाद एक-दूसरे से मिलते हैं। धीमी गति वाली साइकिल को पूरी दूरी तय करने में कितना समय लगेगा यदि पहला चालक दूसरे के गंतव्य पर, दूसरे चालक के पहले के गंतव्य पर पहुँचने के 5 घंटे बाद पहुँचता है?

- A. 5
- B. 8
- C. 9
- D. 7

Ans. A

Sol.

Since the two cyclist meet after = 200 minutes they cover 0.5% of the distance per minutes and 30% per hour.

This condition is satisfied only if the slower cyclist takes 10 hour. and faster cycle takes 5 hours

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34. यदि A और C की आयु को जोड़ा जाता है तो ये B की आयु से दोगुनी हो जाती है, और कुल 59 हो जाता है। यदि B और C की आयु को जोड़ा जाता है तो ये A की आयु की तीन गुना हो जाती है, और कुल 68 हो जाता है और यदि A की आयु को B की आयु में तीन बार जोड़ा जाता है तथा C की तीन बार की आयु का कुल 108 हो जाता है। A की आयु क्या है?

A. 18 वर्ष

B. 15 वर्ष

C. 12 वर्ष

D. 20 वर्ष

Ans. C

Sol. $A+C+2B=59$, $3A+B+C=68$ and $A+3B+3C=108$

$B+C=68-3A$ and $A+3(B+C)=108$

$A+3(68-3A)=108$

$8A=204-108$

$A=96/8=12$ years



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