

General Instructions

- (i) This booklet contains 120 questions, each provided with a complete, step-by-step solution.
- (ii) It comprises 120 single-correct multiple-choice questions.
- (iii) Attempt each question on your own before reviewing the given solution.

1. Which of the following statements is false?

- (A) Mutual understanding is a type of social capital.
- (B) Knowledge about how to operate a machine is intangible capital.
- (C) Physical capital is synonymous with natural capital.
- (D) Education is an investment in human capital.

Correct Answer: (C) Physical capital is synonymous with natural capital.

SOLUTION:

Capital in economics is grouped into four broad types: physical capital (machines, tools, buildings), natural capital (land, water, minerals), human capital (skills and knowledge) and social capital (trust, networks, mutual understanding). Checking each statement against this grouping: mutual understanding fits social capital, so statement 1 holds. Machine-operating know-how fits human capital, and it is intangible since it cannot be touched, so statement 2 holds. Education builds skills, which is the definition of human capital, so statement 4 holds. Physical capital and natural capital are two different groups in

this classification, one man-made and one naturally occurring, so calling them synonymous is wrong.

Statement 3 is false

Quick Tip: Compare what physical capital and natural capital each mean.

• • •

2. Which of the following is an example of an inventory?

- (A) A freezer full of ice cream to be served at a party next week.
- (B) Taking out a loan from a bank.
- (C) A shopping cart.
- (D) A house that is for sale by the owner.

Correct Answer: (A) A freezer full of ice cream to be served at a party next week.

SOLUTION:

A quick way to check this question is to ask, for each option, is this a stock of goods waiting to be used or sold. A loan is money borrowed, which changes financial capital, not physical stock, so it is ruled out. A shopping cart is a tool used to carry goods while shopping, so it does not itself count as inventory. A house being sold by its owner is a single asset changing hands, not goods held in stock by a firm for its regular business. The ice cream stored in a freezer, meant to be served later at a party, is exactly stock kept aside for future use, which is the core idea of inventory.

Option 1: the freezer full of ice cream

Quick Tip: Ask which option is a stock of goods kept for later use.

• • •

3. According to Adam Smith, productivity gains could be brought about through .

- (A) Factor-price equalization.
- (B) Labor-intensive production.
- (C) Protectionism
- (D) Technological innovation

Correct Answer: (D) Technological innovation

SOLUTION:

Adam Smith built his productivity argument around the division of labor: when a task is broken into simple repeated steps, workers naturally look for faster ways to do their step, which leads to new tools and machinery. This process of workers and firms improving their methods and equipment is what economists call technological innovation. Ruling out the other choices helps confirm this: factor-price equalization comes from later international trade theory, protectionism was something Smith argued against since he supported free trade, and labor-intensive production by itself just uses more workers without necessarily raising output per worker.

Technological innovation

Quick Tip: Recall what Adam Smith said division of labor leads workers to invent.

• • •

4. The supply curve for an artificially scarce good is .

- (A) A vertical line at a price of zero
- (B) A vertical line at the market price
- (C) A horizontal line at a price of zero
- (D) A horizontal line at the market price

Correct Answer: (C) A horizontal line at a price of zero

SOLUTION:

Think about what makes a good artificially scarce. Examples are things like a satellite TV channel or an uncongested toll road: once the broadcast or road is built, adding one more viewer or driver costs the provider almost nothing. So the true marginal cost of production, which is what a supply curve tracks, stays at zero no matter how many units are supplied. The scarcity here is not due to production cost but due to a company choosing to exclude non-paying users with a price, which is why it is called artificial. A supply curve that shows marginal cost equal to zero at every quantity is drawn as a flat line sitting on the zero-price axis.

A horizontal line at a price of zero

Quick Tip: Think about the marginal cost of adding one more user to a non-rival good.

• • •

5. Which of the following would not be considered an opportunity cost of paid employment?

- (A) Education
- (B) Self-employment
- (C) Leisure
- (D) Transportation costs of commuting to work

Correct Answer: (D) Transportation costs of commuting to work

SOLUTION:

Opportunity cost and explicit cost are two different ideas that this question is testing. Explicit costs are actual cash payments made because of a decision, while opportunity cost is what you give up by not choosing an alternative. Education, self-employment and leisure are all things a person could have done instead of taking a paid job, so foregoing them counts as opportunity cost. Commuting expense, however, is money spent as a direct result of going to work, similar to any other job-related expense, so it belongs to explicit cost rather than opportunity cost.

Transportation costs of commuting to work

Quick Tip: Separate what you give up from what you actually pay out of pocket.

• • •

6. The causal organism of downy mildew of grapevine is .

- (A) *Plasmopara viticola*
- (B) *Uncinula necator*
- (C) *Phytophthora infestans*
- (D) *Pythium aphanidermatum*

Correct Answer: (A) *Plasmopara viticola*

SOLUTION:

A simple way to answer this is to match each pathogen to the disease it is best known for. *Uncinula necator* is the classic powdery mildew fungus of grapevine, which forms a white powdery coating, different from downy mildew. *Phytophthora infestans* is remembered for the Irish potato famine caused by late blight, and *Pythium aphanidermatum* is a common soil pathogen causing damping off of young seedlings. None of these three match grapevine downy mildew. The oomycete *Plasmopara viticola* specifically infects grapevine leaves and produces the yellowish oily spots with white downy growth underneath that define downy mildew.

Plasmopara viticola

Quick Tip: Downy mildew pathogens are oomycetes in the genus *Plasmopara*.

• • •

7. Match Chemicals with their Use.

Chemical	Used as
(A) Thiophanate-methyl	(I) Weedicide
(B) Atrazine	(II) Insecticide
(C) Fenamiphos	(III) Fungicide
(D) Afidopyropen	(IV) Nematicide

Choose the correct answer from the options given below:

- (A) (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
(B) (A) - (III), (B) - (I), (C) - (IV), (D) - (II)
(C) (A) - (IV), (B) - (II), (C) - (III), (D) - (I)
(D) (A) - (III), (B) - (II), (C) - (I), (D) - (IV)

Correct Answer: (B) (A) - (III), (B) - (I), (C) - (IV), (D) - (II)

SOLUTION:

Each chemical here belongs to a distinct pesticide group, so the fastest method is to recall the group each one is classified under.

Thiophanate-methyl belongs to the benzimidazole group of fungicides, used to control fungal infections in crops, which links it to Fungicide. Atrazine is a well known triazine-group herbicide sprayed to control weeds, linking it to Weedicide. Fenamiphos is an organophosphate compound applied to soil to control nematodes, linking it to Nematicide. Afidopyropen is a newer pyropene-class chemical developed to control aphids and other sucking insects, linking it to Insecticide. Putting these four links together gives (A)-(III), (B)-(I), (C)-(IV), (D)-(II).

Option 2

Quick Tip: Match each chemical to the pest group it controls: fungus, weed, nematode, or insect.

• • •

8. In banana:

Statement (A): Bunch feeding is a simple and low-cost method.

Statement (B): It is the direct way to supply nutrients to the bunch.

Statement (C): Only micronutrients can be given through this method.

Choose the correct answer from the options given below.

- (A) All (A), (B) and (C) statements are correct
- (B) Statements (A) and (C) are correct but (B) is incorrect
- (C) Statements (A) and (B) are correct but (C) is incorrect
- (D) Statements (C) is correct but (A) and (B) are incorrect

Correct Answer: (C) Statements (A) and (B) are correct but (C) is incorrect

SOLUTION:

Bunch feeding is a well known post-shooting nutrient management practice in banana. It is valued mainly because it is cheap and easy to carry out, confirming statement (A), and because the solution is placed directly on the bunch it reaches the developing fingers faster than nutrients applied at the base of the plant, confirming statement (B). The claim in statement (C) fails because bunch feeding solutions in practice usually contain macronutrients like potassium nitrate or urea, sometimes combined with micronutrients, to boost bunch weight and fruit quality, so the method is not restricted to micronutrients alone.

Statements (A) and (B) are correct, (C) is incorrect

Quick Tip: Bunch feeding is usually done with major nutrients, not micronutrients alone.

9. The softwood grafting

Statement (I): Is done with mature, procured scion on the emerging soft, coppery-red shoot of the rootstock, which is 60-70 days old.

Statement (II): Is used for raising desired varieties of mango, sapota, tamarind and cashew.

In light of the above statements, choose the most appropriate answer from the options given below.

- (A) Both Statement (I) and Statement (II) are correct.
- (B) Both Statement (I) and Statement (II) are incorrect.
- (C) Statement (I) is correct but Statement (II) is incorrect.
- (D) Statement (I) is incorrect but Statement (II) is correct.

Correct Answer: (A) Both Statement (I) and Statement (II) are correct.

SOLUTION:

Softwood grafting works because the rootstock shoot is still soft and actively growing, so its cambium tissue joins easily with the scion. Nurseries pick a shoot that is 60 to 70 days old, soft in texture and coppery red in colour for this reason, which matches Statement (I). This grafting method was developed for mango but has since been adopted for other fruit crops including sapota, tamarind and cashew to multiply superior varieties true to type, which matches Statement (II). Since neither statement contains an error,

Both Statement (I) and Statement (II) are correct

Quick Tip: Recall the age and colour of rootstock shoot used, and which fruit crops use softwood grafting.

• • •

10. Arrange the following spores of black rust fungi in their I to IV spore stages.

- (A) Basidiospore
- (B) Uredospore
- (C) Aeciospore
- (D) Teliospore

Choose the correct answer from the options given below:

- (A) (A), (B), (C), (D).
- (B) (D), (C), (A), (B).
- (C) (B), (A), (D), (C).
- (D) (C), (B), (D), (A).

Correct Answer: (D) (C), (B), (D), (A).

SOLUTION:

Puccinia graminis completes its life cycle through numbered spore stages rather than a simple sequence of names, so each spore type must be matched to its stage number first. Stage 0 is the pycniospore, stage I the aeciospore formed on the alternate host, stage II the uredospore that causes repeating infection cycles, stage III the teliospore formed at season end, and stage IV the basidiospore that germinates from the teliospore. Reading off stages I through IV gives

aeciospore, uredospore, teliospore, basidiospore, that is (C), (B), (D), (A).

(C), (B), (D), (A)

Quick Tip: Match each spore name to its numbered stage (I to IV) in the rust life cycle.

• • •

11. Given below are two statements:

Statement (I): According to response of length of day and night on the flowering of plants, they are classified as long day or short day plants.

Statement (II): Wheat and oat are long day plants.

In light of the above statements, choose the most appropriate answer from the options given below.

- (A) Both Statement (I) and Statement (II) are correct.
- (B) Both Statement (I) and Statement (II) are incorrect.
- (C) Statement (I) is correct but Statement (II) is incorrect.
- (D) Statement (I) is incorrect but Statement (II) is correct.

Correct Answer: (A) Both Statement (I) and Statement (II) are correct.

SOLUTION:

Photoperiodism is the name given to a plant's flowering response to relative length of day and night, and this response is the basis of grouping plants as long day, short day or day neutral, which supports

Statement (I). Among crop plants, wheat and oat flower only when day length exceeds a critical value, placing them firmly in the long day group, which supports Statement (II). Neither statement can be rejected on this basis.

Both statements are correct

Quick Tip: Recall which crops need long days versus short days to flower.

• • •

12. Given below are two statements:

Statement (I): The process in which the ammonia is converted into nitrites and then further into nitrates is called denitrification.

Statement (II): Nitrate is usually the predominant form of available nitrogen that is absorbed.

In light of the above statements, choose the most appropriate answer from the options given below.

- (A) Both Statement (I) and Statement (II) are correct.
- (B) Both Statement (I) and Statement (II) are incorrect.
- (C) Statement (I) is correct but Statement (II) is incorrect.
- (D) Statement (I) is incorrect but Statement (II) is correct.

Correct Answer: (D) Statement (I) is incorrect but Statement (II) is correct.

SOLUTION:

The two statements can be checked by naming the actual process involved. Oxidation of ammonia to nitrite followed by oxidation of nitrite to nitrate is the textbook definition of nitrification, carried out by Nitrosomonas and Nitrobacter, so calling it denitrification in Statement (I) is a factual mix up and the statement fails. Because nitrate does not bind strongly to negatively charged soil colloids, it stays dissolved in the soil solution and is the form of nitrogen most available for root uptake, so Statement (II) holds.

Statement (I) incorrect, Statement (II) correct

Quick Tip: Remember the correct name for ammonia to nitrate conversion, and which nitrogen form plants absorb most.

• • •

13. Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A): Wheat based foods has binding and stretchy quality.

Reason (R): Gluten is a protein naturally found in wheat.

In light of the above statements, choose the most appropriate answer from the options given below.

- (A) Both (A) and (R) are correct and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A).
- (C) (A) is correct but (R) is not correct.
- (D) (A) is not correct but (R) is correct.

Correct Answer: (A) Both (A) and (R) are correct and (R) is the correct explanation of (A).

SOLUTION:

Instead of testing the assertion and reason separately, link them through what actually happens when wheat flour is kneaded with water. Two proteins, gliadin and glutenin, hydrate and combine to form gluten, a network that traps gas and stretches without tearing, giving dough its binding and stretchy feel described in Assertion (A). Because Reason (R) names this very protein as the cause, it is not just a true statement standing beside (A), it is the mechanism behind (A).

Both correct, R explains A

Quick Tip: Think about what gluten does to wheat dough.

• • •

14. Pebrine is:

- (A) Disease of silkworm
- (B) Caused by protozoa
- (C) Larva on death immediately emit foul smell
- (D) Tiny black spots appear on larval integument

Choose the correct answer from the options given below:

- (A) (A), (B) and (C) only.
- (B) (A), (B) and (D) only.
- (C) (A), (B), (C) and (D).
- (D) (B), (C) and (D) only.

Correct Answer: (B) (A), (B) and (D) only.

SOLUTION:

A quick way to solve this is to recall what each silkworm disease is known for and match features one by one. Pebrine is caused by the spore forming parasite *Nosema bombycis*, historically grouped under protozoa, confirming (B), and it is a genuine disease of silkworm, confirming (A). Its hallmark diagnostic sign is the appearance of small black speckles on the larval skin, which gives the disease its name and confirms (D). A larva releasing a foul smell right after death is instead a sign of flacherie, a bacterial infection, so (C) does not belong with pebrine and must be dropped.

(A), (B) and (D) only

Quick Tip: Recall the defining symptom that gives pebrine its name.

• • •

15. Given below are two statements:

Statement (I): In garlic modified roots are economic part.

Statement (II): Characteristic odour in garlic is due to volatile organic sulfur-containing compounds that are rapidly produced upon tissue damage and diffuse into the air.

In light of the above statements, choose the most appropriate answer from the options given below.

- (A) Both Statement (I) and Statement (II) are correct.
- (B) Both Statement (I) and Statement (II) are incorrect.
- (C) Statement (I) is correct but Statement (II) is incorrect.
- (D) Statement (I) is incorrect but Statement (II) is correct.

Correct Answer: (D) Statement (I) is incorrect but Statement (II) is correct.

SOLUTION:

Start by identifying what the garlic bulb actually is botanically. It develops from a shortened underground stem, the basal plate, with each clove being a modified, fleshy leaf base attached to it, so the economic part is a modified stem and leaf system, not a root, and Statement (I) fails on this point. The pungent smell is a chemical defence response, released only when cells are ruptured and the enzyme alliinase converts odourless alliin into volatile sulfur compounds such as allicin, which matches Statement (II) exactly.

Statement (I) incorrect, Statement (II) correct

Quick Tip: Think about what part of the plant forms the garlic bulb.

• • •

16. Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A): A series of cellulolytic enzymes are employed in the wood degradation process by brown rot fungi.

Reason (R): Lignin is not degraded by these fungi, therefore, it has typical brown colour wood remains.

In light of the above statements, choose the most appropriate answer from the options given below.

- (A) Both (A) and (R) are correct and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are correct and (R) is the correct explanation of (A).
- (C) (A) is correct but (R) is not correct.
- (D) (A) is not correct but (R) is correct.

Correct Answer: (A) Both (A) and (R) are correct and (R) is the correct explanation of (A).

SOLUTION:

Compare brown rot with white rot to see why the reason fits. White rot fungi carry enzymes for both cellulose and lignin, so wood turns pale as lignin is removed, while brown rot fungi carry only cellulolytic and hemicellulolytic enzymes and cannot touch lignin. Because cellulose and hemicellulose, the lighter coloured components, are consumed while dark lignin stays behind, the wood shrinks, cracks into cube shaped pieces and keeps a brown colour. This cause and effect chain is exactly what Reason (R) describes, so it is a genuine explanation of Assertion (A), not just a separately true fact.

Both correct, R explains A

Quick Tip: Compare brown rot and white rot fungi in terms of which wood component each can break down.

• • •

17. Given below are two statements:

Statement (I): The flowers of ridge gourd start opening in the evening and remain open throughout the night.

Statement (II): Pollination of ridge gourd is done in the day time.

In light of the above statements, choose the most appropriate answer from the options given below.

- (A) Both Statement (I) and Statement (II) are correct.
- (B) Both Statement (I) and Statement (II) are incorrect.
- (C) Statement (I) is correct but Statement (II) is incorrect.
- (D) Statement (I) is incorrect but Statement (II) is correct.

Correct Answer: (D) Statement (I) is incorrect but Statement (II) is correct.

SOLUTION:

Look at each statement using the flowering biology of cucurbits. Cucurbits split into two groups by anthesis time: night bloomers pollinated by moths, such as bottle gourd and snake gourd, and day bloomers pollinated by bees, such as ridge gourd, cucumber and muskmelon. Ridge gourd belongs to the day blooming group, so its flowers open in the early morning, not the evening. This rules out Statement (I).

Because the flowers are open and receptive only during daylight

hours, bee visits and pollination also happen in the day time, which matches Statement (II).

Statement (I) incorrect, Statement (II) correct

Quick Tip: Think about which cucurbits are day bloomers versus night bloomers.

• • •

18. Which among the following is the genus of lac insect?

- (A) Kerria sp.
- (B) Tetragonula sp
- (C) Orthopteran sp
- (D) Oryctes sp

Correct Answer: (A) Kerria sp.

SOLUTION:

Match each name to the insect it represents.

Tetragonula sp is a stingless honey bee used in meliponiculture, not a resin producing insect. Orthopteran is not even a genus, it names an insect order that includes grasshoppers and crickets. Oryctes sp is the rhinoceros beetle, a pest of coconut and oil palm.

The lac insect, which secretes the resin used to make shellac, is placed in the genus Kerria (species Kerria lacca).

Kerria sp

Quick Tip: The lac insect gives shellac and its scientific name starts with K.

• • •

19. Given below are two statements:

Statement (I): The first gynoecious based hybrid of bitter gourd is Pusa Hybrid-4 developed by ICAR-IARI, New Delhi.

Statement (II): The male:female ratio of the gynoecious based hybrids of bitter gourd is 25:1.

In light of the above statements, choose the most appropriate answer from the options given below.

- (A) Both Statement (I) and Statement (II) are correct.
- (B) Both Statement (I) and Statement (II) are incorrect.
- (C) Statement (I) is correct but Statement (II) is incorrect.
- (D) Statement (I) is incorrect but Statement (II) is correct.

Correct Answer: (C) Statement (I) is correct but Statement (II) is incorrect.

SOLUTION:

Check the two claims against the meaning of the word gynoecious. Gynoecious literally means female bearing, so a gynoecious bitter gourd line carries mostly female flowers with very few or no male flowers on the same plant. A male:female ratio of 25:1 would describe an ordinary monoecious bitter gourd, where male flowers vastly outnumber female flowers, which is the opposite of the gynoecious condition. This makes Statement (II) false.

On the historical side, IARI New Delhi is credited with releasing Pusa Hybrid-4 as the first hybrid of bitter gourd built on a gynoecious parent line, which supports Statement (I).

Statement (I) correct, Statement (II) incorrect

Quick Tip: Recall what gynoeceous means for flower sex ratio.

• • •

20. In pomegranate, flowering during January-February is observed in .

- (A) Ambe Bahar
- (B) Mrig Bahar
- (C) Hasta Bahar
- (D) Sada Bahar

Correct Answer: (A) Ambe Bahar

SOLUTION:

Line up each bahar name with its flower induction window.

Growers withhold irrigation and then resume watering to force flowering at a chosen time of year, and each timing has its own name.

Mrig bahar flowering starts around the Mrig nakshatra period in June-July, and Hasta bahar flowering starts around the Hasta nakshatra period in September-October. Ambe bahar gets its name because its flowering, in January-February, coincides with the mango flowering season.

Since the question asks about January-February flowering, this points directly to Ambe Bahar.

Ambe Bahar

Quick Tip: This bahar shares its name with the mango flowering season.

• • •

21. Scurvy is caused due to the deficiency of .

- (A) Vitamin A
- (B) Vitamin B
- (C) Vitamin C
- (D) Vitamin D

Correct Answer: (C) Vitamin C

SOLUTION:

Match the disease name to its vitamin using collagen synthesis as the clue.

Vitamin A deficiency causes night blindness, Vitamin B deficiencies cause disorders such as beriberi and pellagra, and Vitamin D deficiency causes rickets in children and osteomalacia in adults. None of these match scurvy.

Scurvy specifically involves weak connective tissue and bleeding gums because collagen cannot be formed properly, and collagen synthesis needs Vitamin C as a cofactor.

Vitamin C

Quick Tip: This vitamin is also called ascorbic acid.

• • •

22. Essential micronutrient required for the biosynthesis of auxin is .

- (A) Calcium
- (B) Magnesium
- (C) Iron
- (D) Zinc

Correct Answer: (D) Zinc

SOLUTION:

Trace the biochemical pathway backward from auxin to find the nutrient link.

Auxin (indole-3-acetic acid) is built from tryptophan inside the plant, so anything that blocks tryptophan formation also blocks auxin formation. Zinc is a cofactor needed for tryptophan synthase activity, which makes tryptophan from its precursors. Without enough zinc, tryptophan and hence auxin both fall, and plants show symptoms such as shortened internodes and small, rosetted leaves, classic signs of low auxin.

Calcium mainly supports cell wall and membrane function, magnesium is central to chlorophyll, and iron is needed for the electron transport chain and chlorophyll formation, none of which sits directly in the auxin synthesis pathway.

Zinc

Quick Tip: This micronutrient's deficiency causes little leaf disease.

• • •

23. Cauliflower is an indicator plant for the deficiency of .

- (A) Zinc
- (B) Molybdenum
- (C) Iron
- (D) Nitrogen

Correct Answer: (B) Molybdenum

SOLUTION:

Recall the classic disorder linked with each named nutrient in cauliflower.

Zinc shortage typically causes little leaf and interveinal chlorosis, iron shortage causes interveinal chlorosis in young leaves, and nitrogen shortage causes overall pale, stunted growth. None of these matches the whiptail symptom described for cauliflower.

Whiptail, where cauliflower leaves narrow down to just the midrib without a proper blade, is the textbook diagnostic sign of molybdenum deficiency, which is why cauliflower is the standard indicator crop for this deficiency.

Molybdenum

Quick Tip: The deficiency disorder in cauliflower is called whiptail.

• • •

24. Coal is rock of .

- (A) Sedimentary type
- (B) Metamorphic origin
- (C) Glacial origin
- (D) Igneous type

Correct Answer: (A) Sedimentary type

SOLUTION:

Work through how coal actually forms and compare it with each rock category.

Metamorphic rocks form when existing rocks are altered by heat and pressure, igneous rocks form when molten magma or lava cools and solidifies, and glacial origin rocks form through the grinding and depositing action of glaciers. Coal does not form by any of these routes.

Coal begins as plant debris in swampy, low oxygen conditions, which gets buried under layers of sediment, compacted, and slowly converted into peat, then lignite, then coal, through a process identical in nature to sedimentary rock formation.

Sedimentary type

Quick Tip: Coal forms from buried plant matter over time.

• • •

25. Mungbean seed required for the sowing one hectare land at 30cm x 10cm spacing with 92 per cent germination, 85 per cent purity and 36g weight of 1000 seed will be .

- (A) 12.34 kg
- (B) 15.34 kg
- (C) 18.34 kg
- (D) 20.34 kg

Correct Answer: (B) 15.34 kg

SOLUTION:

Step 1: Use the direct seed rate formula: Seed rate (kg/ha)
= $\frac{\text{Plant population} \times 1000 \times \text{seed weight (g)}}{1000 \times \text{germination fraction} \times \text{purity fraction} \times 1000}$.

Step 2: Plant population comes from the area per plant: with 30cm and 10cm spacing, each plant occupies 0.03 m^2 , giving $\frac{10000}{0.03}$
= 333333.33 plants/ha.

Step 3: Substitute the values: Seed rate = $\frac{333333.33 \times 36}{1000 \times 0.92 \times 0.85 \times 1000}$
kg. The numerator gives 12000000 g-equivalent units, and dividing by 782000 gives approximately 15.34 kg/ha.

This confirms the sowing rate needed for the given field quality parameters.

15.34 kg/ha

Quick Tip: First find plants per hectare from the spacing, convert to seed weight, then divide by germination times purity.

• • •

26. Blossom end rot of tomato is caused due to the deficiency of .

- (A) Potash
- (B) Boron
- (C) Nitrogen
- (D) Calcium

Correct Answer: (D) Calcium

SOLUTION:

Step 1: Rule out the wrong options one by one. Potash mainly governs fruit size, colour and shelf life, so its shortage shows up as poor ripening quality, not tissue death at the blossom end.

Step 2: Nitrogen shortage shows up as stunted plants and pale green leaves across the whole crop, not a localized fruit lesion. Boron shortage causes cracked fruit and corky internal tissue, again a different symptom.

Step 3: Calcium is needed to build strong cell walls in the rapidly expanding fruit tissue. When calcium movement to the fruit tip is restricted, the cells there break down and rot, which is exactly blossom end rot.

Calcium deficiency

Quick Tip: Think about which nutrient builds cell wall strength in the rapidly growing fruit tip.

...

27. The anti-nutritional factor in many pulses is .

- (A) Biotin
- (B) Niacin
- (C) Pantothenic acid
- (D) Phytic acid

Correct Answer: (D) Phytic acid

SOLUTION:

Step 1: Group the four options by what they actually are. Biotin, niacin and pantothenic acid are all B-vitamins required for normal

metabolism, so none of them can be an anti-nutritional factor.

Step 2: That leaves phytic acid, which is a phosphorus storage compound in seeds. It chelates minerals such as iron, zinc and calcium, forming complexes the gut cannot absorb well.

Step 3: This mineral-binding action is exactly what defines an anti-nutritional factor, so phytic acid fits the description in pulses.

Phytic acid

Quick Tip: Three of the options are B-vitamins the body needs; only one binds minerals and blocks their absorption.

• • •

28. Which of the following farm equipment is not going to be utilized during the wheat production?

- (A) Disk Harrow
- (B) Shovel Cultivator
- (C) Reaper
- (D) Puddler

Correct Answer: (D) Puddler

SOLUTION:

Step 1: Separate the equipment by the type of field it works on. A puddler is designed to break down soil into a slurry under standing water, a step used only in wetland rice cultivation.

Step 2: Wheat fields are never flooded and puddled like paddy fields, so a puddler has no role in wheat production.

Step 3: The remaining three tools, disk harrow, shovel cultivator and reaper, all serve dryland operations of tillage, weeding and harvesting that wheat actually needs.

Puddler

Quick Tip: One of these tools is meant for flooded rice fields, not a dryland cereal like wheat.

• • •

29. On the farm, during paddy land preparation, if one wheel of tractor gets in mud, which of the following mechanism will be useful to take out the tractor from mud by distributing equal amount of traction at both the rear wheels?

- (A) Break Lock
- (B) Differential Lock
- (C) Flywheel Lock
- (D) Hydraulic Valve Lifting Lever Lock

Correct Answer: (B) Differential Lock

SOLUTION:

Step 1: Think about why the tractor gets stuck first. A free differential always sends torque toward the wheel that spins easiest, which is the muddy, slipping wheel, leaving the gripping wheel almost powerless.

Step 2: The differential lock mechanically joins both rear axle halves so they must rotate together, removing the differential's ability to favor the slipping side.

Step 3: With both wheels forced to spin at the same rate, the wheel still on solid ground now shares in pulling the vehicle, dragging the stuck wheel free of the mud.

Differential Lock

Quick Tip: Think about which mechanism forces both rear wheels to spin at the same speed.

• • •

30. 20 labors engaged in a farm-operation on paddy farm for 6h. In an ideal conditions, how much maximum energy is utilized by labors into the farm?

- (A) 8.94 kWh
- (B) 120 kWh
- (C) 12 hPh
- (D) 240 hPh

Choose the correct answer from the options given below:

- (A) (A), and (C) only.
- (B) (B) and (D) only.
- (C) (C) and (D) only.
- (D) (B) and (C) only.

Correct Answer: (A) (A), and (C) only.

SOLUTION:

Step 1: Calculate the total man-power output first. With the standard value of 0.1 hp per laborer under ideal conditions, 20 laborers

together give $20 \times 0.1 = 2$ hp of total power.

Step 2: Multiply by the working duration of 6 hours to get the energy consumed: $2 \times 6 = 12$ hp-h, which is exactly option (C).

Step 3: Check consistency by converting this same energy into kilowatt-hours using $1\text{hp} = 0.746\text{kW}$: $12 \times 0.746 \approx 8.94$ kWh, which is option (A). Since both values describe the identical amount of energy, only options (A) and (C) can be correct together; (B) at 120 kWh and (D) at 240 hp-h are roughly ten to twenty times too large to be right.

(A) and (C) only

Quick Tip: Take 0.1 hp per laborer, multiply by number of workers and hours, then convert hp-h to kWh to check which pair matches.

• • •

31. Which of the following farm operations utilizes the stationary source of power?

- (A) Irrigation Water Lifting
- (B) Winnowing
- (C) Threshing
- (D) Harvesting
- (E) Cultivation
- (F) Transportation

Choose the correct answer from the options given below:

- (A) (D), (E) and (F) only.
- (B) (C), (D) and (E) only.
- (C) (B), (C) and (D) only.
- (D) (A), (B) and (C) only.

Correct Answer: (D) (A), (B) and (C) only.

SOLUTION:

Step 1: Sort all six operations by whether the machine has to travel while working. Harvesting machines move down the crop rows, cultivation implements move across the field behind a tractor, and transportation obviously means movement, so (D), (E) and (F) all need mobile power.

Step 2: That leaves irrigation water lifting, winnowing and threshing. A water pump sits fixed at the source, a winnower is set up at one spot in the yard, and a thresher stays parked while crop is fed into it, all driven from a stationary engine or motor through a belt.

Step 3: Since these three operations never require the power unit to travel, they are the stationary power source operations.

(A), (B) and (C) only

Quick Tip: Ask which of these six operations keep the power unit fixed at one spot instead of moving across the field.

• • •

32. Which of the following methods are employed for the estimation of infiltration characteristics of soil for design of irrigation system?

(A) Use of Infiltrometer

(B) Measurement of subsidence of free water in a large basin

(C) Estimation of accumulated infiltration from water front advance data

Choose the correct answer from the options given below:

- (A) (A), (B) and (C).
- (B) (B) and (C) only.
- (C) (A) and (C) only.
- (D) (A), and (B) only.

Correct Answer: (A) (A), (B) and (C).

SOLUTION:

Step 1: Instead of picking one method, check whether each technique actually measures water entering the soil over time. The infiltrometer directly records the fall in ponded water depth inside a ring, giving a point infiltration rate.

Step 2: The large basin method extends this same idea to a bigger ponded area, tracking how much the free water surface subsides, useful for basin or border irrigation design.

Step 3: The water front advance method instead watches how quickly the wetting front moves along a furrow and back-calculates the accumulated infiltration from that advance and recession data, which suits furrow irrigation design.

Since all three approaches genuinely estimate infiltration, none can be excluded.

(A), (B) and (C)

Quick Tip: Consider whether each of the three techniques described actually measures water entering the soil over time.



33. Which is the correct sequence to connect various components of drip irrigation systems in a banana field?

- (A) Pump
- (B) Fertilizer Tank
- (C) Lateral
- (D) Course Filter
- (E) Main Line
- (F) Fine Filter
- (G) Drippers

Choose the correct answer from the options given below, which is the correct sequence of drip irrigation components.

- (A) (A) - (B) - (C) - (D) - (E) - (F) - (G)
- (B) (A) - (D) - (F) - (B) - (E) - (C) - (G)
- (C) (A) - (C) - (B) - (D) - (E) - (F) - (G)
- (D) (A) - (E) - (F) - (C) - (B) - (D) - (G)

Correct Answer: (B) (A) - (D) - (F) - (B) - (E) - (C) - (G)

SOLUTION:

Look at the last three positions first: water must travel Main Line then Lateral then Drippers, since a main line always feeds sub units before the crop level laterals and drippers. Option 1 ends with Fine Filter then Drippers, which is wrong because filtration must happen near the pump, not just before the emitters. Option 3 places the Lateral (C) right after the Pump, which cannot be right since laterals are the last small pipes near the plants, not the first fitting after the pump. Option 4 places the Main Line right after the pump and the filters at the very end, which is backward because unfiltered water would clog the drippers. Only option 2, Pump - Course Filter - Fine Filter - Fertilizer

Tank - Main Line - Lateral - Drippers, keeps filtration early and ends Main Line - Lateral - Drippers in the correct physical order.

Option 2

Quick Tip: Filters sit close to the pump, and the pipe network always ends Main Line, then Lateral, then Drippers.

• • •

34. How much quantity of Potassium Metabisulphite (KMS) is required for preservation of 100 kg mango squash at the rate of 350 ppm of Sulphur dioxide (SO₂)?

- (A) 0.0175 g
- (B) 0.035 g
- (C) 17.5 g
- (D) 35 g

Correct Answer: (D) 35 g

SOLUTION:

Use the ppm definition directly: 1 ppm is 1 part in a million by weight, so it equals 1 mg of SO₂ per kg of product. The batch size is 100 kg, so the total SO₂ needed is $350 \times 100 = 35000$ mg. Converting to grams, $35000/1000 = 35$ g. Since KMS supplies this exact SO₂ dose to the squash, the required weight of KMS works out to 35 g. This rules out the much smaller values, 0.0175 g and 0.035 g, which come from a units slip of dividing by an extra 1000, and rules out 17.5 g, which is only half the needed dose.

35 g

Quick Tip: 350 ppm means 350 mg per kg of product; scale that to 100 kg and convert mg to g.

• • •

35. What should be the pH of fruit, in tomato fruit processing?

- (A) Less than ($<$) 4.5 pH
- (B) Greater than ($>$) 4.5 pH
- (C) Equal to ($=$) 4.5 pH
- (D) Neutral pH

Correct Answer: (A) Less than ($<$) 4.5 pH

SOLUTION:

Think about food safety rather than the fruit itself. Low acid foods, pH above 4.5, can support *Clostridium botulinum* spore germination and toxin formation, so they need pressure canning. Tomato products are treated as safe for simple hot water processing precisely because processors keep them in the high acid zone, pH under 4.5, often adding citric acid or lemon juice when a batch is less acidic. A pH equal to or above 4.5, or a neutral pH, would force pressure canning instead, so those three choices are wrong.

$pH < 4.5$

Quick Tip: Tomato must stay in the high acid food category to be safe for boiling water processing.

36. Which of the following is correct sequence for canning?

- (A) Can filling
- (B) Clinching
- (C) Exhausting
- (D) Seaming
- (E) Retorting
- (F) Cooling

Choose the correct answer from the options given below, which describes the correct sequence of canning operations.

- (A) (F) - (E) - (D) - (C) - (B) - (A)
- (B) (A) - (B) - (C) - (D) - (E) - (F)
- (C) (A) - (C) - (E) - (B) - (D) - (F)
- (D) (F) - (D) - (B) - (E) - (C) - (A)

Correct Answer: (B) (A) - (B) - (C) - (D) - (E) - (F)

SOLUTION:

Work backward from what makes physical sense. A can cannot be sterilized in a retort (E) or cooled (F) before it is sealed, so Seaming (D) must come before both of those, and Seaming itself needs the air already removed, so Exhausting (C) comes right before it. Exhausting needs the lid loosely on, which is Clinching (B), and Clinching needs the can already full, which is Can filling (A). Chaining these needs backward gives Filling, then Clinching, then Exhausting, then Seaming, then Retorting, then Cooling, exactly option 2. The other three options start with Cooling or Retorting, which cannot happen to an unsealed, unfilled can, so they are eliminated.

Option 2

Quick Tip: A can must be filled and sealed before it can be sterilized and cooled.

• • •

37. Which of the following are family resources?

- (A) Home
- (B) Weaving skill of your mother
- (C) Your ability to ride a two wheeler
- (D) Your father's car
- (E) Inherited land in your village
- (F) Your salary
- (G) Equipment's in your house

Choose the correct answer from the options given below.

- (A) (A), (B), (C) and (G) only
- (B) (A), (E) and (G) only
- (C) (B), (D) and (F) only
- (D) (A), (C), (E) and (G) only

Correct Answer: (B) (A), (E) and (G) only

SOLUTION:

Sort each item by who it belongs to. Your mother's weaving skill, your riding ability, your father's car and your salary are all owned by one named person, so these count as individual resources, not resources of the family unit. What is left, home, inherited land and household equipment, is not tied to any single member; the whole family lives in the home, shares the inherited land, and uses the equipment together.

That shared ownership test picks out exactly (A), (E) and (G), matching option 2 and ruling out the other three choices, each of which mixes in at least one personally owned item.

(A), (E) and (G) only

Quick Tip: A resource owned by one named family member is individual; a resource shared by the whole household is a family resource.

• • •

38. How much max calories will be your intake while eating 200 g specially designed food having 5% Total Fat, 25% Total Protein, and 68% Total Carbohydrates?

- (A) 834 Cal
- (B) 1034 Cal
- (C) 1464 Cal
- (D) 784 Cal

Correct Answer: (A) 834 Cal

SOLUTION:

Convert each percentage straight to grams for the 200 g portion: fat = $0.05 \times 200 = 10$ g, protein = $0.25 \times 200 = 50$ g, carbohydrate = $0.68 \times 200 = 136$ g. Multiply each by its calorie factor, 9 for fat and 4 for both protein and carbohydrate: $10 \times 9 = 90$, $50 \times 4 = 200$, $136 \times 4 = 544$. Adding these three energy contributions, $90 + 200 + 544 = 834$ Cal. The other options come from using a wrong fat factor or misreading a percentage, so they do not survive this direct check.

834 Cal

Quick Tip: Convert each percent to grams for 200 g, then multiply fat by 9 and protein plus carbohydrate by 4 each.

• • •

39. According to child developmentalists, which of the following age range is considered as 'Adolescence'?

- (A) 12 - 15 Years
- (B) 6 - 11 Years
- (C) 3 - 5 Years
- (D) Birth - 2 Years

Correct Answer: (A) 12 - 15 Years

SOLUTION:

Eliminate the ranges one by one. Birth to 2 years is infancy, when basic motor and language skills first appear. 3 to 5 years is early childhood, the preschool stage. 6 to 11 years is late childhood, the primary school stage marked by steady growth before puberty. That leaves 12 to 15 years, the stage where puberty begins and physical, emotional and social changes mark the shift from childhood to adulthood, which is exactly what developmentalists label adolescence.

12 – 15 Years

Quick Tip: Adolescence begins with puberty, placing it after late childhood.

• • •

40. Which of the following home resource is available equally for all, easy to understand but difficult to manage and control due to limited availability?

- (A) Human Energy
- (B) Money
- (C) Equipment's
- (D) Time

Correct Answer: (D) Time

SOLUTION:

Check each option against the two conditions in the question, equal availability and difficulty of control. Money differs by income, human energy differs by health and age, and equipment differs by what a household owns, so none of these three is equally available to everyone. Time is the one resource every person receives in the same fixed amount each day, so it satisfies equal availability, and because it constantly runs out and cannot be stockpiled, it is genuinely hard to manage even though the idea of time itself is simple.

Time

Quick Tip: This resource gives everyone the same 24 hours a day but can never be saved for later.

• • •

41. Which of the following fiber is fireproof?

- (A) Vegetable Fiber
- (B) Mineral Based Fiber
- (C) Animal Fiber
- (D) Man Made Fiber or Artificial Fiber

Correct Answer: (B) Mineral Based Fiber

SOLUTION:

Check each fiber type against fire behavior. Cotton and jute (vegetable fibers) catch fire easily. Wool and silk (animal fibers) can char and burn, though wool resists flame better than cotton. Nylon and polyester (man made fibers) melt and burn when exposed to flame. Only fibers made from minerals, such as asbestos and fiberglass, are inorganic, so they cannot support combustion. **Mineral Based Fiber**

Quick Tip: Think about which fiber type is inorganic and cannot burn.

• • •

42. Which of the following antiviral drug is available for treatment of lumpy skin disease in cow?

- (A) Amantadine
- (B) Cidofovir
- (C) Tenofovir
- (D) No Drug Available

Correct Answer: (D) No Drug Available

SOLUTION:

Look at what LSD actually is before checking the drug options. It is a pox virus infection of cattle, spread mainly by biting insects. None of Amantadine, Cidofovir or Tenofovir has approval or established field use for this disease, since these drugs target unrelated viruses. Current management of LSD relies only on supportive treatment, wound care and control of secondary infection, plus vaccination for prevention, not on a curative antiviral. **No Drug Available**

Quick Tip: No approved antiviral exists for this viral cattle disease, treatment is supportive.

• • •

43. How do you arrange the correct sequence of the following procedural steps for early pregnancy diagnosis in cow?

- (A) Do the insemination in adult dairy cows.
- (B) Administer a small dose (2.5 mg or 0.5 ml) of Dinoprost (Lutalyse) intravenously through the ear vein.
- (C) Observe critically the teat of the animal for alveolar milk to start flowing about one minute later.
- (D) After 18 to 22 days and 3 hours prior to the evening milking, place the teat cannula in the left fore-teat and leave it for milk flow from the teat cistern till it ceases.

Choose the correct answer from the options given below which describe the correct sequential steps for early pregnancy diagnosis in cow.

- (A) (A), (B), (C), (D)
- (B) (A), (C), (D), (B)
- (C) (A), (D), (C), (B)
- (D) (A), (D), (B), (C)

Correct Answer: (D) (A), (D), (B), (C)

SOLUTION:

Think of this test as a hormone response check rather than a memorised list. First the cow must be bred, so insemination (A) always comes first. About three weeks later, the milk cistern is drained through a cannula so that no old milk is left to confuse the result, so (D) comes next. Only after the cistern is empty does it make sense to inject the Dinoprost dose (B), because the test measures whether this injection triggers a fresh oxytocin driven milk let down. The final step is watching the teat for that let down within about a minute (C), which tells whether the corpus luteum, and so the pregnancy, is still active.

(A), (D), (B), (C)

Quick Tip: Breeding comes first, then draining the cistern, then the hormone injection, then observing the response.

• • •

44. Match List-I with List-II.

List-I (Toxic Element)

List-II (Effect of toxicity on Animal)

- | | |
|--------------|---|
| (A) Fluoride | (I) Abdominal pain and diarrhea can be common clinical signs in animals exposed. |
| (B) Arsenic | (II) Short-term exposure may include nausea, vomiting, diarrhea, increase in blood pressure or heart rate, skin rashes and eye irritation. |
| (C) Lead | (III) Cattle can show clinical signs of depression, weakness and ataxia with postmortem findings of gastroenteritis and degenerative changes in the renal tubular epithelium. |
| (D) Mercury | (IV) Abdominal pain or colic, vomiting, a staggering gait and weakness, incoordination, rapid weak pulse and shock, diarrhea, followed by collapse and death. |

Choose the correct answer from the options given below.

- (A) (A) - (IV), (B) - (II), (C) - (I), (D) - (III)
- (B) (A) - (II), (B) - (I), (C) - (IV), (D) - (III)
- (C) (A) - (III), (B) - (IV), (C) - (I), (D) - (II)
- (D) (A) - (I), (B) - (III), (C) - (II), (D) - (IV)

Correct Answer: (C) (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

SOLUTION:

Work from the most specific description first. The picture of severe colic, a staggering gait, weak rapid pulse with shock, diarrhea and death is the standard textbook description of acute Arsenic poisoning, so (B) links to (IV). Mercury exposure is well known for producing nausea, vomiting, diarrhea, raised blood pressure or heart rate, skin

rash and eye irritation on short exposure, which fixes (D) to (II). What remains for Fluoride is the description with depression, weakness, ataxia, gastroenteritis and renal tubular damage, giving (A) to (III). By elimination, Lead is left with the plain description of abdominal pain and diarrhea, giving (C) to (I).

(A) – (III), (B) – (IV), (C) – (I), (D) – (II)

Quick Tip: Match the classic toxic syndrome of each element to its description, arsenic gives the most severe shock like picture.

• • •

45. A tank can be filled in 30 minutes. There is a leakage which can empty it in 60 minutes. In how many minutes can the tank be filled?

- (A) 40 minutes
- (B) 45 minutes
- (C) 60 minutes
- (D) 90 minutes

Correct Answer: (C) 60 minutes

SOLUTION:

Take the total tank capacity as 60 units, a number divisible by both 30 and 60. The filling pipe then adds $60/30 = 2$ units per minute, while the leak removes $60/60 = 1$ unit per minute. Together the tank gains $2 - 1 = 1$ unit each minute, so filling all 60 units takes $60/1 = 60$ minutes. **60 minutes**

Quick Tip: Subtract the leak rate from the fill rate to get the net rate.

• • •

- - -

46. A is 50% more efficient than B. C does half of the work done by A and B together. If C alone does the work in 40 days, then A, B and C together can do the work in approximately:

- (A) 13 days
- (B) 15 days
- (C) 20 days
- (D) 30 days

Correct Answer: (A) 13 days

SOLUTION:

Assume the work has 40 units in total, matching C's 40 day schedule so C completes 1 unit every day. Since C's daily output is half of A and B's combined daily output, A and B together must finish 2 units per day, meaning A and B together would need 20 days for the whole job. A works 50% faster than B, so their 2 units per day split as B doing 0.8 units and A doing 1.2 units, since $1.2 = 1.5 \times 0.8$ and $1.2 + 0.8 = 2$. Adding C's 1 unit per day, all three together complete $1.2 + 0.8 + 1 = 3$ units per day. To finish 40 units at 3 units per day takes $40/3$ days, close to 13.3 days. **approximately 13 days**

Quick Tip: Find C's rate first from the 40 day figure, then split A and B in the ratio 3 to 2.

• • •

47. The total of 8 consecutive numbers is 108. The largest of these numbers is .

- (A) 10
- (B) 12
- (C) 14
- (D) 17

Correct Answer: (D) 17

SOLUTION:

For consecutive numbers the average equals the middle value, and the sum equals the average times the count. Here the average is $108/8 = 13.5$. With 8 numbers, this average falls exactly between the 4th and 5th numbers in the sequence, so the 4th number is 13 and the 5th is 14. Building outward gives the full list 10, 11, 12, 13, 14, 15, 16, 17. The largest value is the last one. 17

Quick Tip: Use the average of the 8 numbers to locate the sequence.

• • •

48. The area of the largest circle that can be drawn inside a rectangle with sides 16 cm by 12 cm is .

- (A) 100 cm^2
- (B) 112 cm^2
- (C) 113 cm^2
- (D) 150 cm^2

Correct Answer: (C) 113 cm^2

SOLUTION:

A circle drawn inside a rectangle is limited by the smaller dimension, since the circle must touch both long sides without crossing them, so its diameter cannot exceed the 12 cm width. Taking the diameter as 12 cm gives radius 6 cm. Using $\pi \approx 3.1416$, area = $3.1416 \times 36 \approx 113.1$ square cm, matching the closest listed value. **113 cm²**

Quick Tip: The circle's diameter equals the shorter side of the rectangle.

• • •

49. A mixture of 150 liters of wine and water contains 20% water. How much more water should be added so that water becomes 25% of the new mixture?

- (A) 10 litres
- (B) 15 litres
- (C) 30 litres
- (D) 20 litres

Correct Answer: (A) 10 litres

SOLUTION:

Wine quantity never changes since only water is added.

Wine in the original mixture = 80 L.

After adding water, water becomes 25%, so wine becomes 100 of the new mixture.

New total mixture = $\frac{120}{0.75} = 160$ L.

Water added = $160 - 150 = 10$ L.

10 litres

Quick Tip: Wine quantity stays fixed; only water increases.

• • •

50. Find the next number in the series 125, 80, 45, 20,

- (A) 15
- (B) 5
- (C) -10
- (D) -5

Correct Answer: (B) 5

SOLUTION:

Rewrite each term as 5 times a perfect square: $125 = 5(5^2)$, $80 = 5(4^2)$, $45 = 5(3^2)$, $20 = 5(2^2)$.

The square term drops by 1 each time: 5, 4, 3, 2, so the next square term is 1.

Next number = $5(1^2) = 5$.

5

Quick Tip: Try writing each term as 5 times a perfect square.

• • •

51. The average of all two digit numbers that are divisible by 5 is _____.

- (A) 33.5
- (B) 55.5
- (C) 52.5
- (D) 40.5

Correct Answer: (C) 52.5

SOLUTION:

Number of terms $n = \frac{95-10}{5} + 1 = 18$.

Sum of terms $= \frac{n}{2}(\text{first} + \text{last}) = \frac{18}{2}(10 + 95) = 9 \times 105 = 945$.

Average $= \frac{945}{18} = 52.5$.

52.5

Quick Tip: For an AP, the average equals (first term + last term) divided by 2.

...

52. Which of the following fractions is greater than $3/4$ and less than $5/6$?

- (A) $4/5$
- (B) $3/5$
- (C) $7/5$
- (D) $6/5$

Correct Answer: (A) $4/5$

SOLUTION:

Take a common denominator of 60 for the two given fractions: $3/4 = 45/60$, $5/6 = 50/60$.

Check the options on the same denominator: $4/5 = 48/60$, $3/5 = 36/60$, $7/5 = 84/60$, $6/5 = 72/60$.

Only $48/60$ lies strictly between $45/60$ and $50/60$.

$4/5$

Quick Tip: Convert all fractions to a common denominator or decimal form to compare.

• • •

53. If an object travels at 10 feet per second, how many feet does it travel in one hour?

- (A) 50000
- (B) 75000
- (C) 36000
- (D) 60000

Correct Answer: (C) 36000

SOLUTION:

Convert the speed step by step: $10 \text{ ft/s} \times 60 \text{ s/min} = 600 \text{ ft/min}$.
 $600 \text{ ft/min} \times 60 \text{ min/hr} = 36000 \text{ ft/hr}$.

36000 feet

Quick Tip: Multiply speed by the number of seconds in an hour.

• • •

54. A vertical object 20 cm long casts a shadow 7 cm long on the ground. At the same time a pole casts a shadow 30 m long on the ground. Then find the approximate height of the pole.

- (A) 60 m
- (B) 85 m
- (C) 92 m
- (D) 70 m

Correct Answer: (B) 85 m

SOLUTION:

Similar triangles give the same height to shadow ratio for the object and the pole.

Set up a direct proportion: pole height = $30 \times \frac{20}{7}$.

$30 \times \frac{20}{7} = \frac{600}{7} = 85.71$ m, which rounds to about 85 m.

85 m

Quick Tip: Height and shadow length are proportional for objects measured at the same time.

• • •

55. Find the odd one out in the numbers 31, 41, 61, 71, 91, 101, 111.

- (A) 31
- (B) 71
- (C) 91
- (D) 101

Correct Answer: (C) 91

SOLUTION:

List the given options: 31, 71, 91, 101.

Test each for small prime factors: 31 and 71 have no factors besides 1 and themselves, and 101 is also prime.

91 divides evenly by 7, since $91 = 7 \times 13$, so it fails the prime test.

The number breaking the all prime pattern is 91.

91

Quick Tip: Check which of the listed numbers is not a prime number.

• • •

56. A, B, C rent an establishment for their different jobs. A puts 10 workers for 7 months, B puts 12 workers for 5 months and C puts 15 workers for 3 months for preparing jobs. If the rent of the establishment is Rs. 17500, how much must C pay as his share of rent?

- (A) 4500
- (B) 5500
- (C) 5000
- (D) 7000

Correct Answer: (A) 4500

SOLUTION:

Find the rent charged per unit of work first.

Total work units = $70 + 60 + 45 = 175$.

Rent per unit = $\frac{17500}{175} = 100$.

C contributed 45 units, so C's share = $45 \times 100 = 4500$.

Rs.4500

Quick Tip: Share of rent is proportional to workers multiplied by months.

• • •

57. The ratio of the present ages of P and Q is 3:4. Five years ago, the ratio of their ages was 5:7. Find their present ages.

- (A) 30 and 40 years
- (B) 24 and 32 years
- (C) 12 and 16 years
- (D) 18 and 24 years

Correct Answer: (A) 30 and 40 years

SOLUTION:

Check each option by testing the ratio five years ago.

For 30 and 40, ages five years back were 25 and 35, and $25/35 = 5/7$.

This matches the given condition.

For 24 and 32, five years back the ratio is $19/27$, not $5/7$.

For 12 and 16, the ratio is $7/11$, not $5/7$.

For 18 and 24, the ratio is $13/19$, not $5/7$.

Only the first pair works.

30 and 40 years

Quick Tip: Set present ages as $3k$ and $4k$, then use the five-years-ago ratio to find k .

• • •

58. A man sitting in a train which is traveling at 40 kmph observes that a goods train, traveling in opposite direction, takes 9 seconds to pass him. If the goods train is 270 m long, find its speed.

- (A) 64
- (B) 68
- (C) 70
- (D) 72

Correct Answer: (B) 68

SOLUTION:

The goods train covers its own length of 270 m relative to the man in 9 seconds.

$$\text{Relative speed} = \frac{270}{9} \text{ m/s} = 30 \text{ m/s.}$$

Multiply by $\frac{18}{5}$ to convert m/s into km/h: $30 \times \frac{18}{5} = 108 \text{ km/h.}$

Since the man's train and the goods train move toward each other, this relative speed equals the sum of the two speeds: $40 + v = 108.$

$$\boxed{v = 68 \text{ km/h}}$$

Quick Tip: Relative speed of trains moving in opposite directions is the sum of their speeds.

• • •

59. 40 men took a dip in a water tank 30 m long and 20 m broad on a religious day. If the average displacement of water by a man is 4 cu.m, then the approximate rise in the water level in the tank will be .

- (A) 40 cm
- (B) 36 cm
- (C) 27 cm
- (D) 22 cm

Correct Answer: (C) 27 cm

SOLUTION:

Total displaced volume is $40 \times 4 = 160$ cubic metres, spread uniformly over the tank base of $30 \times 20 = 600$ square metres.

The extra height of water equals volume divided by base area: h
 $= \frac{160}{600} \text{ m} = \frac{4}{15} \text{ m}.$

Multiplying by 100 converts metres to centimetres: $\frac{4}{15} \times 100 \approx 26.7$ cm, which rounds to 27 cm.

27 cm

Quick Tip: Divide the total volume of water displaced by the base area of the tank.

• • •

60. Which of the following is true:

- (A) Integers from 0 to infinity are called whole numbers.
- (B) An integer always has to be positive.
- (C) 91 is a prime number.
- (D) All natural numbers, whole numbers and integers are rational numbers.

Choose the correct answer from the options given below:

- (A) (A) and (D) only.
- (B) (A), (B) and (D) only.
- (C) (A), (B), (C) and (D).
- (D) (B), (C) and (D) only.

Correct Answer: (A) (A) and (D) only.

SOLUTION:

Check each statement and eliminate the false ones.

Statement (B) fails immediately because integers such as -5 exist, so any option containing (B) can be dropped.

Statement (C) fails because $91 = 7 \times 13$ is composite, not prime, so any option containing (C) can be dropped.

That leaves only the option built from (A) and (D). Statement (A) matches the standard definition of whole numbers, and (D) holds because every integer n can be written as $n/1$, a rational number.

(A) and (D) only

Quick Tip: Check each statement against the definitions of whole numbers, integers and prime numbers.

• • •

61. Which of the following is not true:

- (A) Zero is a prime number.
- (B) One is an integer.
- (C) 31 is a whole number but not a prime number.
- (D) -31 is an integer but not a whole number.

Choose the correct answer from the options given below:

- (A) (A) and (C) only.
- (B) (A), (B) and (D) only.
- (C) (B), (C) and (D) only.
- (D) (C) and (D) only.

Correct Answer: (A) (A) and (C) only.

SOLUTION:

Test each option for its truth value directly.

(A) claims zero is prime. A prime number has exactly two distinct positive divisors, and zero has infinitely many divisors, so (A) is false.

(B) claims one is an integer, which is correct, so (B) is a true statement.

(C) claims 31 is a whole number but not prime. Since 31 has no divisors other than 1 and 31, it is prime, so the second half of (C) is wrong, making the whole statement false.

(D) claims -31 is an integer but not a whole number. Whole numbers start from 0 and go upward, so a negative number cannot be whole, so (D) is fully correct.

Only (A) and (C) turn out false, so those are the ones that are not true.

(A) and (C) only

Quick Tip: Zero is not prime, and 31 is itself a prime number.

• • •

62. Salaries of Ankita and Ishita are in the ratio 2:3. If the salary of each is increased by Rs. 4000, the new ratio becomes 40:57. What is Ishita's salary?

- (A) 37000
- (B) 38000
- (C) 46800
- (D) 36700

Correct Answer: (B) 38000

SOLUTION:

Try each option as Ishita's final salary and check whether removing the raise gives back a clean 2 : 3 ratio.

If Ishita's final salary is 38000, her original salary was $38000 - 4000 = 34000$.

Using the final ratio 40 : 57, Ankita's final salary is $38000 \times \frac{40}{57} \approx 26667$, so her original salary was about 22667.

Checking 22667 : 34000, this reduces to almost exactly 2 : 3, confirming the given original ratio.

None of the other options reduce back to a clean 2 : 3 ratio after removing the Rs 4000 raise.

Rs.38000

Quick Tip: Set salaries as 2k and 3k, then use the new ratio after the Rs 4000 increase.

...

63. A man went downstream for 28 km in a motor boat and immediately returned. It took the man twice as long to make the return trip. If the speed of the river flow were twice as high, the trip downstream and back would take 672 minutes. Find the speed of the boat in still water and the speed of the river flow.

- (A) 12 km/hr, 3 km/hr
- (B) 9 km/hr, 3 km/hr
- (C) 8 km/hr, 2 km/hr
- (D) 9 km/hr, 6 km/hr

Correct Answer: (B) 9 km/hr, 3 km/hr

SOLUTION:

Check option 2 directly: boat speed $b = 9$ km/h, stream speed $s = 3$ km/h.

Original downstream speed is $9 + 3 = 12$ km/h and upstream speed is $9 - 3 = 6$ km/h. Time for 28 km upstream is $28/6$ hours and downstream is $28/12$ hours, and $28/6$ is exactly twice $28/12$, so the first condition holds.

Now double the stream speed to 6 km/h. New downstream speed is $9 + 6 = 15$ km/h and new upstream speed is $9 - 6 = 3$ km/h.

Total time = $\frac{28}{15} + \frac{28}{3}$ hours = $1.867 + 9.333 = 11.2$ hours = 672 minutes, matching the given condition exactly.

9 km/hr boat speed, 3 km/hr stream speed

Quick Tip: First use the time relation to link boat and stream speed, then apply the doubled stream speed condition.



64. If $1.5x = 0.04y$, then the value of $\frac{y-x}{y+x}$ is:

- (A) $73/77$
- (B) $7.3/77$
- (C) $730/77$
- (D) $7300/77$

Correct Answer: (A) $73/77$

SOLUTION:

Divide both sides of $1.5x = 0.04y$ by y to get $\frac{x}{y} = \frac{0.04}{1.5} = \frac{2}{75}$.

Write the target expression in terms of this single ratio by dividing numerator and denominator of $\frac{y-x}{y+x}$ by y : $\frac{1-x/y}{1+x/y}$.

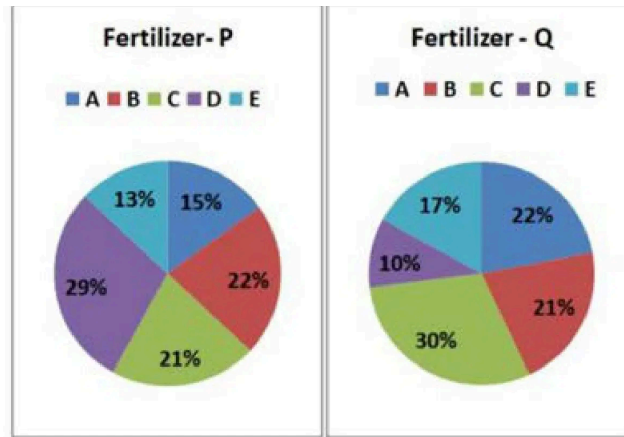
Substitute $x/y = 2/75$: $\frac{1-2/75}{1+2/75} = \frac{73/75}{77/75} = \frac{73}{77}$.

$$\boxed{\frac{73}{77}}$$

Quick Tip: Find x/y from the given equation, then substitute into $(y-x)/(y+x)$.

...

65. The following charts show the sales share of five companies (A, B, C, D and E) for two fertilizer products, Fertilizer-P and Fertilizer-Q. The Fertilizer-P sale of company C is 2520 Kg and the Fertilizer-Q sale of company B is 3150 Kg.



What percentage of sales of fertilizer-Q from company C is to total sales of Fertilizer-P?

- (A) 33.5
- (B) 39.67
- (C) 57.85
- (D) 37.5

Correct Answer: (D) 37.5

SOLUTION:

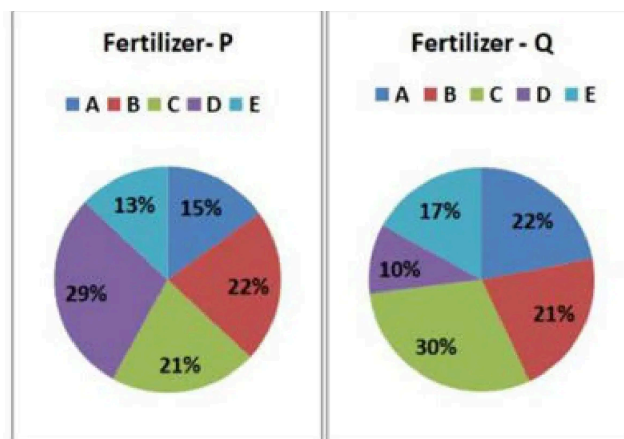
Start by fixing both chart totals from the two clues given. Company C's 21% share of Fertilizer-P equals 2520 Kg, which gives total Fertilizer-P as $2520/0.21 = 12000$ Kg. Company B's 21% share of Fertilizer-Q equals 3150 Kg, which gives total Fertilizer-Q as $3150/0.21 = 15000$ Kg. Company C's share in the Fertilizer-Q chart is 30%, so its actual sale is $0.30 \times 15000 = 4500$ Kg. Comparing this against the Fertilizer-P total:

$$\frac{4500}{12000} \times 100 = 37.5.$$

Quick Tip: First find both chart totals using the given absolute values, then compute company C's Fertilizer-Q sale and compare it to the Fertilizer-P total.

• • •

66. The following charts show the sales share of five companies (A, B, C, D and E) for two fertilizer products, Fertilizer-P and Fertilizer-Q. The Fertilizer-P sale of company C is 2520 Kg and the Fertilizer-Q sale of company B is 3150 Kg.



What is the difference between Fertilizer-P sales from company A, B and C together and total sales of Fertilizer-Q from company C, D and E?

- (A) 1590
- (B) 2190
- (C) 1890
- (D) 1770

Correct Answer: (A) 1590

SOLUTION:

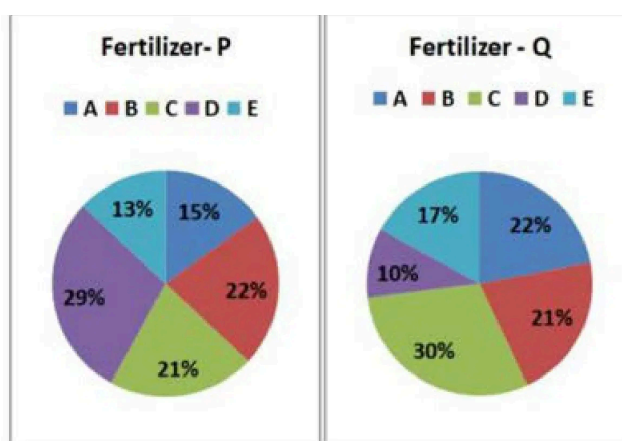
Work out each group's share directly as a fraction of its chart before converting to weight. Group A+B+C on the Fertilizer-P chart covers $15 + 22 + 21 = 58$ percent, and since total Fertilizer-P is $2520/0.21 = 12000$ Kg, this group sells $0.58 \times 12000 = 6960$ Kg. Group C+D+E on the Fertilizer-Q chart covers $30 + 10 + 17 = 57$ percent, and since total Fertilizer-Q is $3150/0.21 = 15000$ Kg, this group sells $0.57 \times 15000 = 8550$ Kg. The gap between the two groups is $8550 - 6960 = 1590$ Kg.

1590

Quick Tip: Add the relevant percentage shares for each group first, then convert both to Kg using the two chart totals and subtract.

...

67. The following charts show the sales share of five companies (A, B, C, D and E) for two fertilizer products, Fertilizer-P and Fertilizer-Q. The Fertilizer-P sale of company C is 2520 Kg and the Fertilizer-Q sale of company B is 3150 Kg.



The sale of Fertilizer-Q from company E is what percent of sales of Fertilizer-P from company A and B together?

- (A) 45.25
- (B) 36.33
- (C) 57.40
- (D) 26.50

Correct Answer: (C) 57.40

SOLUTION:

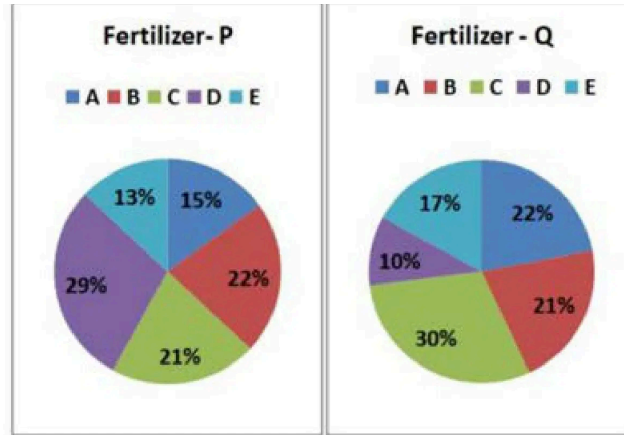
Set up the two quantities separately before comparing them. Company E's Fertilizer-Q sale is $0.17 \times (3150/0.21) = 0.17 \times 15000 = 2550$ Kg. Company A and B combined on Fertilizer-P is $(0.15 + 0.22) \times (2520/0.21) = 0.37 \times 12000 = 4440$ Kg. The ratio of E's Fertilizer-Q sale to this combined Fertilizer-P sale is $\frac{2550}{4440} \times 100 \approx 57.4$.

57.40

Quick Tip: Find company E's Fertilizer-Q sale and the combined A+B Fertilizer-P sale in Kg first, then take the ratio.

...

68. The following charts show the sales share of five companies (A, B, C, D and E) for two fertilizer products, Fertilizer-P and Fertilizer-Q. The Fertilizer-P sale of company C is 2520 Kg and the Fertilizer-Q sale of company B is 3150 Kg.



How many companies have higher Fertilizer-Q sales than the average sales of Fertilizer-P from the 5 companies?

- (A) 5
- (B) 3
- (C) 4
- (D) 2

Correct Answer: (C) 4

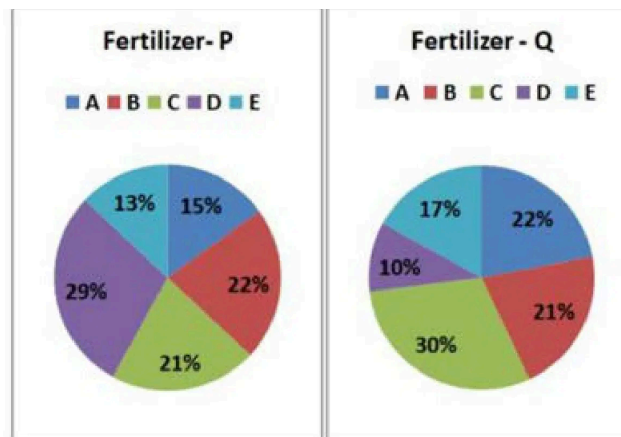
SOLUTION:

First fix the benchmark, then check each company against it. The benchmark is the average Fertilizer-P sale: total Fertilizer-P is $2520/0.21 = 12000$ Kg, so the average per company is $12000/5 = 2400$ Kg. Now list each company's actual Fertilizer-Q sale using total Fertilizer-Q = $3150/0.21 = 15000$ Kg: A gives $0.22 \times 15000 = 3300$, B gives $0.21 \times 15000 = 3150$, C gives $0.30 \times 15000 = 4500$, D gives $0.10 \times 15000 = 1500$, E gives $0.17 \times 15000 = 2550$. Checking each against 2400: A, B, C and E all cross it, only D falls short.

Quick Tip: Compute the average Fertilizer-P sale as a single benchmark number, then check each company's Fertilizer-Q sale against that number.

...

69. The following charts show the sales share of five companies (A, B, C, D and E) for two fertilizer products, Fertilizer-P and Fertilizer-Q. The Fertilizer-P sale of company C is 2520 Kg and the Fertilizer-Q sale of company B is 3150 Kg.



In the year 2021, if the price of Fertilizer-P was Rs 320 per Kg and Fertilizer-Q was Rs 280 per Kg for all companies, what was the fertilizer sales revenue from company E in Rs?

- (A) 1213200
- (B) 1854200
- (C) 2246300
- (D) 1965200

Correct Answer: (A) 1213200

SOLUTION:

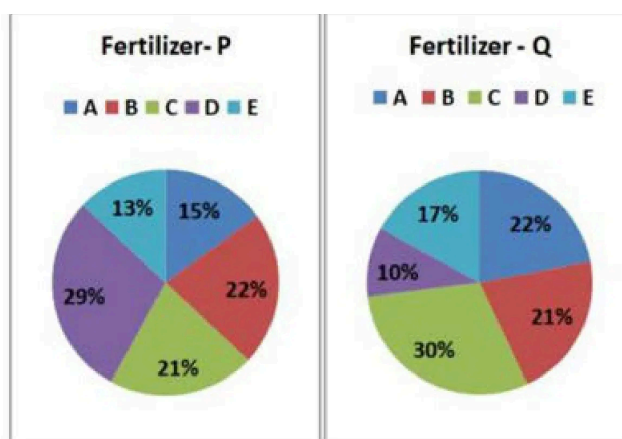
Treat the two products as two separate income streams for company E and add them at the end. Company E's Fertilizer-P quantity is $0.13 \times 12000 = 1560$ Kg, earning $1560 \times 320 = 499200$ rupees at the given rate. Company E's Fertilizer-Q quantity is $0.17 \times 15000 = 2550$ Kg, earning $2550 \times 280 = 714000$ rupees at its rate. Adding both streams gives the total revenue from company E: $499200 + 714000 = 1213200$.

Rs 1213200

Quick Tip: Find company E's quantity in each product separately, multiply each by its own price, then add the two revenues.

...

70. The following charts show the sales share of five companies (A, B, C, D and E) for two fertilizer products, Fertilizer-P and Fertilizer-Q. The Fertilizer-P sale of company C is 2520 Kg and the Fertilizer-Q sale of company B is 3150 Kg.



If all companies decided to increase the price of both fertilizers by Rs 20 in 2022, what will be the difference of both fertilizer sales in terms of Rs for company B?

- (A) 44500
- (B) 47400
- (C) 54600
- (D) 32568

Correct Answer: (B) 47400

SOLUTION:

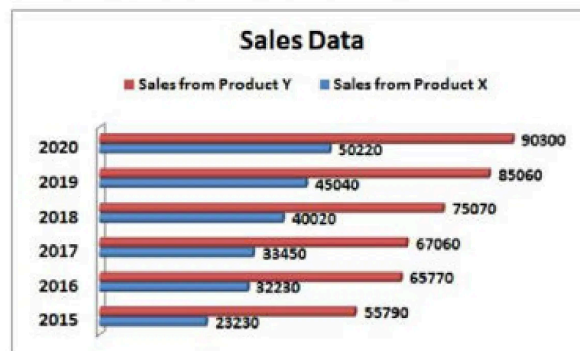
Update both prices first, then compute company B's two revenues and subtract. The 2022 prices become $320 + 20 = 340$ for Fertilizer-P and $280 + 20 = 300$ for Fertilizer-Q. Company B's Fertilizer-P quantity is $0.22 \times 12000 = 2640$ Kg, giving revenue $2640 \times 340 = 897600$. Company B's Fertilizer-Q quantity is $0.21 \times 15000 = 3150$ Kg, giving revenue $3150 \times 300 = 945000$. The difference between the two revenues is $945000 - 897600 = 47400$.

Rs 47400

Quick Tip: Add Rs 20 to each price first, then compute company B's revenue for each fertilizer separately and subtract.

...

71. The following graph shows sales data of two products X and Y from 2015 to 2020 in Kgs. Study the graph of sales data carefully and answer the questions given below:



What is the percentage sales from product X in 2015 to the sales from product Y in 2020?

- (A) 25.72
- (B) 41.63
- (C) 46.26
- (D) 72.00

Correct Answer: (A) 25.72

SOLUTION:

Step 1: Use a unitary method instead of direct division. Sales of Y in 2020 is 90300 kg, so 1 percent of it is $90300/100 = 903$ kg.

Step 2: Divide the sales of X in 2015 by this unit value: $23230/903 \approx 25.72$.

Step 3: So the sales of X in 2015 form about 25.72 percent of the sales of Y in 2020.

25.72

Quick Tip: Divide sales of X in 2015 by sales of Y in 2020, then multiply by 100.

• • •

72. The following graph shows sales data of two products X and Y from 2015 to 2020 in Kgs. Study the graph of sales data carefully and answer the questions given below:



The sales of product X in 2018 are what percent of the total sales from both products together in the same year?

- (A) 17.85
- (B) 9.12
- (C) 53.33
- (D) 34.77

Correct Answer: (D) 34.77

SOLUTION:

Step 1: Find the share of Y first instead of X. Total sales in 2018 = $40020 + 75070 = 115090$ kg.

Step 2: Share of Y = $75070/115090 \times 100 \approx 65.23\%$.

Step 3: Since X and Y together make up the whole, share of X = $100 - 65.23 = 34.77\%$.

34.77

Quick Tip: Add the two 2018 values for the total, then find what share X contributes.

...

73. The following graph shows sales data of two products X and Y from 2015 to 2020 in Kgs. Study the graph of sales data carefully and answer the questions given below:



In the year 2021, the company expects to have average sales of product Y based on the 2015 to 2020 data. If the company keeps a price of Rs. 26 per Kg for product Y, what will be the revenue generated from product Y in the year 2021?

- (A) Rs. 1902550
- (B) Rs. 2202550
- (C) Rs. 2102650
- (D) Rs. 1803650

Correct Answer: (A) Rs. 1902550

SOLUTION:

Step 1: Instead of averaging first, multiply the total sales of Y across all six years by the price, then divide by the number of years. Total sales of Y = 439050 kg.

Step 2: Total value at the given rate = $439050 \times 26 = 11415300$.

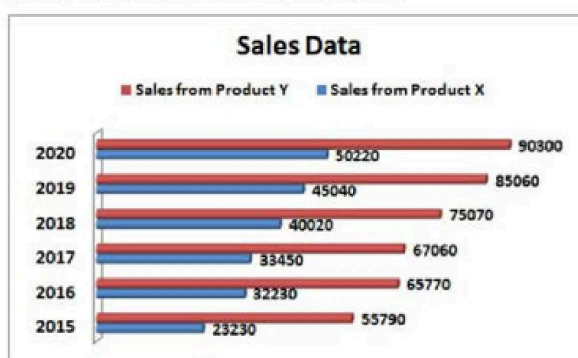
Step 3: Dividing by 6 years gives the expected 2021 revenue:
 $11415300/6 = 1902550$.

Rs. 1902550

Quick Tip: Average the six years of Y sales first, then multiply by the price per kg.

...

74. The following graph shows sales data of two products X and Y from 2015 to 2020 in Kgs. Study the graph of sales data carefully and answer the questions given below:



In how many years is the sales of product X higher than 45 percent of the average sales of product Y?

- (A) 5
- (B) 4
- (C) 6
- (D) 3

Correct Answer: (B) 4

SOLUTION:

Step 1: Instead of finding the average first, work with the total. Total sales of Y over 6 years = 439050 kg.

Step 2: The threshold is 45 percent of the average, so scale the total directly: $0.45 \times 439050/6 = 197572.5/6 = 32928.75$ kg.

Step 3: Check each year's X value against this threshold: only 2015 (23230) and 2016 (32230) fall below it; the remaining four years, 2017 through 2020, exceed it.

4

Quick Tip: Find 45 percent of the average Y sales, then count how many years X beats that number.

...

75. The following graph shows sales data of two products X and Y from 2015 to 2020 in Kgs. Study the graph of sales data carefully and answer the questions given below:



Which of the following has the highest sales difference over the previous year?

- (A) Product Y in 2016
- (B) Product X in 2016
- (C) Product X in 2018
- (D) Product Y in 2018

Correct Answer: (A) Product Y in 2016

SOLUTION:

Step 1: Instead of computing all four values first, eliminate options by pairwise comparison. Product Y in 2016 gives $65770 - 55790 = 9980$ and Product X in 2016 gives $32230 - 23230 = 9000$; since $9980 > 9000$, drop Product X in 2016.

Step 2: Product X in 2018 gives $40020 - 33450 = 6570$, which is less than 9980, so drop this option too.

Step 3: Product Y in 2018 gives $75070 - 67060 = 8010$, still less than 9980, so it is dropped as well.

Step 4: The only option surviving every comparison is Product Y in 2016.

Product Y in 2016

Quick Tip: Subtract each year's value from the previous year for all four listed options and compare.

• • •

76. Choose the option closest in meaning to the word Bamboozled.

- (A) Amused
- (B) Deceived
- (C) Perilous
- (D) Gloomy

Correct Answer: (B) Deceived

SOLUTION:

Step 1: Look at where the word comes from. To bamboozle someone is to hoodwink or cheat them by confusing their judgment.

Step 2: Rule out the options one by one. Amused describes a pleasant feeling, not trickery. Perilous describes danger, not deception. Gloomy describes a low mood, not deception.

Step 3: The word left standing, Deceived, is the only one built on the idea of being cheated or misled, which is exactly what bamboozled means.

Deceived

Quick Tip: Think of a word for being tricked or fooled, not a mood or a danger.



77. Choose the option closest in meaning to the word Malarkey.

- (A) Foolishness
- (B) Intelligent
- (C) Pleasing
- (D) Puzzled

Correct Answer: (A) Foolishness

SOLUTION:

Step 1: Malarkey is commonly used in speech such as that is just malarkey, meaning that is nonsense.

Step 2: Check each option against this sense. Intelligent is the opposite quality. Pleasing describes something agreeable, not silly. Puzzled describes a state of confusion in a person, not the quality of the talk itself.

Step 3: Foolishness directly captures the silly, senseless quality that malarkey describes.

Foolishness

Quick Tip: Malarkey is slang for nonsense talk.

• • •

78. Choose the option closest in meaning to the word Epoch.

- (A) Neutral
- (B) Turning Point
- (C) Early
- (D) Time Point

Correct Answer: (B) Turning Point

SOLUTION:

Step 1: Recall the everyday phrase epoch-making, which describes an event so important that it starts a new era.

Step 2: Eliminate the weaker options first. Neutral has nothing to do

with time, so it is out. Early only refers to timing, not significance.

Step 3: Between Time Point and Turning Point, Time Point ignores the weight of importance that epoch carries, while Turning Point keeps that sense of a defining, significant moment.

Turning Point

Quick Tip: Epoch is linked to epoch-making, a phrase for a defining moment.

• • •

79. Which among the following is NOT a synonym of the word Synergy?

- (A) Cooperation
- (B) Shared
- (C) Discord
- (D) Conjunct

Correct Answer: (C) Discord

SOLUTION:

Step 1: Focus on the core idea behind synergy, which is unity of action, several parts pulling in the same direction.

Step 2: Cooperation clearly matches this, Shared matches the joint nature of the effort, and Conjunct means joined together, so all three fit.

Step 3: Discord describes clashing or being at odds, the reverse of a synergetic relationship, making it the odd one out.

Discord

Quick Tip: Synergy is about working together; find the word that means the opposite.

• • •

80. Which among the following is NOT a synonym of the word eccentricity?

- (A) Anomaly
- (B) Queerness
- (C) Sameness
- (D) Foible

Correct Answer: (C) Sameness

SOLUTION:

Step 1: Picture eccentricity as anything that breaks from the usual pattern of behavior.

Step 2: Anomaly is literally a departure from the normal, Queerness is plain oddness, and Foible is a minor personal quirk, all consistent with this picture.

Step 3: Sameness describes conformity and consistency, the exact reverse of being eccentric, so it stands apart from the rest.

Sameness

Quick Tip: Eccentricity means oddness; look for the word meaning uniformity instead.

• • •

81. Which among the following is NOT a synonym of the word Validate?

- (A) Examine
- (B) Disprove
- (C) Dig out
- (D) Exhume

Correct Answer: (B) Disprove

SOLUTION:

Step 1: Think of validate as the act of establishing that a claim holds up after close checking.

Step 2: Examine fits directly since it means to inspect carefully, and Dig out and Exhume both carry the sense of uncovering something in order to verify it.

Step 3: Disprove works against a claim rather than confirming it, so its meaning is opposite to validate, not similar.

Disprove

Quick Tip: Validate means to confirm as true; find the word that means to prove false instead.

...

82. Amit has tried his best to the brand image of his company by projecting it as a pro-consumer.

- (A) Praise
- (B) Insinuate
- (C) Refurbish
- (D) Hamper

Correct Answer: (C) Refurbish

SOLUTION:

Step 1: Read the sentence for the underlying action: Amit is repositioning his company as pro-consumer, which is an act of renewal.

Step 2: Praise only expresses approval, it does not involve any change to the image. Insinuate suggests something indirectly, often with a negative undertone, so it does not fit a positive rebranding effort.

Hamper means to obstruct progress, which contradicts trying his best.

Step 3: Refurbish, meaning to update and improve the look or appeal of something, is the only word that matches an active effort to reshape a brand image.

Refurbish

Quick Tip: Look for a word meaning to renovate or freshen up an image.

• • •

83. Ravesh is not feeling well so he.

- (A) Only drinks water
- (B) Drinks only water
- (C) Drinks alone water
- (D) Drinks water only

Correct Answer: (B) Drinks only water

SOLUTION:

Step 1: A simple test for placing only is to ask what exactly is being restricted, in this sentence it is the drink itself, water, and nothing besides it.

Step 2: Rule out Drinks alone water first, since alone is not grammatically used this way. Then compare Only drinks water, which wrongly suggests drinking is the only activity he does, against the two remaining options.

Step 3: Placing only right before the word it limits is the standard rule, so Drinks only water reads most naturally and states clearly that water is the sole thing he drinks.

Drinks only water

Quick Tip: Place only directly before the word it is meant to restrict.

...

84. is a dangerous thing.

- (A) A little knowledge
- (B) Little knowledge
- (C) The little knowledge
- (D) A little learning

Correct Answer: (D) A little learning

SOLUTION:

Step 1: Read the blank as the subject of a well known saying about the danger of insufficient learning. **Step 2:** Test each option: "knowledge" (options 1-3) is a widespread misquote in everyday speech, but the poet Alexander Pope actually wrote "learning," not

"knowledge." **Step 3:** Only option 4, "A little learning," matches the authentic wording of the quotation.

A little learning is a dangerous thing

Quick Tip: Recall the exact wording of Alexander Pope's famous line about learning.

...

85. The customers would with him over the price.

- (A) Resolve
- (B) Haggle
- (C) Defer
- (D) Confine

Correct Answer: (B) Haggle

SOLUTION:

Step 1: Eliminate options that do not collocate with "price." "Resolve with someone over the price" is not standard usage. **Step 2:** "Defer" means to postpone or yield, and "confine" means to restrict, neither fits a price discussion. **Step 3:** "Haggle over the price" is a fixed, natural collocation meaning to bargain.

Haggle

Quick Tip: Think of the word that means to bargain over cost.

...

86. The soldiers were instructed to restraint and handle the situation peacefully.

- (A) Enforce
- (B) Remain
- (C) Maintain
- (D) Exercise

Correct Answer: (D) Exercise

SOLUTION:

Step 1: Check each verb against the noun "restraint." "Enforce restraint" and "maintain restraint" sound unnatural because these verbs pair with rules or discipline, not personal self-control. **Step 2:** "Remain restraint" is grammatically wrong since "remain" needs an adjective, not a noun. **Step 3:** The fixed expression "exercise restraint," meaning to hold oneself back, fits the sentence.

Exercise

Quick Tip: Which verb pairs naturally with "restraint" to mean self-control.

...

87. Don't take my words to heart.

- (A) by heart
- (B) in heart
- (C) at heart
- (D) no improvement needed

Correct Answer: (D) no improvement needed

SOLUTION:

Step 1: Test the alternatives: "by heart" belongs with "learn" or "know," not with "take." "In heart" is not an English idiom. "At heart" means fundamentally or deep down, which changes the meaning entirely. **Step 2:** None of these substitutes fit the intended sense of being emotionally affected by words. **Step 3:** The original phrase "take my words to heart" is idiomatically correct as it stands.

No improvement needed

Quick Tip: Recall the fixed idiom that means to be emotionally affected by words.

...

88. Casius and Brutes cooked a conspiracy to assassinate Caesar.

- (A) Prepared
- (B) Hatched
- (C) Made
- (D) no improvement needed

Correct Answer: (B) Hatched

SOLUTION:

Step 1: Look for the fixed expression that goes with "conspiracy." English uses "hatch a plot" or "hatch a conspiracy" to describe secretly devising a plan, drawing on the image of an egg hatching into something fully formed. **Step 2:** "Prepared a conspiracy" and "made a

conspiracy" are understandable but not natural collocations, and "cooked" is informal and imprecise here. **Step 3:** Replacing "cooked" with "hatched" gives the standard idiomatic phrase.

Hatched

Quick Tip: Which verb is the standard collocation with "a conspiracy" or "a plot."

• • •

89. Manak purchased the very good of all dresses in the shop.

- (A) the better
- (B) the very better
- (C) the best
- (D) no improvement needed

Correct Answer: (C) the best

SOLUTION:

Step 1: Identify the comparison scope: "of all dresses in the shop" signals more than two items, which always calls for a superlative form.

Step 2: Eliminate "the better" and "the very better," both comparative forms meant for exactly two items being compared. **Step 3:** "The very good" is simply the positive degree with an intensifier and cannot express a comparison at all. **Step 4:** Only "the best" correctly expresses that this dress surpasses all the others in the group.

the best

Quick Tip: Comparing among many items needs the superlative degree, not the comparative.

• • •

90. The writer was sad because the world had not become prosperous.

- (A) Has not become
- (B) Had not become
- (C) Have not become
- (D) No improvement needed

Correct Answer: (B) Had not become

SOLUTION:

Step 1: Recall the three forms of the verb: become, became, become. The past participle is identical to the base form. **Step 2:** The sentence needs the past perfect tense because it explains the reason behind an earlier state of sadness, so the auxiliary "had" is appropriate rather than "has" or "have." **Step 3:** Combining the correct auxiliary with the correct participle rules out "had not became," since "became" can never follow an auxiliary verb. **Step 4:** The fix is "had not become."

Had not become

Quick Tip: After "had," the verb must be in its past participle form, not the simple past.

• • •

91. Only rural development can rise the standard of living in villages.

- (A) Raised
- (B) Raise
- (C) Raising
- (D) no improvement needed

Correct Answer: (B) Raise

SOLUTION:

Step 1: Check whether the verb after "can" needs an object. Here "the standard of living" is a direct object, so the verb must be transitive.

Step 2: "Rise" never takes an object, since things rise by themselves, while "raise" is used to lift or increase something else. **Step 3:** Modal verbs like "can" are always followed by the base form, which rules out "raised" and "raising." **Step 4:** The correct word is "raise."

Raise

Quick Tip: Distinguish the intransitive verb "rise" from the transitive verb "raise."

...

92.

Read the following passage carefully and answer the question given below.

According to Paul Freet, an entrepreneur, business is a repeatable process that makes money. This process is an interlinked network of activities involving different sets of skills and knowledge. Broadly speaking, these activities spread over five different areas of operation, i.e. value creation, marketing, sales, value delivery and finance. Each of these activities demands a definite set of skills which are economically viable. In a business arena, not every activity contributes to economic viability; some exist for enjoyment or relaxation, so that motivation for work remains consistent and performance driven. Motivation is an important parameter for maintaining human drives at social and professional levels. Abraham Maslow, one of the finest American psychologists, attempted to define human motivation with his theory of "hierarchy of needs" in 1943. His theory advocated that human motives progress through five stages, i.e. physiological, safety, belongingness, esteem and self-actualization. He categorized physiological and safety as lower needs, and self-actualization as a higher order need with a thrust on the cognitive framework. He also coined the term Metamotivation for self-actualized individuals. Maslow's need hierarchy strongly advocated fulfillment of lower level needs prior to the higher ones. For further inclusive understanding, Clayton Alderfer propounded the ERG Theory of Motivation. His theory revolved around three components, i.e. Existence, Relatedness and Growth. Alderfer merged physiological and safety needs into one category, i.e. existence needs, merged social needs and esteem needs into relatedness, and treated self-actualization as growth need. Both ERG and need hierarchy theory provide a detailed basis for insights into motivation. Using these two fundamental theories, a large body of motivational research and literature has been developed over the years to define and describe human nature.

In recent times, Paul Lawrence and Nitin Nohria from Harvard Business School attempted to provide a renewed perspective by merging biological and social sciences to lay out a new theory on human nature. Their theory identified four core human drives, i.e. Drive to Acquire, Drive to Bond, Drive to Learn and Drive to Defend. There must also be a fifth drive in their theory, i.e. Drive to Feel, representing emotional and sensory stimulus. In the contemporary business world, new products and services are being developed to entice the sensory or emotional part of human nature.

Maslow advocated hierarchy of needs in .

- (A) 1945
- (B) 1943
- (C) 1950
- (D) 1963

Correct Answer: (B) 1943

SOLUTION:

Step 1: Maslow's original paper, "A Theory of Human Motivation," was published in the journal Psychological Review in the year 1943, which is the same year given in the passage.

Step 2: Checking the other years: 1945, 1950 and 1963 do not correspond to the publication of this theory, so they can be ruled out.

Step 3: 1943

Quick Tip: The exact year is stated in the passage itself, right after Maslow's name is introduced.



93.

Read the following passage carefully and answer the question given below.

According to Paul Freet, an entrepreneur, business is a repeatable process that makes money. This process is an interlinked network of activities involving different sets of skills and knowledge. Broadly speaking, these activities spread over five different areas of operation, i.e. value creation, marketing, sales, value delivery and finance. Each of these activities demands a definite set of skills which are economically viable. In a business arena, not every activity contributes to economic viability; some exist for enjoyment or relaxation, so that motivation for work remains consistent and performance driven. Motivation is an important parameter for maintaining human drives at social and professional levels. Abraham Maslow, one of the finest American psychologists, attempted to define human motivation with his theory of "hierarchy of needs" in 1943. His theory advocated that human motives progress through five stages, i.e. physiological, safety, belongingness, esteem and self-actualization. He categorized physiological and safety as lower needs, and self-actualization as a higher order need with a thrust on the cognitive framework. He also coined the term Metamotivation for self-actualized individuals. Maslow's need hierarchy strongly advocated fulfillment of lower level needs prior to the higher ones. For further inclusive understanding, Clayton Alderfer propounded the ERG Theory of Motivation. His theory revolved around three components, i.e. Existence, Relatedness and Growth. Alderfer merged physiological and safety needs into one category, i.e. existence needs, merged social needs and esteem needs into relatedness, and treated self-actualization as growth need. Both ERG and need hierarchy theory provide a detailed basis for insights into motivation. Using these two fundamental theories, a large body of motivational research and literature has been developed over the years to define and describe human nature.

In recent times, Paul Lawrence and Nitin Nohria from Harvard Business School attempted to provide a renewed perspective by merging biological and social sciences to lay out a new theory on human nature. Their theory identified four core human drives, i.e. Drive to Acquire, Drive to Bond, Drive to Learn and Drive to Defend. There must also be a fifth drive in their theory, i.e. Drive to Feel, representing emotional and sensory stimulus. In the contemporary business world, new products and services are being developed to entice the sensory or emotional part of human nature.

Which among the following is a major weakness of Maslow's theory?

- (A) It was based on psychological school of thought only
- (B) It lacked scientific validation
- (C) It focused only on five category of needs
- (D) No weakness given

Correct Answer: (B) It lacked scientific validation

SOLUTION:

Step 1: Instead of picking the weakness directly, check each option against what management scholars actually criticize about Maslow's model.

Step 2: Being a psychological theory (option 1) is simply its origin, not a defect. Having five need categories (option 3) is just its design, and many theories describe their structure this way without that being a flaw. Saying no weakness exists (option 4) contradicts decades of research questioning the rigid, universal ordering of needs.

Step 3: What remains is the genuine, repeatedly raised limitation: the hierarchy was never firmly proven through controlled, scientific

testing.

Step 4: It lacked scientific validation

Quick Tip: Think about what critics say is missing behind Maslow's theory, not what the theory describes.

...

94.

Read the following passage carefully and answer the question given below.

According to Paul Freet, an entrepreneur, business is a repeatable process that makes money. This process is an interlinked network of activities involving different sets of skills and knowledge. Broadly speaking, these activities spread over five different areas of operation, i.e. value creation, marketing, sales, value delivery and finance. Each of these activities demands a definite set of skills which are economically viable. In a business arena, not every activity contributes to economic viability; some exist for enjoyment or relaxation, so that motivation for work remains consistent and performance driven. Motivation is an important parameter for maintaining human drives at social and professional levels. Abraham Maslow, one of the finest American psychologists, attempted to define human motivation with his theory of "hierarchy of needs" in 1943. His theory advocated that human motives progress through five stages, i.e. physiological, safety, belongingness, esteem and self-actualization. He categorized physiological and safety as lower needs, and self-actualization as a higher order need with a thrust on the cognitive framework. He also coined the term Metamotivation for self-actualized individuals. Maslow's need hierarchy strongly advocated fulfillment of lower level needs prior to the higher ones. For further inclusive understanding, Clayton Alderfer propounded the ERG Theory of Motivation. His theory revolved around three components, i.e. Existence, Relatedness and Growth. Alderfer merged physiological and safety needs into one category, i.e. existence needs, merged social needs and esteem needs into relatedness, and treated self-actualization as growth need. Both ERG and need hierarchy theory provide a detailed basis for insights into motivation. Using these two fundamental theories, a large body of motivational research and literature has been developed over the years to define and describe human nature.

In recent times, Paul Lawrence and Nitin Nohria from Harvard Business School attempted to provide a renewed perspective by merging biological and social sciences to lay out a new theory on human nature. Their theory identified four core human drives, i.e. Drive to Acquire, Drive to Bond, Drive to Learn and Drive to Defend. There must also be a fifth drive in their theory, i.e. Drive to Feel, representing emotional and sensory stimulus. In the contemporary business world, new products and services are being developed to entice the sensory or emotional part of human nature.

Relatedness component of ERG is .

- (A) Merger of Social and Esteem needs
- (B) Merger of Physiological and Safety needs
- (C) Merger of Social and Security needs
- (D) Extension of Self Actualization need

Correct Answer: (A) Merger of Social and Esteem needs

SOLUTION:

Step 1: ERG theory has only three buckets for Maslow's five needs. Existence covers physiological and safety needs, and growth covers self-actualization, since these mappings are given directly in the passage.

Step 2: That leaves the two middle needs of Maslow's model, belongingness (social) and esteem, with nowhere to go except the third ERG bucket.

Step 3: By elimination, relatedness must be the bucket that absorbs social and esteem needs together.

Step 4: Merger of Social and Esteem needs

Quick Tip: Existence takes physiological and safety, growth takes self-actualization; relatedness takes what remains.



95.

Read the following passage carefully and answer the question given below.

According to Paul Freet, an entrepreneur, business is a repeatable process that makes money. This process is an interlinked network of activities involving different sets of skills and knowledge. Broadly speaking, these activities spread over five different areas of operation, i.e. value creation, marketing, sales, value delivery and finance. Each of these activities demands a definite set of skills which are economically viable. In a business arena, not every activity contributes to economic viability; some exist for enjoyment or relaxation, so that motivation for work remains consistent and performance driven. Motivation is an important parameter for maintaining human drives at social and professional levels. Abraham Maslow, one of the finest American psychologists, attempted to define human motivation with his theory of "hierarchy of needs" in 1943. His theory advocated that human motives progress through five stages, i.e. physiological, safety, belongingness, esteem and self-actualization. He categorized physiological and safety as lower needs, and self-actualization as a higher order need with a thrust on the cognitive framework. He also coined the term Metamotivation for self-actualized individuals. Maslow's need hierarchy strongly advocated fulfillment of lower level needs prior to the higher ones. For further inclusive understanding, Clayton Alderfer propounded the ERG Theory of Motivation. His theory revolved around three components, i.e. Existence, Relatedness and Growth. Alderfer merged physiological and safety needs into one category, i.e. existence needs, merged social needs and esteem needs into relatedness, and treated self-actualization as growth need. Both ERG and need hierarchy theory provide a detailed basis for insights into motivation. Using these two fundamental theories, a large body of motivational research and literature has been developed over the years to define and describe human nature.

In recent times, Paul Lawrence and Nitin Nohria from Harvard Business School attempted to provide a renewed perspective by merging biological and social sciences to lay out a new theory on human nature. Their theory identified four core human drives, i.e. Drive to Acquire, Drive to Bond, Drive to Learn and Drive to Defend. There must also be a fifth drive in their theory, i.e. Drive to Feel, representing emotional and sensory stimulus. In the contemporary business world, new products and services are being developed to entice the sensory or emotional part of human nature.

Which among the following is not part of Paul and Nitin's theory?

- (A) Drive to Bond
- (B) Drive to Feel
- (C) Drive to Defend
- (D) Drive to Acquire

Correct Answer: (B) Drive to Feel

SOLUTION:

Step 1: List the four drives the passage attributes directly to Paul Lawrence and Nitin Nohria: Acquire, Bond, Learn and Defend.

Step 2: Match each option against this list. Bond, Defend and Acquire all appear in it, so these are confirmed as part of the theory.

Step 3: Feel does not appear in the original list of four; the passage introduces it separately as a proposed additional drive, meaning it falls outside the original four-drive model.

Step 4: Drive to Feel

Quick Tip: The passage names only four original drives, then separately proposes one more.

...

96.

Read the following passage carefully and answer the question given below.

According to Paul Freet, an entrepreneur, business is a repeatable process that makes money. This process is an interlinked network of activities involving different sets of skills and knowledge. Broadly speaking, these activities spread over five different areas of operation, i.e. value creation, marketing, sales, value delivery and finance. Each of these activities demands a definite set of skills which are economically viable. In a business arena, not every activity contributes to economic viability; some exist for enjoyment or relaxation, so that motivation for work remains consistent and performance driven. Motivation is an important parameter for maintaining human drives at social and professional levels. Abraham Maslow, one of the finest American psychologists, attempted to define human motivation with his theory of "hierarchy of needs" in 1943. His theory advocated that human motives progress through five stages, i.e. physiological, safety, belongingness, esteem and self-actualization. He categorized physiological and safety as lower needs, and self-actualization as a higher order need with a thrust on the cognitive framework. He also coined the term Metamotivation for self-actualized individuals. Maslow's need hierarchy strongly advocated fulfillment of lower level needs prior to the higher ones. For further inclusive understanding, Clayton Alderfer propounded the ERG Theory of Motivation. His theory revolved around three components, i.e. Existence, Relatedness and Growth. Alderfer merged physiological and safety needs into one category, i.e. existence needs, merged social needs and esteem needs into relatedness, and treated self-actualization as growth need. Both ERG and need hierarchy theory provide a detailed basis for insights into motivation. Using these two fundamental theories, a large body of motivational research and literature has been developed over the years to define and describe human nature.

In recent times, Paul Lawrence and Nitin Nohria from Harvard Business School attempted to provide a renewed perspective by merging biological and social sciences to lay out a new theory on human nature. Their theory identified four core human drives, i.e. Drive to Acquire, Drive to Bond, Drive to Learn and Drive to Defend. There must also be a fifth drive in their theory, i.e. Drive to Feel, representing emotional and sensory stimulus. In the contemporary business world, new products and services are being developed to entice the sensory or emotional part of human nature.

Which of the following are related to metamotivation?

- (A) Fulfillment of lower order needs
- (B) Fulfillment of esteem & belonging needs
- (C) Fulfillment of Self-Actualization

Choose the **correct** answer from the options given below:

- (A) Only (A) and (B)
- (B) Only (B) and (C)
- (C) Only (A) and (C)
- (D) (A), (B) and (C)

Correct Answer: (D) (A), (B) and (C)

SOLUTION:

Step 1: Instead of judging (A), (B) and (C) one at a time, picture Maslow's pyramid as one continuous climb where no level can be skipped, exactly as the passage describes it.

Step 2: A metamotivated person sits at the very top of that climb, so by definition they have already cleared every rung below, the lower order needs of (A) and the esteem and belonging needs of (B), while

also standing on the self-actualization rung of (C).

Step 3: Removing any one of the three would break the chain the passage insists on, so none of them can be left out of the answer.

Step 4: (A), (B) and (C)

Quick Tip: Maslow's hierarchy must be climbed in full, in order, before self-actualization is reached.

...

97. Some dogs are rats. All cats are chairs. All rats are cats.

What can be concluded from the above given statements?

- (A) All dogs are cats
- (B) All cats are rats
- (C) All chairs are dogs
- (D) All rats are chairs

Choose the correct answer from the options given below:

- (A) Only (A) and (B) follow.
- (B) Only (B) follows.
- (C) Only (A) and (D) follow.
- (D) Only (D) follows.

Correct Answer: (D) Only (D) follows.

SOLUTION:

Draw the chain of sets step by step.

Rats $\subseteq$ Cats (all rats are cats), and Cats $\subseteq$ Chairs (all cats are chairs).

Combining these two universal statements gives Rats $\subseteq$ Chairs, meaning every rat is a chair. So conclusion (D) is certain.

Now check the others by testing possibility, not certainty. Dogs and

Rats only overlap partially (some dogs are rats), so we cannot place all dogs inside Cats, only some. So (A) is not forced.

Cats $\subseteq$ Chairs does not mean Chairs $\subseteq$ Cats, so (C) is false, and it also does not mean Cats $\subseteq$ Rats, so (B) is false.

Only one conclusion survives the test of certainty.

Only (D) follows

Quick Tip: Chain the two universal (All...are) statements first; that always gives a valid conclusion.

• • •

98. Statements: Some ships are boats. All boats are submarines. Some submarines are watches.

Conclusion:

- (A) Some watches are boats.
- (B) Some submarines are boats.
- (C) Some submarines are ships.
- (D) Some watches are ships.

Choose the correct answer from the options given below:

- (A) (A), (B), (C) and (D)
- (B) Only (B) and (C) follow.
- (C) Only (C) follows.
- (D) Only (D) follows.

Correct Answer: (B) Only (B) and (C) follow.

SOLUTION:

Use Venn circles instead of rules. Draw Submarines as a big circle. Boats is a smaller circle fully inside Submarines (all boats are submarines). Ships overlaps partly with Boats (some ships are boats), so Ships also touches the Submarines circle, giving submarines-ships overlap and submarines-boats overlap for certain. Watches is a separate circle that overlaps Submarines somewhere, but its position relative to Boats or Ships inside the Submarines circle is not fixed by the given data, since two different "some" overlaps inside the same big circle need not touch each other. So only the boats-submarines and ships-submarines links are guaranteed.

Only (B) and (C) follow

Quick Tip: Two particular (some) statements about the same middle term cannot be combined; only the chain through the universal statement is valid.

• • •

99. If in a certain language, MADRAS is coded as NBESBT, how is BOMBAY coded in that code?

- (A) CPNCBX
- (B) CPNCBZ
- (C) CPOCBZ
- (D) CQOCBZ

Correct Answer: (B) CPNCBZ

SOLUTION:

Assign each letter its alphabet position and check the difference with the code word.

M=13 to N=14, A=1 to B=2, D=4 to E=5, R=18 to S=19, A=1 to B=2, S=19 to T=20. Every position increases by exactly 1, confirming a uniform forward shift of one letter.

Now shift BOMBAY the same way: B=2 to 3=C, O=15 to 16=P, M=13 to 14=N, B=2 to 3=C, A=1 to 2=B, Y=25 to 26=Z.

Reading the new letters together gives the coded word.

BOMBAY → CPNCBZ

Quick Tip: Check the letter shift between corresponding letters of MADRAS and NBESBT, then apply it to BOMBAY.

• • •

100. If 'P **You can't use 'macro parameter character #' in math mode** B × D ?

- (A) Nephew
- (B) Grandson
- (C) Granddaughter
- (D) Cannot be determined

Correct Answer: (D) Cannot be determined

SOLUTION:

Build a small family tree from the code chain.

N is mother of A, so N sits one level above A. A is father of B, so B sits one level below A. B is sister of D, meaning B and D are siblings on the same level, both children of A and N.

This fixes N as the grandmother of D through A, which is a certain

fact. What is not fixed is the gender of D. The clue "B is sister of D" only tells us B is female; it says nothing about whether D is male or female.

Since the options split the answer into "Grandson" and "Granddaughter" as separate choices, and gender data is missing for D, neither can be picked with confidence.

Cannot be determined

Quick Tip: Trace N to A to B to D, then check whether D's gender is actually given anywhere.

• • •

101. Read the following instructions and answer the question:

Eleven friends M, N, O, P, Q, R, S, T, U, V and W are sitting in the first row of the stadium watching a cricket match.

- (A) T is to the immediate left of P and third to the right of U.
- (B) V is the immediate neighbour of M and N and third to the left of S.
- (C) M is the second to the right of Q, who is at one of the ends.
- (D) R is sitting next to the right of P and P is second to the right of O.

Who is sitting in the center of the row?

- (A) N
- (B) O
- (C) S
- (D) U

Correct Answer: (D) U

SOLUTION:

Step 1: Start with the block formed by clues (A) and (D). O, T, P and R must sit in four consecutive seats in that exact order (O, then T, then P, then R), since T is just left of P and R is just right of P, while O is two seats left of P. Also U sits three seats to the left of T, that is, four seats to the left of P.

Step 2: Try shifting this whole block along the row of 11 seats. If P sits at seat 10, the block occupies seats 6 (U), 8 (O), 9 (T), 10 (P) and 11 (R), leaving seats 1 to 5 and 7 for the rest. This is the only shift that avoids clashing with Q, who by clue (C) must sit at seat 1 with M automatically at seat 3.

Step 3: Clue (B) says V is sandwiched between M and N. Seat 4 is the only open seat next to M (seat 3) that also has a further open seat next to it (seat 5) for N, so $V = 4$ and $N = 5$. Since S sits three seats to the right of V, $S = 7$, which is open. That leaves only seat 2 for W.

Step 4: The complete seating from left to right is Q, W, M, V, N, U, S, O, T, P, R.

Counting eleven seats, the middle one is the 6th seat, occupied by U.

Center person = U

Quick Tip: Fix Q at the left end and M at seat 3 first, then slide the O-T-P-R block until it fits without clashing.

• • •

102. Read the following instructions and answer the question:

Eleven friends M, N, O, P, Q, R, S, T, U, V and W are sitting in the first row of the stadium watching a cricket match.

- (A) T is to the immediate left of P and third to the right of U.
- (B) V is the immediate neighbour of M and N and third to the left of S.
- (C) M is the second to the right of Q, who is at one of the ends.
- (D) R is sitting next to the right of P and P is second to the right of O.

Which of the following people are sitting to the right of S?

- (A) OTPQ
- (B) OTPR
- (C) UNVM
- (D) UOTPR

Correct Answer: (B) OTPR

SOLUTION:

Step 1: Rather than rebuilding the whole row from scratch, use the fixed block identified from clues (A) and (D): O, T, P, R always sit consecutively in that order, with U sitting four seats before P. Placing this block so it does not clash with Q (seat 1) and M (seat 3) forces P to seat 10, so O, T, P, R land on seats 8, 9, 10, 11.

Step 2: Clue (B) then places V at seat 4, N at seat 5, and S three seats after V, at seat 7, with W taking the last free seat, seat 2. So S is at seat 7, strictly before the O-T-P-R block.

Step 3: Everything sitting at a seat number greater than 7 is to the right of S. That is seats 8, 9, 10, 11, occupied by O, T, P and R in that left-to-right order. Checking the choices, only the group OTPR in that exact order matches.

Right of S = O, T, P, R

Quick Tip: Once the full row is fixed, S sits at position 7; just read off everyone after it.

...

103. Read the following instructions and answer the question:

Eleven friends M, N, O, P, Q, R, S, T, U, V and W are sitting in the first row of the stadium watching a cricket match.

- (A) T is to the immediate left of P and third to the right of U.
- (B) V is the immediate neighbour of M and N and third to the left of S.
- (C) M is the second to the right of Q, who is at one of the ends.
- (D) R is sitting next to the right of P and P is second to the right of O.

Which of the following statements is true with respect to the above arrangement?

- (A) There are three persons sitting between P and S
- (B) W is between M and V.
- (C) N is sitting between V and U
- (D) S and O are neighbours sitting to the immediate right of T

Correct Answer: (C) N is sitting between V and U

SOLUTION:

Step 1: Instead of listing the whole row again, check each statement by elimination using the key sub-blocks already known: the O-T-P-R block (seats 8, 9, 10, 11) and the V-N-U neighbourhood (seats 4, 5, 6), with S at seat 7.

Step 2: The claim of three people between P and S fails because only seats 8 and 9 (O and T) lie between P (seat 10) and S (seat 7), which is

just two people.

Step 3: The claim that W is between M and V fails because M and V are themselves adjacent (seats 3 and 4), leaving no room for anyone between them, and W sits at seat 2, outside that pair.

Step 4: The claim about S and O being neighbours to the immediate right of T fails because the seat immediately right of T (seat 9) is seat 10, which holds P, not S or O.

Step 5: That leaves the claim about N. From the V-N-U block at seats 4, 5, 6, N sits exactly at seat 5, directly between V (seat 4) and U (seat 6). This statement holds.

True statement: N is sitting between V and U

Quick Tip: Use the fixed row and check each statement one by one; only one survives.

• • •

104. Read the following instructions and answer the question:

Eleven friends M, N, O, P, Q, R, S, T, U, V and W are sitting in the first row of the stadium watching a cricket match.

- (A) T is to the immediate left of P and third to the right of U.
- (B) V is the immediate neighbour of M and N and third to the left of S.
- (C) M is the second to the right of Q, who is at one of the ends.
- (D) R is sitting next to the right of P and P is second to the right of O.

If Q and P, O and N, M and T, and W and R interchange their positions then which of the following pairs of friends is sitting at the ends?

- (A) P and Q
- (B) Q and R
- (C) P and W
- (D) W and R

Correct Answer: (C) P and W

SOLUTION:

Step 1: Instead of rewriting the whole row, just track what happens to the two end seats, position 1 and position 11, since only they decide the answer.

Step 2: Position 1 originally holds Q. The interchange list swaps Q with P, so position 1 now holds P.

Step 3: Position 11 originally holds R. The interchange list swaps W with R, so position 11 now holds W.

Step 4: None of the other swaps (O with N, M with T) touch positions 1 or 11 at all, so they do not affect the ends.

Step 5: Therefore after all the interchanges, the left end holds P and the right end holds W.

Ends = P and W

Quick Tip: Only the swaps touching seat 1 (Q-P) and seat 11 (W-R) matter for the ends.

...

105. When XEROX is coded as YFSPY then PAPER will be coded as?

- (A) QCRFS
- (B) QBQFS
- (C) RCQFS
- (D) RBRFS

Correct Answer: (B) QBQFS

SOLUTION:

Step 1: Assign each letter its position number, A = 1 up to Z = 26. XEROX becomes 24-5-18-15-24, and its code YFSPY becomes 25-6-19-16-25. Each number in the code is exactly one more than the original.

Step 2: Take PAPER and convert to numbers: P = 16, A = 1, P = 16, E = 5, R = 18.

Step 3: Add 1 to every number: 17, 2, 17, 6, 19, which correspond to Q, B, Q, F, S.

QBQFS

Quick Tip: Check how much each letter shifts between XEROX and YFSPY, then apply the same shift to PAPER.

...

106. A girl introduced a boy as the son of the daughter of the father of her uncle. How is the boy related to the girl?

- (A) Brother
- (B) Son
- (C) Son in law
- (D) Uncle

Correct Answer: (A) Brother

SOLUTION:

Step 1: Build the chain from the far end backward. Start with the girl and move up one generation: her uncle's father is her grandfather, call him G.

Step 2: G has a daughter, and since the chain must connect back to the girl's own family, this daughter is the girl's mother, M.

Step 3: The son of M, other than the girl herself, is the girl's brother.

Brother

Quick Tip: Trace the chain from the father of the uncle back down to a son; it lands on the girl's own mother and brother.

...

107. Girl : Beautiful : : Boy : ?

- (A) Smart
- (B) Heroic
- (C) Courageous
- (D) Handsome

Correct Answer: (D) Handsome

SOLUTION:

Step 1: Remove options that describe character or behaviour rather than looks: smart refers to intelligence, heroic and courageous refer to bravery.

Step 2: Only handsome refers purely to physical appearance, the same category as beautiful.

Handsome

Quick Tip: Beautiful describes looks, so find the word that describes a boy's looks.

• • •

108. Which of the following is the best example of a perfectly competitive market?

- (A) Gold trade
- (B) Chocolate market
- (C) Soft drinks
- (D) Farming

Correct Answer: (D) Farming

SOLUTION:

Step 1: Check each option against the requirement of a homogeneous product with no branding. Chocolate and soft drinks are heavily branded and differentiated, so buyers do care which firm they buy from.

Step 2: Gold trade involves fewer large dealers and is influenced by big players, so it does not fit as neatly.

Step 3: Farming has countless independent producers selling an undifferentiated commodity, which is the textbook case of perfect competition.

Farming

Quick Tip: Look for many sellers, an identical product, and no one able to set the price on their own.

• • •

109. Implicit cost is equal to

- (A) Business profit minus economic profit
- (B) Business profit plus economic profit
- (C) Economic profit minus business profit
- (D) Economic profit minus explicit cost.

Correct Answer: (A) Business profit minus economic profit

SOLUTION:

Step 1: Implicit cost is the opportunity cost of resources the owner already possesses, such as their own capital or labour, and it never shows up in the accounting books.

Step 2: Because accounting profit ignores this hidden cost while economic profit deducts it, economic profit is always smaller than or equal to accounting profit by exactly the implicit cost.

Step 3: Rearranging this relation gives implicit cost as the gap between business profit and economic profit.

$$\text{Business profit} - \text{Economic profit}$$

Quick Tip: Write economic profit as revenue minus explicit cost minus implicit cost, then compare with business profit.

• • •

110. Which of the following is NOT correct about patents?

- (A) Patents stimulate innovation.
- (B) A patent is a barrier to entry.
- (C) Patents enable a firm to be a permanent monopoly.
- (D) Patents encourage invention of new products.

Correct Answer: (C) Patents enable a firm to be a permanent monopoly.

SOLUTION:

Step 1: Recall the legal definition, a patent is a time bound exclusive right, typically lasting around 20 years from filing.

Step 2: Because the exclusivity has a fixed expiry date, any claim describing it as permanent must be false, while claims about stimulating innovation, blocking entry, and encouraging invention all match how patents actually work.

Step 3: Matching each option against this definition leaves only one contradiction.

Patents enable a firm to be a permanent monopoly

Quick Tip: Patents expire after a fixed number of years, they do not last forever.

• • •

111. Storing milk creates

- (A) Form utility
- (B) Place Utility
- (C) Possession utility
- (D) Time utility

Correct Answer: (D) Time utility

SOLUTION:

Step 1: Go through each marketing function one by one. Processing milk into butter or cheese would create form utility, transporting milk to a city market would create place utility, and selling it to a consumer would create possession utility.

Step 2: Storage does none of these actions, it only keeps the milk available for a later period.

Step 3: Making a good available at a later, more useful point in time is the definition of time utility.

Time utility

Quick Tip: Storage bridges the gap between when a product is made and when it is consumed.

• • •

112. All the following have positive relationship with marketable surplus except?

- (A) Size of family
- (B) Size of Holding
- (C) Quality of production
- (D) Higher resources

Correct Answer: (A) Size of family

SOLUTION:

Step 1: Write marketable surplus as total production minus the quantity retained for family needs.

Step 2: Size of holding, quality of production, and higher resources all push the production term up, so they raise marketable surplus, giving them a positive relationship.

Step 3: Size of family pushes the retained for consumption term up instead, which pulls marketable surplus down, making it the one factor with a negative, not positive, relationship.

Size of family

Quick Tip: A bigger family consumes more of its own produce, leaving less to sell.

...

113. Farmers' share in consumers' rupee is least in marketing of .

- (A) Rice
- (B) Milk
- (C) Cotton
- (D) Gram

Correct Answer: (C) Cotton

SOLUTION:

Step 1: Rule out the simple cases first. Rice and gram are food grains that reach the kitchen almost as they are, so the grower keeps most of

the price. Milk usually moves through a short cooperative or vendor chain to the household.

Step 2: Cotton is not sold to the consumer in its raw form at all, it is only the starting material for cloth. Between the farm and the shop shelf sit ginner, spinners, weavers, processors and retailers, each taking a cut.

Step 3: With so many hands adding value and margin after the farm gate, the cotton grower's share of what the final buyer pays is the smallest of the four. **Farmer's share** = $\frac{\text{Price at farm gate}}{\text{Price paid by consumer}}$ is lowest for cotton.

Cotton

Quick Tip: Compare how many processing stages each commodity passes through before reaching the final consumer.

• • •

114. Pick the odd man out.

- (A) MPEDA
- (B) APEDA
- (C) DMI
- (D) NAFED

Correct Answer: (C) DMI

SOLUTION:

Step 1: Sort the four bodies by whether they actually move produce across the border. MPEDA sends marine products abroad, APEDA sends agricultural and processed food items abroad, and NAFED also

imports and exports notified items like pulses and edible oils under government policy.

Step 2: DMI never trades anything. Its entire job is grading farm produce for domestic markets under AGMARK and gathering market information, a purely regulatory function within India.

Step 3: Three of the four bodies have an export/import trading role, one does not. That single mismatch marks the answer.

DMI

Quick Tip: Ask which of these four bodies has no role in export or import trade.

• • •

115. Which state among the following is the largest producer of chilli in India?

- (A) Madhya Pradesh
- (B) West Bengal
- (C) Rajasthan
- (D) Andhra Pradesh

Correct Answer: (D) Andhra Pradesh

SOLUTION:

Step 1: Recall which state's name is tied to India's biggest chilli trading market. The Guntur chilli yard in Andhra Pradesh is known as Asia's largest chilli market, which only makes sense if the surrounding state grows chilli on a very large scale.

Step 2: Madhya Pradesh, West Bengal and Rajasthan grow chilli too, but none of them matches the scale of cultivation seen in Andhra Pradesh.

Step 3: Matching the crop to its known trading hub confirms the state.

Andhra Pradesh

Quick Tip: Think of the state home to the Guntur chilli market.

• • •

116. Rural Consumers may respond better to a promotion that is .

- (A) Flashy
- (B) Aggressive
- (C) Personal
- (D) Repetitive

Correct Answer: (C) Personal

SOLUTION:

Step 1: Think about how a rural buyer actually decides to trust a new product. It is rarely a hoarding or a loud jingle, it is usually a known face, a dealer, or a village demonstration recommending it.

Step 2: Flashy and aggressive styles are built for urban, high-exposure media markets, and simple repetition without a human touch does not address the trust gap in villages.

Step 3: Since rural buying decisions lean on relationships and direct contact rather than mass media intensity, the promotion style that fits best is a personal one.

Quick Tip: Rural buying decisions lean heavily on trust and direct human contact.

• • •

117. Which has high potential in India?

- (A) Mushroom production.
- (B) Silviculture.
- (C) Organic farming.
- (D) Lac culture.

Correct Answer: (C) Organic farming.

SOLUTION:

Step 1: Compare the scale each option can realistically achieve across the country. Mushroom growing, silviculture and lac culture are valuable but remain localized, niche activities tied to specific regions or crops.

Step 2: Organic farming, on the other hand, can be adopted across the huge stretch of India's rainfed and traditionally low-input farmland, and it lines up with growing export and domestic demand for chemical-free food.

Step 3: Because the scope for organic conversion spans a much larger share of Indian agriculture than the other three niche activities, it is judged to carry the highest potential.

Organic farming

Quick Tip: Think about which option can scale across India's large rainfed, low-input farmland.

• • •

118. First Indian product to get the GI Tag .

- (A) Cardamom
- (B) Darjeeling Tea
- (C) Basmati
- (D) Gobindo Bhog

Correct Answer: (B) Darjeeling Tea

SOLUTION:

Step 1: Recall a well known fact often used in general awareness, Darjeeling Tea is famous as India's very first GI-tagged product.

Step 2: Basmati rice and Gobindo Bhog rice were tagged much later, and cardamom is not the item usually cited as the first GI registration.

Step 3: Matching the "first GI tag" fact to the product it is always associated with gives the answer directly.

Darjeeling Tea

Quick Tip: This tea from West Bengal is famous for being India's very first GI-tagged product.

• • •

119. J.C. Kumarappa emphasized for which of the following framework?

- (A) Pink Revolution
- (B) Yellow Revolution
- (C) Bamboo cultivation
- (D) Rural Industrialization

Correct Answer: (D) Rural Industrialization

SOLUTION:

Step 1: Kumarappa is remembered as a close associate of Mahatma Gandhi who translated Gandhian ideas of self-reliance into an economic model.

Step 2: His model centred on strengthening the village economy through small, decentralized, labour-intensive industries rather than large factories or single-commodity "revolutions" like Pink or Yellow Revolution, or a specific crop like bamboo.

Step 3: This decentralized, village-centred industrial approach is exactly what is termed Rural Industrialization.

Rural Industrialization

Quick Tip: He was a Gandhian economist who wrote about a village-centred, decentralized economy.

• • •

120. What is the premium rates for Rabi season crops to be paid by farmers in PMFBY scheme?

- (A) 1.5 percent
- (B) 2 percent
- (C) 2.5 percent
- (D) 3 percent

Correct Answer: (A) 1.5 percent

SOLUTION:

Step 1: PMFBY fixes three flat farmer-premium slabs by season and crop type, rather than charging the full actuarial premium to the farmer.

Step 2: Kharif food and oilseed crops sit at the 2 percent slab, and commercial and horticultural crops sit at the higher 5 percent slab, leaving the Rabi food and oilseed crop slab as the lowest of the three.

Step 3: That lowest, Rabi-season slab is fixed at 1.5 percent of the sum insured.

1.5%

Quick Tip: PMFBY charges farmers 2 percent for Kharif and a lower fixed rate for Rabi food/oilseed crops.