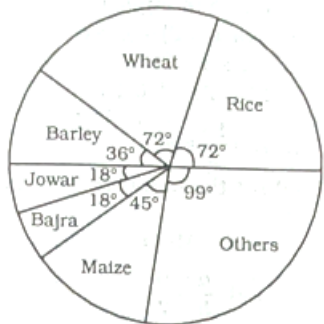


21-Days Study Plan

Day 11



1. **Direction:** The pie- chart provided below gives the distribution of land (in a village) under. Various food crops.



If the total area under bajra was three hundred acres, then the total area (in hundred acres) under rice and barley together is:

- A. 18
- B. 12
- C. 15
- D. 20

Ans. A

Sol. Corresponding angle for rice and barley = $72^\circ + 36^\circ = 108^\circ$

$\therefore 18^\circ = 300 \text{ acres}$

$\Rightarrow 1^\circ = 300/18$

$\Rightarrow \text{Total area under Rice and Barley} = 108^\circ = (300/18) \times 108 = 1800 \text{ acres}$

2. The combination of three crops which contribute to more than 50% of the total area under the food crops is:

- A. Wheat, rice and maize
- B. wheat, rice and jowar
- C. wheat, rice and bajra
- D. rice, barley and maize

Ans. A

Sol. Since, $100\% = 360^\circ$

$\Rightarrow 50\% = 180^\circ$

$\therefore \text{wheat} + \text{rice} + \text{maize}$

$= 72^\circ + 72^\circ + 45^\circ$

$= 189^\circ > 180^\circ$

Thus, option A is correct.

3. The ratio of the land used for rice and barley is

- A. 3 : 1
- B. 1 : 2
- C. 2 : 1
- D. 3 : 2

Ans. C

Sol. Required ratio

$= 72^\circ : 36^\circ = 2 : 1$

4. If 10% of the land reserved for rice be distributed to wheat and barley in the

ratio 2:1, then the angle corresponding to wheat in the new pie-chart will be:

- A. 38.40
- B. 76.80
- C. 75.60
- D. 45.50

Ans. B

Sol. $10\% \text{ of } 72^\circ = 7.2^\circ$

\therefore Increase in the corresponding angle of wheat

$= (2/3) \times 7.2 = 4.8^\circ$

\therefore New corresponding angle for Wheat = $72 + 4.80 = 76.80^\circ$

5. If the production of rice is 5 times that of jowar and the production of jowar is 2 times that of bajra, then the ratio between the yield per acre of rice and bajra is:

- A. 5 : 2
- B. 3 : 1
- C. 4 : 1
- D. 6 : 1

Ans. A

Sol. Hint: If the production of Bajra be x tonnes, then

Production of Jowar = 2x tonnes

and Production of rice = 10x tonnes

Let the total area under cultivation be y

then area under cultivation of rice = $y/5$

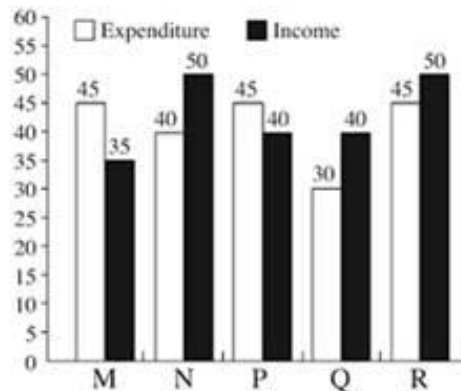
area under cultivation of bajra = $y/20$

Required ratio = $(10x/y/5)/(x/y/20)$

$= 10x \cdot 5 \cdot y / y \cdot 20x = 5/2$

6. **Direction:** Study the bar chart & answer the question.

Income and Expenditure (in Crore Rs.) in 2001 of five companies.



The company earning the maximum percentage of profit in the year 2001 is:

- A. N
- B. Q
- C. M
- D. P

Ans. B



Sol.

For Company M:

Expenditure = ₹45 crs.

Income = ₹35 crs.

Therefore, percentage profit or Loss =

$$\left(\frac{35-40}{35} \times 100\right)\% = -28\frac{4}{7}\% \text{ (loss)}$$

For Company N:

Expenditure = ₹40crs.

Income = ₹50crs.

Therefore, percentage profit or Loss =

$$\left(\frac{50-40}{50} \times 100\right)\% = 20\% \text{ (profit)}$$

For Company P:

Expenditure = ₹45crs.

Income = ₹40crs.

Therefore, percentage profit or Loss =

$$\left(\frac{40-45}{40} \times 100\right)\% = -12.5\% \text{ (loss)}$$

For Company Q:

Expenditure = ₹30crs.

Income = ₹40crs.

Therefore, percentage profit or Loss =

$$\left(\frac{40-30}{40} \times 100\right)\% = 25\% \text{ (profit)}$$

For Company R:

Expenditure = ₹45crs.

Income = ₹50crs.

Therefore, percentage profit or Loss =

$$\left(\frac{50-45}{50} \times 100\right)\% = 10\% \text{ (profit)}$$

Clearly, the company Q earns maximum profit.

7. If the income of company Q in 2001 was 10% more than R in 2000 and the company had earned a profit of 20% in 2000, then its expenditure in 2000 (in crores) was :

- A. 32.32 B. 30.3
C. 34.34 D. 28.28

Ans. B

Sol.

Let the company expenditure in 2000 was ₹x cr.

The income of the company R in 2000 =

$$\frac{40 \times 100}{110} = ₹36.36 \text{ cr.}$$

Now,

$$\frac{36.36 - x}{x} \times 100 = 20$$

$$x = \frac{3636}{120} = 30.3$$

8. In 2001, the approximate percentage of profit/loss of all the five companies taken together is equal to :

- A. 4.87% profit B. 6.48% profit
C. 6.88% loss D. 4% loss

Ans. A

Sol.

Total Income = ₹ (35 + 50 + 40 + 40 + 50) = ₹215 cr.

Total expenditure = ₹ (45+ 40 +45 +30+ 45) = ₹205 cr.

Now, profit = 215-205 = ₹10 cr.

Profit% = (10/205)×100 = 4.87%

9. For company R, if the expenditure had increased by 20% in the year 2001 from the year 2000 and the company had earned profit of 10% in 2000, the company's income in 2000 was? (in crore)

- A. 38.5 B. 37.25
C. 41.67 D. 35.75

Ans. C

Sol.

Let the company expenditure in 2000 was ₹x cr.

The expenditure of the company R in

$$2000 = \frac{45 \times 100}{120} = ₹37.5 \text{ cr.}$$

Now,

$$\frac{(x - 37.5) \times 100}{x} = 10$$

$$10x - x = 37.5 \times 10$$

$$= \frac{37.5 \times 10}{9} = ₹41.67 \text{ cr.}$$



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10. The companies M and N together had a percentage of profit/loss of :

- A. 10% profit
- B. No loss and No profit
- C. 10% loss
- D. 12% loss

Ans. B

Sol.

Total Income = ₹ 35+ 50 = 85 ₹cr.

Total expenditure = ₹ 45+ 40 = 85 ₹cr.

Now, profit/loss = 85 - 85 = Rs.0

Hence, There is no loss nor profit.

11. Which acid is released when an Ant bites?

- A. Hydrochloric Acid
- B. Formic Acid
- C. Acetic Acid
- D. Phosphoric Acid

Ans. B

Sol.

• **Ant bites consist of Formic Acid** which is the simplest carboxylic acid, containing a single carbon.

• It occurs naturally in various sources including the venom of bee and ant stings and is a useful organic synthetic reagent.

12. Which of the following is a lead ore?

- A. Mica
- B. Quartz
- C. Feldspar
- D. Galena

Ans. D

Sol.

• **Galena is the primary ore mineral of lead.**

• Galena, also called lead glance, is the natural mineral form of lead (II) sulfide.

• It is the most important ore of lead and an important source of silver.

• Galena is one of the most abundant and widely distributed sulfide minerals. It crystallizes in the cubic crystal system often showing octahedral forms. It is often associated with the minerals sphalerite, calcite and fluorite.

13. What is the chemical name of vinegar?

- A. Citric acid
- B. Acetic acid
- C. Pyruvic acid
- D. Malic acid

Ans. B

Sol.

• **Vinegar** is a liquid consisting mainly of acetic acid (CH_3COOH) and water.

• The acetic acid is produced by the fermentation of ethanol by acetic acid bacteria.

• Vinegar is now mainly used as a cooking ingredient. Historically, as the most easily available mild acid, it had a great variety of industrial, medical and domestic uses, some of which (such as its use as a general household cleanser) are still promoted today.

14. The terms systolic and diastolic are used in the context of _____

- A. Detecting problems in eye sight
- B. Counting blood platelets
- C. Measuring blood pressure
- D. Finding blood vessels

Ans. C

Sol.

The terms systolic and diastolic are used in the context of measuring blood pressure.

* Blood pressure is measured using two numbers. For ex. "120/80 mmHg."

* The first number is called systolic blood pressure which measures the pressure in your blood vessels when your heart beats.

* The second number is called diastolic blood pressure which measures the pressure in your blood vessels when your heart rests between beats.

15. The scientific name of Spinach is _____.

- A. Cojonus cgjan
- B. Spinacia Cence
- C. Spinacia oleracea
- D. Spinacia Sativus

Ans. C

Sol.

• **Spinacia Oleracea it the scientific name of Spinach.**

• California and Arizona were the leading producers of spinach.

• Spinach is a leafy green vegetable that originated in Persia.

16. Which one of the following cell organelles does NOT possess nucleic acid?

- A. Nucleolus
- B. Chloroplast
- C. Ribosome
- D. Plasma Membrane

Ans. D



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Sol.

- Plasma membrane does not contain nucleic acids- DNA and RNA. The major components of plasma membrane are – lipids, glycol-lipids, and cholesterol.
- Nucleic acid is a term used for both DNA and RNA. They are small biomolecules essential for all life forms.

17. What is selection of homozygous plants called?

- A. Pure line selection
- B. Mass selection
- C. Gravity selection
- D. None of these

Ans. A

Sol.

* In pure line selection, large numbers of plants are selected from a self-pollinated crop.

* They are harvested individually, individual plant progenies from them are evaluated separately and the best one is released as pure line variety.

* It is the progeny of single self- fertilized homozygous plant.

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

State Route 520 (SR 520) is a 13-mile (21 km) state highway and freeway in the Seattle metropolitan area in the U.S. state _____ of Washington.

_____ (###Q1###) Seattle to the Eastside region of King County across the Evergreen Point Floating Bridge on Lake Washington, it intersects Interstate 5 (I-5) in Seattle, I-405 in Bellevue, and SR 202 in Redmond. It was _____ (###Q2###) as a freeway in 1964, but was not fully constructed until the late 1970s. Increased traffic on the corridor, spurred in part by _____ (###Q3###) of the Microsoft headquarters in Overlake, led to the addition of high-occupancy vehicle lanes _____ and _____ new _____ (###Q4###) in the 1990s. In April 2016, the original floating bridge was replaced by a wider one as part of a multibillion-dollar expansion program _____ that _____ is

_____ (###Q5###) to be completed in the 2020s.

Select the most appropriate option to fill in the blank.

- A. segregating
- B. illuminating
- C. connecting
- D. staggering

Ans. C

Sol. 'Segregating' means to set apart from the rest. 'Illuminating' means to light up. 'Staggering' means astonish. 'Connecting' means to bring together two things so that a link is established. This sentence talks about the places between which the road runs which is why option C is the correct answer.

19. Select the most appropriate option to fill in the blank.

- A. designated
- B. vindicated
- C. confounded
- D. exaggerated

Ans. A

Sol. 'Vindicated' means to clear someone of blame. 'Confounded' means to cause surprise. 'Exaggerated' means to represent something as being larger than it actually is. Since the sentence is about the official status of the road, 'designated' which means to officially give a specified status to something seems like the correct answer. The correct answer is option A.

20. Select the most appropriate option to fill in the blank.

- A. narration
- B. expansion
- C. explanation
- D. interrogation

Ans. B

Sol. 'Narration' is the process of narrating a story. 'Explanation' is a statement that makes something clear. 'Interrogation' is the action of interrogating. The increase in traffic was due to the Microsoft headquarters becoming bigger hence, 'expansion' which is the action of becoming bigger seems like the best choice. The correct answer is option B.

21. Select the most appropriate option to fill in the blank.

- A. destinations
- B. numerical
- C. priorities
- D. interchanges

Ans. D

Sol. The destination is the place to which someone is going to. Numerical is



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something that is expressed as a number. Priorities are things that are regarded as more important than the others. Interchanges are road junctions designed on several levels so that traffic streams do not intersect. The sentence here has a word like "lane" which makes the "interchanges" the correct answer. Hence, option D is the correct answer.

22. Select the most appropriate option to fill in the blank.

- A. outnumbered
- B. cancelled
- C. scheduled
- D. exported

Ans. C

Sol. Outnumbered means to be more numerous than something else. Cancelled means to revoke a plan. Exported means to send goods or services to another country. The road is planned to be expanded by 2020 which is why 'scheduled' which means something which is planned according to a schedule is the appropriate word here. The correct answer is option C.

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

_____ (###Q1###) so long ago, virtually everyone seemed _____ (###Q2###) that a sizeable majority of British voters _____ (###Q3###) reaffirm their faith and confidence in a united Europe. Unfortunately, what was considered to be a remote possibility has actually become a very _____ (###Q4###) reality. A small majority of voters _____ (###Q5###) to take Britain out of the European Union (EU) in the referendum held on June 23.

Select the most appropriate option to fill in the blank.

- A. not
- B. far
- C. so
- D. nor

Ans. A

Sol. The phrase "not so long ago" means "a short time ago". Only "not" fits the blank contextually and grammatically. Hence, option A is the correct answer.

24. Select the most appropriate option to fill in the blank.

- A. satisfied
- B. positive
- C. presumptuous
- D. confident

Ans. D

Sol. A confident person is one who shows confidence in oneself or one's abilities or qualities. It is the most suitable word here. Hence, option D is the correct option.

25. Select the most appropriate option to fill in the blank.

- A. would
- B. will
- C. should
- D. surely

Ans. C

Sol. Should is used to indicate obligation, duty, or correctness, typically when criticizing someone's actions. Option C is the most suitable option. Hence, option C is the correct option.

26. Select the most appropriate option to fill in the blank.

- A. ominous
- B. grim
- C. dire
- D. haunting

Ans. A

Sol. Ominous means giving the worrying impression that something bad is going to happen; threateningly inauspicious. 'Unfortunately' gives the sentence a negative tone hence, option A is the correct option.

27. Select the most appropriate option to fill in the blank.

- A. had opted
- B. will opt
- C. have opted
- D. has opted

Ans. A

Sol. The event had already taken place in the past. Therefore, "had opted" will be the correct answer, i.e. option A.

28. Each vowel of the word BUCKSHOT is changed to the next letter in the English alphabetical order and each consonant is changed to the previous letter in the English alphabetical order. If the new alphabets thus formed are arranged in alphabetical order (from left to right). Which of the following will be fifth from the right?

- A. R
- B. B
- C. G
- D. J
- E. P



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Ans. D

Sol. Each vowel in the word is replaced to the next alphabet and each consonant with the previous letter,

B-1 ->A

U+1->V

C-1->B

K-1->J

S-1->R

H-1->G

O+1->P

T-1->S

AVBJRGPS,

After arranging in alphabetical order'

ABGJPRSV

J will be 5th from the right.

29. If it is possible to make only one meaningful word with the second, third, eighth and ninth letters of the word ABDUCTION, which of the following would be the second letter of that word from the left end? If no such word can be made, give 'A as your answer and if more than one such word can be formed, give your answer as 'Z'?

A. A

B. O

C. N

D. B

E. Z

Ans. B

Sol. The specified letters of the given word ABDUCTION are B, D, O and N. From these letters only one word BOND can be made. Hence, its second letter from the left is O.

30. How many such pairs of letters are there in the word STREAMING each of which has as many letters between them in the word, as in the English alphabet? (In both forward and backward directions)

A. None

B. One

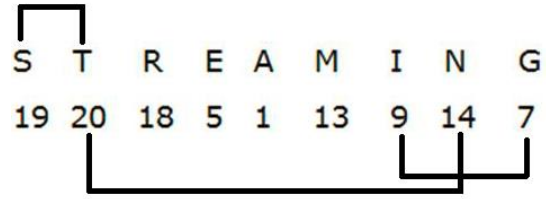
C. Two

D. Three

E. More than three

Ans. D

Sol.



There are three pairs ST, NT and IG.

31. The positions of how many alphabets will remain the same if each of the alphabets in the word PROFIT is rearranged in the alphabetical order from left to right?

A. None

B. One

C. Two

D. Three

E. More than three

Ans. C

Sol.

Original word : P R O F I T

After rearrangement : F I O P R T

Hence the position of two alphabets O and T remain unchanged.

32. **Direction:** Following questions are based on the five words given below:

LAP BUT CAR SON HID

(The new words formed after performing the mentioned operations may or may not be meaningful English word)

If the given words are arranged in the order as they would appear in a dictionary from left to right, which of the following will be fourth from the left?

A. LAP

B. BUT

C. CAR

D. SON

E. HID

Ans. A

Sol. The words as per the arrangement are:

BUT – CAR – HID – LAP – SON

Thus **LAP** is fourth from the left.



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