

CHAPTER 3 & 4

MATRICES AND DETERMINANTS

VERY SHORT ANSWER TYPE QUESTIONS (1 Mark)

1. If $\begin{bmatrix} x+3 & 4 \\ y-4 & x+y \end{bmatrix} = \begin{bmatrix} 5 & 4 \\ 3 & 9 \end{bmatrix}$, find x and y .
2. If $A = \begin{bmatrix} i & 0 \\ 0 & -i \end{bmatrix}$ and $B = \begin{bmatrix} 0 & i \\ i & 0 \end{bmatrix}$, find AB .
3. Find the value of $a_{23} + a_{32}$ in the matrix $A = [a_{ij}]_{3 \times 3}$
where $a_{ij} = \begin{cases} |2i - j| & \text{if } i > j \\ -i + 2j + 3 & \text{if } i \leq j \end{cases}$.
4. If B be a 4×5 type matrix, then what is the number of elements in the third column.
5. If $A = \begin{bmatrix} 5 & 2 \\ 0 & 9 \end{bmatrix}$ and $B = \begin{bmatrix} 3 & 6 \\ 0 & -1 \end{bmatrix}$ find $3A - 2B$.
6. If $A = \begin{bmatrix} 2 & -3 \\ -7 & 5 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 0 \\ 2 & -6 \end{bmatrix}$ find $(A+B)'$.
7. If $A = [1 \ 0 \ 4]$ and $B = \begin{bmatrix} 2 \\ 5 \\ 6 \end{bmatrix}$ find AB .
8. If $A = \begin{bmatrix} 4 & x+2 \\ 2x-3 & x+1 \end{bmatrix}$ is symmetric matrix, then find x .
9. For what value of x the matrix $\begin{bmatrix} 0 & 2 & -3 \\ -2 & 0 & -4 \\ 3 & 4 & x+5 \end{bmatrix}$ is skew symmetric matrix.
10. If $A = \begin{bmatrix} 2 & 3 \\ 1 & 0 \end{bmatrix} = P + Q$ where P is symmetric and Q is skew-symmetric matrix, then find the matrix Q .

11. Find the value of $\begin{vmatrix} a + ib & c + id \\ -c + id & a - ib \end{vmatrix}$
12. If $\begin{vmatrix} 2x + 5 & 3 \\ 5x + 2 & 9 \end{vmatrix} = 0$, find x .
13. For what value of k , the matrix $\begin{bmatrix} k & 2 \\ 3 & 4 \end{bmatrix}$ has no inverse.
14. If $A = \begin{bmatrix} \sin 30^\circ & \cos 30^\circ \\ -\sin 60^\circ & \cos 60^\circ \end{bmatrix}$, what is $|A|$.
15. Find the cofactor of a_{12} in $\begin{vmatrix} 2 & -3 & 5 \\ 6 & 0 & 4 \\ 1 & 5 & -7 \end{vmatrix}$.
16. Find the minor of a_{23} in $\begin{vmatrix} 1 & 3 & -2 \\ 4 & -5 & 6 \\ 3 & 5 & 2 \end{vmatrix}$.
17. Find the value of P , such that the matrix $\begin{bmatrix} -1 & 2 \\ 4 & P \end{bmatrix}$ is singular.
18. Find the value of x such that the points $(0, 2)$, $(1, x)$ and $(3, 1)$ are collinear.
19. Area of a triangle with vertices $(k, 0)$, $(1, 1)$ and $(0, 3)$ is 5 unit. Find the value (s) of k .
20. If A is a square matrix of order 3 and $|A| = -2$, find the value of $|-3A|$.
21. If $A = 2B$ where A and B are square matrices of order 3×3 and $|B| = 5$, what is $|A|$?
22. What is the number of all possible matrices of order 2×3 with each entry 0, 1 or 2.
23. Find the area of the triangle with vertices $(0, 0)$, $(6, 0)$ and $(4, 3)$.
24. If $\begin{vmatrix} 2x & 4 \\ -1 & x \end{vmatrix} = \begin{vmatrix} 6 & -3 \\ 2 & 1 \end{vmatrix}$, find x .

25. If $A = \begin{bmatrix} x+y & y+z & z+x \\ z & x & y \\ 1 & 1 & 1 \end{bmatrix}$, write the value of $\det A$.
26. If $A = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix}$ such that $|A| = -15$, find $a_{11}C_{21} + a_{12}C_{22}$ where C_{ij} is cofactors of a_{ij} in $A = [a_{ij}]$.
27. If A is a non-singular matrix of order 3 and $|A| = -3$ find $|\text{adj } A|$.
28. If $A = \begin{bmatrix} 5 & -3 \\ 6 & 8 \end{bmatrix}$ find $(\text{adj } A)$
29. Given a square matrix A of order 3×3 such that $|A| = 12$ find the value of $|A \text{ adj } A|$.
30. If A is a square matrix of order 3 such that $|\text{adj } A| = 8$ find $|A|$.
31. Let A be a non-singular square matrix of order 3×3 find $|\text{adj } A|$ if $|A| = 10$.
32. If $A = \begin{bmatrix} 2 & -1 \\ 3 & 4 \end{bmatrix}$ find $|(A^{-1})^{-1}|$.
33. If $A = \begin{bmatrix} -1 & 2 & 3 \end{bmatrix}$ and $B = \begin{bmatrix} 3 \\ -4 \\ 0 \end{bmatrix}$ find $|AB|$.

SHORT ANSWER TYPE QUESTIONS (4 MARKS)

34. Find x, y, z and w if $\begin{bmatrix} x-y & 2x+z \\ 2x-y & 3x+w \end{bmatrix} = \begin{bmatrix} -1 & 5 \\ 0 & 13 \end{bmatrix}$.
35. Construct a 3×3 matrix $A = [a_{ij}]$ whose elements are given by
$$a_{ij} = \begin{cases} 1+i+j & \text{if } i \geq j \\ \frac{|i-2j|}{2} & \text{if } i < j \end{cases}$$

36. Find A and B if $2A + 3B = \begin{bmatrix} 1 & -2 & 3 \\ 2 & 0 & -1 \end{bmatrix}$ and $A - 2B = \begin{bmatrix} 3 & 0 & 1 \\ -1 & 6 & 2 \end{bmatrix}$.

37. If $A = \begin{bmatrix} -1 \\ 2 \\ 3 \end{bmatrix}$ and $B = \begin{bmatrix} -2 & -1 & -4 \end{bmatrix}$, verify that $(AB)' = B'A'$.

38. Express the matrix $\begin{bmatrix} 3 & 3 & -1 \\ -2 & -2 & 1 \\ -4 & -5 & 2 \end{bmatrix} = P + Q$ where P is a symmetric and Q is a skew-symmetric matrix.

39. If $A = \begin{bmatrix} \cos \theta & \sin \theta \\ -\sin \theta & \cos \theta \end{bmatrix}$, then prove that $A^n = \begin{bmatrix} \cos n\theta & \sin n\theta \\ -\sin n\theta & \cos n\theta \end{bmatrix}$ where n is a natural number.

40. Let $A = \begin{bmatrix} 2 & -1 \\ 3 & 4 \end{bmatrix}$, $B = \begin{bmatrix} 5 & 2 \\ 7 & 4 \end{bmatrix}$, $C = \begin{bmatrix} 2 & 5 \\ 3 & 8 \end{bmatrix}$, find a matrix D such that $CD - AB = O$.

41. Find the value of x such that $\begin{bmatrix} 1 & x & 1 \end{bmatrix} \begin{bmatrix} 1 & 3 & 2 \\ 2 & 5 & 1 \\ 15 & 3 & 2 \end{bmatrix} \begin{bmatrix} 1 \\ 2 \\ x \end{bmatrix} = 0$

42. Prove that the product of the matrices

$$\begin{bmatrix} \cos^2 \theta & \cos \theta \sin \theta \\ \cos \theta \sin \theta & \sin^2 \theta \end{bmatrix} \text{ and } \begin{bmatrix} \cos^2 \phi & \cos \phi \sin \phi \\ \cos \phi \sin \phi & \sin^2 \phi \end{bmatrix}$$

is the null matrix, when θ and ϕ differ by an odd multiple of $\frac{\pi}{2}$.

43. If $A = \begin{bmatrix} 5 & 3 \\ 12 & 7 \end{bmatrix}$ show that $A^2 - 12A - I = 0$. Hence find A^{-1} .

Treatment of Goodwill

1 Mark Questions

1. Under what circumstances will the premium for goodwill paid by the incoming partner not be recorded in the books of accounts. (Compartment 2014)

Ans. When the incoming partner pays his share of goodwill privately to the sacrificing partners, outside the business, then no entry is passed in the books of the firm.

2. State the need for treatment of goodwill on admission of a partner. (Delhi 2010)

Ans. When a new partner is admitted, his share in future profits of the firm is equal to the sacrifice of profit by an existing partner or partners of the firm. The amount he pays to compensate this sacrifice, is in the form of goodwill. Therefore, it is important to treat goodwill at the time of admission of a partner.

2 Marks Question

3. A and B are partners with capitals of Rs. 90,000 and Rs. 1,00,000 respectively. They decide to admit C into the partnership for $\frac{1}{4}$ th share in the future profits. C is to bring a sum of Rs. 80,000 as his capital. Calculate the amount of goodwill. (All India 2008)

A's capital	=	90,000
B's capital	=	1,00,000
C's capital	=	80,000
Total capital of partners	=	<u>₹ 2,70,000</u>

Calculation of total capital on C's admission taking his capital as base

$$\text{C's share} = \frac{1}{4} \text{ th}$$

C brings as capital = 80,000

For $\frac{1}{4}$ th share, capital = 80,000

$$\text{Total capital} = 80,000 \times 4 = ₹ 3,20,000$$

$$\text{Hidden goodwill} = 3,20,000 - 2,70,000 = ₹ 50,000$$

$$\therefore \text{C's share of goodwill} = 50,000 \times \frac{1}{4} = ₹ 12,500$$

4. Hemant and Nishant were partners in a firm sharing profits in the ratio of 3 : 2. Their capitals were Rs. 1,60,000 and Rs. 1,00,000 respectively. They admitted Somesh on 1st April, 2013 as a new partner for $\frac{1}{5}$ share in the future profits. Somesh brought Rs. 1,20,000 as his capital. Calculate the value of goodwill of the firm and record necessary journal entries for the above transactions on Somesh's admission.

(All India 2014)

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
2013 Apr 1	Bank A/c To Somesh's Capital A/c (Being the cash brought in by Somesh for his capital)	Dr	1,20,000	1,20,000
Apr 1	Somesh's Capital A/c To Hemant's Capital A/c To Nishant's Capital A/c (Being the credit given for goodwill to Hemant and Nishant on Somesh's admission)	Dr	44,000	26,400 17,600

Working Note

Calculation of Hidden Goodwill

Somesh's capital = ₹ 1,20,000 for $\frac{1}{5}$ share

(a) Total capital of new firm = $1,20,000 \times \frac{5}{1} = ₹ 6,00,000$

(b) Hemant, Nishant and Somesh's capital = $1,60,000 + 1,00,000 + 1,20,000 = ₹ 3,80,000$

Goodwill of the firm ($a - b$) = $6,00,000 - 3,80,000 = ₹ 2,20,000$

Somesh's share = $2,20,000 \times \frac{1}{5} = ₹ 44,000$

5. Abhay and Beena are partners in a firm. They admit Chetan as a partner with $\frac{1}{4}$ th share in the profits of the firm. Chetan brings Rs. 2,00,000 as his share of capital. The value of the total assets of the firm is Rs. 5,40,000 and outside liabilities are valued at Rs. 1,00,000 on that date. Give the necessary entry to record goodwill at the time of Chetan's admission. Also show your working notes.

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Chetan's Capital A/c To Abhay's Capital A/c To Beena's Capital A/c (Being Chetan's share of goodwill adjusted in existing partners' capital accounts)	Dr	40,000	20,000 20,000

(i) Calculation of Chetan's Share of Goodwill

(a) New firm's capital on the basis of Chetan's capital and his share = $2,00,000 \times \frac{4}{1} = 8,00,000$

(b) Adjusted Capitals of Old Partners = Assets – Liabilities

$$= 5,40,000 - 1,00,000 = 4,40,000$$

(+)	New partner's capital	= 2,00,000
		₹ 6,40,000

Value of hidden goodwill (a + b) = $8,00,000 - 6,40,000 = 1,60,000$

$$\text{Chetan's share} = 1,60,000 \times \frac{1}{4} = ₹ 40,000$$

6. Asin and Shreyas are partners in a firm. They admit Ajay as a new partner with 1/5th share in the profits of the firm. Ajay brings Rs. 5,00,000 as his share of capital. The value of the total assets of the firm was Rs. 15,00,000 and outside liabilities were valued at Rs. 5,00,000 on that date. Give the necessary journal entry to record goodwill at the time of Ajay's admission. Also, show your workings. (All India 2013)

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Ajay's Capital A/c Dr		2,00,000	
	To Asin's Capital A/c			1,00,000
	To Shreyas's Capital A/c			1,00,000
	(Being adjustment entry passed for goodwill)			

Working Note

(i) Calculation of Ajay's Share of Goodwill

(a) New firm's capital on the basis of Ajay's capital and his profit share

$$= 5,00,000 \times \frac{5}{1} = ₹ 25,00,000$$

(b) Adjusted Capital of Old Partners = Assets – Liabilities

$$= 15,00,000 - 5,00,000 = ₹ 10,00,000$$

(+)	New partner's capital	= ₹ 5,00,000
		₹ 15,00,000

Value of hidden goodwill (a – b) = $25,00,000 - 15,00,000 = 10,00,000$

$$\text{Ajay's share} = 10,00,000 \times \frac{1}{5} = ₹ 2,00,000$$

7. A and B were partners in a firm sharing profits and losses in the ratio of 3 : 2. They admitted C as a new partner for 3/7th share in the profits and the new profit sharing ratio will be 2 : 2 : 3. C bought tRs. 2,00,000 as his capital and Rs. 1,50,000 as premium for goodwill. Half of their share of premium was withdrawn by A and B from the firm. Calculate sacrificing ratio and pass necessary journal entries for the above transactions in the books of the firm. (All India 2009)

Old ratio between A and B = 3 : 2

New ratio among A, B and C = 2 : 2 : 3

Sacrificing Ratio = Old Share – New Share

$$\therefore \text{A's sacrifice} = \frac{3}{5} - \frac{2}{7} = \frac{21-10}{35} = \frac{11}{35}$$

$$\text{B's sacrifice} = \frac{2}{5} - \frac{2}{7} = \frac{14-10}{35} = \frac{4}{35}$$

Sacrificing ratio between A and B = 11 : 4

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Cash A/c Dr		3,50,000	
	To C's Capital A/c			2,00,000
	To Premium for Goodwill A/c			1,50,000
	(Being cash brought in for capital and goodwill by C)			
	Premium for Goodwill A/c Dr		1,50,000	
	To A's Capital A/c			1,10,000
	To B's Capital A/c			40,000
	(Being amount of goodwill credited to old partners in their sacrificing ratio i.e. 11 : 4)			
	A's Capital A/c Dr		55,000	
	B's Capital A/c Dr		20,000	
	To Cash A/c			75,000
	(Being half goodwill withdrawn by A and B in sacrificing ratio)			

8. A and B were partners in a firm sharing profits in the ratio of 4 : 3. They admitted C as a new partner for 3/7th share in the profits of the firm. The new profit sharing ratio will be 2 : 2 : 3. C brought Rs. 2,00,000 as his capital and Rs. 60,000 for his share of premium as goodwill, half of which was withdrawn by A and B from the firm. Calculate sacrificing ratio and pass necessary journal entries in the books of the firm for the above transactions. (All India 2009)

Old ratio between A and B = 4 : 3

New ratio among A, B and C = 2 : 2 : 3

Sacrificing Ratio = Old Share – New Share

$$\therefore \quad \text{A's sacrifice} = \frac{4}{7} - \frac{2}{7} = \frac{2}{7}; \quad \text{B's sacrifice} = \frac{3}{7} - \frac{2}{7} = \frac{1}{7}$$

\therefore Sacrificing ratio between A and B = 2 : 1

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Cash A/c Dr		2,60,000	
	To C's Capital A/c			2,00,000
	To Premium for Goodwill A/c			60,000
	(Being cash brought in for capital and goodwill by C)			
	Premium for Goodwill A/c Dr		60,000	
	To A's Capital A/c			40,000
	To B's Capital A/c			20,000
	(Being goodwill credited to old partners in their sacrificing ratio i.e. 2 : 1)			
	A's Capital A/c Dr		20,000	
	B's Capital A/c Dr		10,000	
	To Cash A/c			30,000
	(Being half goodwill withdrawn by A and B in sacrificing ratio)			

6 Marks Question

9. A and B were partners in a firm sharing profits and losses in the ratio of 5 : 3. They admitted C as a new partner. A surrendered 1/3rd of his share in favour of C and B surrendered 1/4 th of his share in favour of C. C brought Rs. 1,50,000 for his capital and Rs. 58,000 for his share of goodwill. Calculate new profit sharing ratio of A, B and C, sacrificing ratio of A and B and pass necessary journal entries for the above transactions on C's admission. (Delhi 2008)

Old ratio between A and B = 5 : 3

$$A \text{ surrendered} = \frac{1}{3} \times \frac{5}{8} = \frac{5}{24} \times \frac{4}{4} = \frac{20}{96}$$

$$B \text{ surrendered} = \frac{1}{4} \times \frac{3}{8} = \frac{3}{32} \times \frac{3}{3} = \frac{9}{96}$$

∴ Sacrificing ratio = 20 : 9

Calculation of New Profit Sharing Ratio

$$A's \text{ new share} = \frac{5}{8} - \frac{20}{96} = \frac{60 - 20}{96} = \frac{40}{96}$$

$$B's \text{ new share} = \frac{3}{8} - \frac{9}{96} = \frac{36 - 9}{96} = \frac{27}{96}$$

$$C's \text{ new share} = \frac{20}{96} + \frac{9}{96} = \frac{29}{96}$$

∴ New ratio = 40 : 27 : 29

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Cash A/c Dr		2,08,000	
	To C's Capital A/c			1,50,000
	To Premium for Goodwill A/c			58,000
	(Being cash brought in for capital and goodwill by C)			
	Premium for Goodwill A/c Dr		58,000	
	To A's Capital A/c			40,000
	To B's Capital A/c			18,000
	(Being goodwill credited to old partners in their sacrificing ratio i.e. 20 : 9)			

10. B and C were partners in a firm sharing profits and losses in the ratio of 4 : 3. They admitted D as a new partner for 1/4th share in the profits which he acquired from B and C in 3 : 4 ratio. D brought Rs. 1,80,000 for his capital and Rs. 42,000 for his 1/4th share in goodwill. Calculate new profit sharing ratio of B, C and D and pass necessary journal entries for the above transactions on D's admission in the books of the firm. (Delhi 2008)

Old ratio between B and C = 4 : 3

$$D's \text{ share} = \frac{1}{4} \text{ th}$$

$$B's \text{ sacrifice} = \frac{1}{4} \times \frac{3}{7} = \frac{3}{28}$$

$$C's \text{ sacrifice} = \frac{1}{4} \times \frac{4}{7} = \frac{4}{28}$$

Sacrificing ratio = 3 : 4

Calculation of New Profit Sharing Ratio

$$B's \text{ new share} = \frac{4}{7} - \frac{3}{28} = \frac{16 - 3}{28} = \frac{13}{28}$$

$$C's \text{ new share} = \frac{3}{7} - \frac{4}{28} = \frac{12 - 4}{28} = \frac{8}{28}$$

$$D's \text{ new share} = \frac{3}{28} + \frac{4}{28} = \frac{7}{28}$$

New ratio = 13 : 8 : 7

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Cash A/c Dr		2,22,000	
	To D's Capital A/c			1,80,000
	To Premium for Goodwill A/c			42,000
	(Being cash brought in for capital and goodwill by D)			
	Premium for Goodwill A/c Dr		42,000	
	To B's Capital A/c			18,000
	To C's Capital A/c			24,000
	(Being goodwill credited to old partners in their sacrificing ratio)			

11. K and Y were partners in a firm sharing profits in 3 : 2 ratio. They admitted Z as a new partner for 1/3rd share in the profits of the firm. Z acquired his share from K and Y in 2 : 3 ratio. Z brought Rs. 80,000 for his capital and Rs. 30,000 for his 1/3rd share as premium. Calculate the new profits sharing ratio of K, Y and Z and pass necessary journal entries for the above transactions in the books of the firm. (All India 2008)

Old ratio between K and Y = 3 : 2

$$Z's \text{ share} = \frac{1}{3} ;$$

$$K's \text{ sacrifice} = \frac{2}{5} \times \frac{1}{3} = \frac{2}{15} ;$$

$$Y's \text{ sacrifice} = \frac{3}{5} \times \frac{1}{3} = \frac{3}{15}$$

∴ Sacrificing ratio = 2 : 3

Calculation of New Profit Sharing Ratio

$$\begin{aligned} K's \text{ new share} &= \frac{3}{5} - \frac{2}{15} \\ &= \frac{9-2}{15} = \frac{7}{15} \end{aligned}$$

$$\begin{aligned} Y's \text{ new share} &= \frac{2}{5} - \frac{3}{15} \\ &= \frac{6-3}{15} = \frac{3}{15} \end{aligned}$$

$$Z's \text{ new share} = \frac{2}{15} + \frac{3}{15} = \frac{5}{15}$$

New ratio = 7 : 3 : 5

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Cash A/c Dr		1,10,000	
	To Z's Capital A/c			80,000
	To Premium for Goodwill A/c			30,000
	(Being cash brought in for capital and goodwill by Z)			
	Premium for Goodwill A/c Dr		30,000	
	To K's Capital A/c			12,000
	To Y's Capital A/c			18,000
	(Being goodwill credited to old partners in their sacrificing ratio i.e., 2 : 3)			

CLASS 12 BUSINESS STUDIES
CHAPTER-3
BUSINESS ENVIRONMENT

IMPORTANT QUESTIONS

VERY SHORT ANSWER QUESTIONS (1 or 2 Marks)

QUESTION 1.

What is Business Environment?

Answer: Forces affecting the performance of an organization but outside its control are called as Business Environment.

QUESTION 2.

Which of the sector was given importance after independence?

Answer: Public sector.

QUESTION 3.

How have customers benefited by increased competition after liberalization and globalization?

Answer: While purchasing they get a better quality and wider choice of goods and services.

QUESTION 4.

What do you mean by Liberalisation?

Answer: It means reduction in government controls and restrictions

QUESTION 5.

How can the firms cope up with changing technological environment?

Answer: By developing new ways of doing things.

QUESTION 6.

What is meant by opportunities?

Answer: It refers to the positive external trends that help an enterprise to improve its performance

QUESTION 7.

What do you mean by Globalization?

Answer: Globalization means interaction and interdependence of a country with the economies of other countries to facilitate free flow of goods and services, capital and technology across borders.

QUESTION 8.

Which policy of Indian Government has moved India towards globalization?

Answer: The Industrial Policy of 1991.

QUESTION 9.

What do you mean by Innovation?

Answer: Producing goods and services by newly developed methods is called as Innovation.

QUESTION 10.

Name the economic reforms introduced to free Indian business from unnecessary controls and restrictions.

Answer: Liberalisation

QUESTION 11.

What do you mean by disinvestment?

Ans. When the private sector takes over public sector, it is called as disinvestment.

QUESTION 11.

Give one measure taken by Indian Government to introduce liberalization.

Ans. Abolishing licensing requirements.

SHORT ANSWER QUESTIONS (3 or 4 Marks)

QUESTION 12.

Explain how does the understanding of business environment help the management in the following:

(a) Tapping useful resources; and

(b) Coping with rapid changes.

(CBSE Board 2015)

Answer:

(a) Understanding of business environment helps in **tapping useful resources** by designing the policies that allow it to get the resources it need, so that they can convert resources into outputs that the environment desires.

(b) Understanding of business environment helps in **coping with rapid changes** by developing suitable courses of action to deal with changes taking place in the environment as well as the pace of change.

QUESTION 13.

An environmental conscious multinational company "AXN Ltd." follows certain well defined business principles that result to minimize the employee turnover. Following are some of the important environmental factors followed by 'AXN Ltd.'

(1) Honour the law of every country in which it operates.

(2) Respect the culture and customs of all nations.

(3) Provide clean and safe products to enhance the quality of life throughout the world.

(4) Develop a culture in the company that enhances individual creativity and teamwork while honouring mutual trust and respect between management and labour.

From the above:

(i) Identify and state any one general principle of management and any one dimension of business environment.

(ii) Also identify any two values which the above guiding principles and environmental factors are conveying to the society.

(CBSE BOARD 2015)

Answer:

(i) Principle of management:

- a) Stability of personnel
- b) Esprit de corps
- c) Initiative

Dimension of business environment:

- a) Legal environment.
- b) Social environment.

(ii) Values being conveyed:

- a) Respect for law
- b) Cleanliness and hygiene
- c) Raising standard of living
- d) Secularism

QUESTION 14.

‘Accent Electronics Ltd.’ was operating its business in Malaysia. The company started exporting its products to India when the Prime Minister announced relaxation in import duties on electronic items. The company appointed retailers in India who had direct on-line links which the suppliers to replenish stocks when needed.

Identify and explain the dimensions of business environment discussed in the above case.

(CBSE BOARD 2016)

Answer: The dimensions of business environment discussed in the above case are as follows.

i) Economic Environment: Reference line- "company started exporting its products to India"

Economic Environment: It comprises the economic variables such as interest rates, income, stock market indices that affect the functioning of the enterprises. For example, an increase in the income of the consumers in turn increases the demand for goods and services in an economy. Similarly, a fall in the interest rates of loans for consumer durables increases the spending capacity, and thereby increases the demand for such products.

ii) Legal Environment: Reference line-"Prime Minister allowed relaxation in import duties on electronic items"

Legal Environment: It comprises of the legislations and rules passed by the government such as the Companies Act, Trade union Act, etc. These legislations govern how an enterprise functions and behaves. Knowledge of these legislations is essential for enterprises as their non-compliance can lead to legal trouble for them.

QUESTION 15.

With change in the consumption habits of people, Neelesh, who was running, a sweets shop shifted to chocolate business. On the eve of Diwali he offered chocolates in attractive packages at reasonable prices. He anticipated huge demand and created a website chocolove.com for taking orders online. He got lot of orders online and earned huge profit by selling chocolates.

Identify and explain the dimensions of business environment discussed in the above case.

(CBSE BOARD 2016)

Answer. The dimensions of business environment that have been discussed here are as follows.

i. Social Environment- 'Change in consumption habits of people'

Social environment refers to the social forces such as customs, traditions, social values, social trend etc. For example, religious celebrations provide business opportunities to many enterprises such as those producing sweets, decoration items, gifts etc. Similarly, in India a change in social trend towards western lifestyle has increased the demand for western wear, consumption of fast food, etc.

ii. Technological Environment- 'Created a website chocolove.com for taking orders online'

Technological environment comprises of the technological changes and improvements. It includes forces relating to scientific improvements and innovations, which provide new ways of producing goods and services and new methods and techniques of operating business.

QUESTION 16.

Explain the role of political environment in shaping the business.?

Answer. : It includes political conditions such as general stability and peace in the country and the attitude of the elected government representatives hold towards businesses. Political stability builds confidence among business community while political instability and bad law & order situation may bring uncertainty in business activities.

A business functions within the framework of political environment. Generally, government's policies change with the change of guard in power. Business is required to understand and follow such changes and also respect the orders that judiciary gives from time to time.

For example, after globalization, Government of India allowed many companies to enter the Indian market for giving boost to the different industries like food processing industry etc. That paved the way for entry of multinationals in India on a large scale.

QUESTION 17.

A recent rate cut in the interest on loans announced by the Banks encouraged Amit, a science student of Progressive School to take a loan from State Bank of India to experiment and develop cars to be powered by fuel produced from garbage. He developed such a car and exhibited it in the Science Fair organised by Directorate of Education. He was awarded first prize for his invention.

Identify and explain the dimensions of business environment discussed in the above case.

Answer. The dimensions of business environment discussed in the above case are as follows.

i) Economic Environment- Reference line "A recent cut in the interest on loans announced by banks."

ii) Technological Environment- Reference line: "Developed cars to be powered by fuel produced from garbage".

Explanations of aforementioned dimensions of business environment

i) Economic Environment: It comprises the economic variables such as interest rates, income, stock market indices that affect the functioning of the enterprises. For example, an increase in the income of the consumers increases the demand for goods and services of the enterprises. Similarly, a fall in the interest rates of loans for consumer durables increases the spending capacity, and thereby increases the demand for such products.

ii) Technological Environment: Technological environment comprises the technological

changes and improvements. For example, introduction of computers and the Internet has changed the working style of the organisations today. Similarly, continuous improvement and innovations in the technology used in the production improves the quality of production. While on the one hand, improvement in technology provides new business opportunities for the enterprises; on the other hand, it is a threat for the enterprises using obsolete technology.

QUESTION 18.

Enumerate the benefits of understanding business environment.

Answer. The benefits of understanding business environment are:

- (i) Enabling the identification of opportunities and getting the first mover advantage.
 - (ii) Helping in the identification of threats and early
 - (iii) Tapping useful resources.
 - (iv) Coping with the rapid changes.
 - (v) Assisting in planning and policy.
 - (vi) Improvement in performance.
-

QUESTION 19.

Business environment or Environmental Scanning helps in the identification of threats and early warning signals." Explain?

Answer. Environmental scanning helps an enterprise to recognize qualitative information in advance, which can be used to prepare it for facing likely challenges. For example, if any new multinational company is entering the Indian market, the manager of an Indian firm dealing with the same product, should take it as a warning signal. He should take measures like improving the quality of his product, heavy advertisement etc. to face the challenge.

QUESTION 20.

Mention four examples of acquisitions and mergers.

Answer. Four examples of mergers and acquisitions are:

- (i) SRF buy Ceat's Rayon Tyre Cord.
- (ii) Parle's take-over by Coke.
- (iii) Godrej has bought over Goodnight.
- (iv) Hutch by Vodafone.

LONG ANSWER TYPE QUESTIONS (5 OR 6 MARKS)

QUESTION 21.

Metlapp Networks and Technologies Ltd. is a leader in technology innovation in the United States, creating products and solutions for connecting the world. It has a large research and development team which invented the first smart watch, named as W-7. The watch besides showing the time also monitors few health parameters like heart beat, blood pressure etc. While in search of markets abroad, the company found that in India, the reform process was underway with the aim of accelerating the pace of economic growth. The company decided to take advantage of simplified export procedure and removal of quantitative as well as tariff restrictions in India.

It set up its office in Jamnagar with a view to capture the Indian market. In a short span of time, the company emerged as a market leader. Success of the company attracted many other players to enter the market. Competition resulted in reduction in prices, thereby benefiting the customers.

(a) In the above paragraph, two major concepts related to government policy have been discussed. Identify and explain these concepts.

(b) Also, explain briefly any three impacts of these concepts on Indian business and industry.

Answer.

a. The two concepts related to the government policy discussed in the question are Liberalisation and Globalisation.

1. Liberalisation: Liberalisation refers to the removal of controls and restrictions imposed by the government. They indicated the end of the famous license-permit-quota raj in India.

2. Globalisation: Globalisation refers to the integration of economies of the world. It is the process associated with increasing openness, growing economic independence and promoting economic integration in the world economy.

b. The three major impacts of these concepts on Indian business and industry were:

1. Increased competition: As a result of measures such as abolition of the licensing policy, dereservation and encouragement to foreign direct investment, the competition faced by industries increased, both internally as well as externally, from foreign enterprises. This increase in competition was particularly felt in service industries, such as telecommunication, banking and insurance.

2. Increased demand: With the increased competition, producers increasingly became market-oriented. They began to produce goods keeping in mind the market demand. Therefore, the availability of goods and services for the consumers and the quality also increased tremendously. Thus, consumers gained from quality products and greater variety, and their demand for products increased.

3. Change in business policies: The government policies under the new industrial policy directly affected the functioning of business enterprises. As a result, they altered their policies and operations appropriately.

QUESTION 22.

Social environment of business is important for a business enterprise". Explain ?

Answer. A business is a part of the society in which it operates. The buying and consumption habits of the people, their languages, customs, preferences, tastes etc. are the factors that influence the business. The management should be aware of the changes happening in the business environment to exploit the right opportunities and to mitigate threats. Cooperation between business and society will see business boom and will help growth of professional managers. The failure of any business organization in adapting to changes in the social environment will lead to dissatisfaction amongst its customers and rejection of its products. This shift of demand can affect the survival of the business in the long run. For example, equal pay for male and female workers, demand for reservation in jobs for minorities and women etc.

QUESTION 23.

Enumerate any ten Positive impacts of liberalization and globalization.

Answer. The positive impacts of liberalization and globalization are as follow:

- I. Opportunities for new entrepreneurs.
 - II. Latest technology becoming available.
 - III. Opening up of foreign markets.
 - IV. Easy imports of capital goods.
 - V. Direct investment by Indian companies abroad.
 - VI. Changed attitude of labor unions,
 - VII. Easy inflow of foreign capital.
 - VIII. Freedom to expand and diversify.
 - IX. Restructuring of industries.
 - X. Widening of product choices for consumers.
-

QUESTION 24.

Explain any five negative impacts of liberalization and globalization.

Answer. Following are the negative effects of liberalization and globalization.

(i) Threats from multinational companies (MNCs) :With the arrival of multinationals it is becoming difficult for small and medium business units to even survive. The massive entry and consolidation to multinationals in the Indian markets is a challenge that has already forced some business enterprises to take the exit route.

(ii) Destabilization of protected environment :With easier entry of multi-national companies, Indian business environment is fast losing its protective shield. The new entrepreneurial freedom is creating problems for the existing players. Even manufacturers of Maruti car could not retain their market share and had to remodel their products and announce heavy price reductions from time to time.

(iii) Decline in public sector : Public sector is losing markets and their capacity utilization has declined, hampering thereby pace of country's technological and economic growth.

(iv) Sellers' market turned into buyers' market: With the entry of foreign goods .and services, shortage of goods, which is a boon for the sellers, has now turned into surplus. Resultantly, sales/margin to any sellers have come down substantially. Buyers are now free to buy any product of their choice at a price they can afford.

(v) Fall in the value of rupee : Indian rupee has been devaluing against DOLLAR, EURO and many other foreign currencies. This phenomenon has forced even some established exporters to encase their stake partly/fully.

QUESTION 25.

'Explain 'fiscal reforms' and 'monetary reforms' as per economic change initiated by Government of India since 1991.

Answer.

(i) Fiscal Reforms

- Measures have been taken to bring down fiscal deficit.
- Tax reforms have been initiated to increase revenue and tax compliance
- Reduction in direct and indirect taxes.

- Decrease in subsidies.

(ii) Monetary Reforms

- Phased reduction of statutory liquidity ratio (SLR).
- Private sector banks allowed to set up new branches.
- Banks have now been allowed to access capital market for raising capital.
- Permission for disinvestment (up to 49% of total equity).

QUESTION 26.

Explain any five ways in which managers have responded to changes in business environment.

Answer. Following are the ways in which managers have responded to changes in business environment:

i) Strategic alliance, mergers and consolidation of businesses : To achieve the objectives of market dominance, market entry, product ranges etc., the Indian business enterprises are also indulging in mergers, acquisitions, amalgamations and takeovers. Initiative for the same has naturally come from managers of such enterprises.

ii) Diversification spree: Managers are leading diversification of their companies into various fields. For example, Reliance is now also in the business of communications, retail chains etc. Likewise, they are bold enough to diversify into other nations too if the need arises.

iii) Consolidation of multinationals: Many multinational companies have entered India through new joint ventures. For example, General Motors' entry through a joint venture with Hindustan Motors.

iv) Brand Building: Companies are becoming more aggressive towards brand building. Their managers are spending huge amounts on the same. Focus is on securing prime positions for their brands, through creative media-mix, in the minds of consumers.

v) Labor : Managers are changing their behavior towards labor. Labors have also benefitted through higher wages and other facilities like training to upgrade their skills and job enrichment

QUESTION 27.

Briefly discuss the impact of government policy changes on the business and industry.

Answer:

The policies of liberalisation, privatisation and globalisation by the government affect the functioning of the business enterprises. The following points highlight the impact of government policy changes on the business and industry.

- i. Increased Competition:** As a result of the policies such as relaxation of the licensing policy and reduction of import duties, the competition faced by the domestic firms increases. India companies experienced competition in service industry such as telecommunication, banking, insurance, etc.
- ii. Increased Demand:** As competition increases, the choice of goods and services for the consumers also increases. Thus, consumers also gain from quality products and greater variety.
- iii. Change in Business Policies:** The government policies directly impact the functioning of the business enterprises. As a result, they have to alter their policies appropriately.
- iv. Technological Changes:** As competition increases firms tend to find new and innovative ways to survive in the market. In such a scenario, technological improvements become imperative.
- v. Need for Trained Personnel:** Innovations and improvement in product, application of improved technologies requires skilled and trained personnel. Thus, there arises a need for the development of human resources.
- vi. Greater Market Orientation:** With increased competition, the production has become market oriented. That is, the enterprises produce as per the demand market.
- vii. Less Reliance on Budgetary Support by Public Sector Enterprises:** To survive the increased competition, the public sector enterprises must improve efficiency and productivity rather than relying on budgetary support to cover their losses.

On the whole, the impact of Government policy changes particularly in respect of liberalisation, privatisation and globalisation has been positive as the Indian business and industry has shown great resilience in dealing with the new economic order. Indian enterprises have developed strategies and adopted business processes and procedures to meet the challenge of competition. They have become more customer-focused and adopted measures to improve customer relationship and satisfaction

CLASS 12 BUSINESS STUDIES
CHAPTER-4
PLANNING

IMPORTANT QUESTIONS

VERY SHORT ANSWER QUESTIONS (1 or 2 Marks)

QUESTION 1.

Give the meaning of 'Method' as a type of plan.

(CBSE BOARD 2015)

Answer. Method is the prescribed way or manner in which a task has to be performed.

QUESTION 2.

What is planning?

Answer. Planning is deciding in advance what to do and how to do. It is one of the basic managerial functions.

QUESTION 3.

What all qualities are required for doing planning?

Answer. Intelligence, Imagination, Foresight, Sound Judgment.

QUESTION 4.

Name and state the aspect of financial management that enables to foresee the fund requirements both in terms of 'the quantum' and 'in terms of the timings'.

(CBSE BOARD 2016)

Answer. The aspect of financial management that enables to foresee the fund requirements both in terms of 'the quantum' and in terms of 'the timings' is "Financial Planning". Financial planning involves designing the blueprint of the overall financial operations of a company such that right amount of funds are available for various operations at the right time.

QUESTION 5.

How does planning create rigidity?

Answer. Planning creates rigidity by putting adverse effect on initiative taken by the managers.

QUESTION 6.

What is the basis for creating future course of action?

Answer. Forecasting

QUESTION 7.

Give one limitation of planning function.

Answer. Planning does not guarantee success

QUESTION 8.

Which is the most crucial step in planning process?

Answer. Setting objectives for the organisation.

QUESTION 9.

Define 'Objective'?

Answer. Objectives are desired future position that the management would like to reach.

QUESTION 10.

Define 'Strategy'.

Answer. A strategy refers to future decisions and actions, defining the organisation's direction and scope in the long run.

SHORT ANSWER QUESTIONS (3 or 4 Marks)

QUESTION 11:

It is deciding in advance what to do and how to do. It is one of the basic managerial functions. It requires that before doing something, the manager must formulate an idea of how to work on a particular task. This function is closely connected with creativity and innovation. It seeks to bridge the gap between where we are and where we want to go and is performed at all levels of management.

In spite of this, the function of management referred above has a number of limitations.

Explain any two such limitations.

(CBSE BOARD 2015)

or

State any three limitations of planning function of management.

(CBSE BOARD 2016)

Answer.

The following are the limitations of planning.

1. Planning leads to rigidity: In an organisation, a well-defined plan is drawn up with specific goals to be achieved within a specific time but managers may not be in a position to change it. As the business environment is, dynamic managers need to be given some flexibility to cope up with the changed circumstances.

2. Planning may not work in dynamic environment: Planning is based on anticipation of future happenings and since future is uncertain and dynamic, so the organisation needs to adapt itself to changes. However planning cannot foresee the future events effectively.

3. Planning reduces creativity: Top management does planning and middle management does implementation of plan but they are not allowed to deviate from the plan and thus creativity of these managers are reduced.

QUESTION 12.

Enumerate six points of importance of planning.

Answer. Importance of planning is as under:

- i. It provides direction for action.

- ii. It reduces the risk of uncertainty
 - iii. It facilitates decision making.
 - iv. It establishes standards for controlling.
 - v. It promotes innovative ideas.
 - vi. It reduces overlapping and wasteful activities.
-

QUESTION 13:

Explain the first three steps in the process of 'Planning'.

(CBSE BOARD 2016)

Answer: The following are the first three steps are involved in the planning process.

i. Setting the objectives: Any business enterprise needs to decide upon its objectives, and the first step in the planning process is to set the objectives. Managers are required to define objectives clearly, so that they can take the right action to achieve the goals.

ii. Developing the premises: Planning is based on certain assumptions regarding the future. These assumptions are known as premises. The assumptions are regarding the predictions of the future, which form the basis of the planning process. Accuracy of forecast is necessary for successful plans.

iii. Identifying alternatives: The next step is to identify alternative courses of action. Managers must identify all the alternative courses of action for achieving the objectives of the organisation. This involves innovation and creativity.

QUESTION 14:

Explain any three features of 'Planning.'

(CBSE BOARD 2017)

Answer. The following points highlight the features of planning.

i) Planning focuses on achieving objectives: Organisations set up with general goals and specific goals along with the plans and activities to be undertaken to achieve these goals. Any management should formulate plans keeping in view the specific goals in mind. These plans must ensure that the desired objective is attained. The managers must make sure that the plans made are purposeful. For example, if sales target is to be achieved then the plans must be made in sync with this objective.

ii) Stepping Stone: Planning lays down the base for other functions of management. That is, planning precedes all other functions such as organising, directing, staffing and controlling. This is because plans states the objectives and all other functions are in accordance with the said objectives. Once the plans are determined, the role of other interrelated functions comes into place. Thus, planning sets the basis for other functions of an organisation.

iii) Pervasiveness: : Planning is required at all levels of management as well as in all departments of the organisation. The scope of planning is different at different levels and for different departments.

For example, the top level managers have to chalk out the policies regarding the overall management whereas the middle level managers plan out the authority to be assigned to the subordinates. On the other hand, the lower level managers make out small targets for day-to-day working.

QUESTION 15.

'Planning focuses on achieving objectives'. Explain.

Answer. Planning is a goal oriented process which helps in defining objectives, and preparation of necessary plans of action to achieve goals. Thus, planning is focused on clarifying what is to be done and how is that to be done. The planning holds no purpose if it does not focus on achievement of preset organizational or corporate objectives.

QUESTION 16.

'Planning is the basic function on of management'. Comment.

Answer. Every management starts with planning. All other functions like organizing, staffing, directing and controlling are based on planning. It precedes the execution of all other managerial functions and allows mangers to organize the staff and direct and control the activities in a better way to achieve organizational goals. All the activities are created in such a way that plans are easily carried out. This is also referred to as primacy of planning.

QUESTION 17.

Somnath Ltd. is engaged in the business of export of garments. In the past, the performance of the company had been up-to the expectations. In line with the latest technology, the company decided to upgrade its machinery. For this, the Finance Manager, Dalmia estimated the amount of funds required and the timings. This will help the company in linking the investment and the financing decisions on a continuous basis. Dalmia therefore, began with

the preparation of a sales forecast for the next four years. He also collected the relevant data about the profit estimates in the coming years. By doing this, he wanted to be sure about the availability of funds from the internal sources of the business. For the remaining funds, he is trying to find out alternative sources from outside. Justify the financial concept discussed in the above para. Also, state the objectives to be achieved by the use of financial concept, so identified.

(CBSE BOARD 2017)

Answer. The concept stated in the question is **Financial Planning**. It involves designing the blueprint of the overall financial operations of a company such that right amount of funds are available for various operations at the right time. That is, it tends to forecast what amount of fund would be required at what time as per the growth and performance of the company.

Objectives of Financial Planning

Proper financial planning is a prerequisite for the successful growth of any organisation, regardless of whether they are new or existing ones. The two main objectives of financial planning are as given below:

- 1. Ensure timely availability of funds:** Financial planning involves estimating the right amount of funds required for various business operations and the time when these funds would be required. It also involves identifying the probable sources of raising funds.
- 2. Proper utilization of funds:** It implies ensuring that situations of both inadequate funds as well as surplus funds are avoided. While on the one hand, inadequate funds hinder the smooth operations of the firm; on the other hand, excess funds add to the cost of business and encourage unnecessary and wasteful expenditure. Thus, financial planning ensures that the funds are optimally utilised.

QUESTION 18.

What do you mean by planning premises?

Answer. Planning premises are assumptions relating to future conditions and events which are likely to have an effect on achievement of goals. These are the bases upon which the entire structure of planning is built. Every plan is drawn with certain assumptions. To make planning effective, it is necessary that the premises should be based on accurate forecasts, existing plans or any past information about policies etc.

For example, demand for a product, cost of raw materials, interest rates, state of technology, intensity of competition, government policies etc.

QUESTION 19:

Give the meaning of 'procedure' and 'rule' as types of plans.

(CBSE BOARD 2017)

Answer.

(i) Procedure: A procedure is a set of routine steps defined in a chronological order to be followed for the enforcement of a policy. It include a detailed description of the exact manner in which a task is to be performed. Generally, procedures are developed for the insiders, i.e. the employees of the organisation. They consist of steps in a sequential manner, which are undertaken to implement a policy or a particular work. In short, we can say that procedures are the steps that require to be carried out within a broad policy framework.

(ii) Rule: A rule refers to a standard or specific statement that gives information about what is to be done and what is not to be done. Rules are the simplest type of plans that do not allow any kind of flexibility. They signify the managerial decision that a particular task or action has to be performed or not. Such rules do not allow any scope for compromise or change unless the managers take a policy decision.

QUESTION 20:

Ramnath Ltd. is dealing in import of organic food items in bulk. The company sells the items in smaller quantities in attractive packages. Performance of the company has been up to the expectations in the past. Keeping up with the latest packaging technology, the company decided to upgrade its machinery. For this, the Finance Manager of the company, Mr. Vikrant Dhull, estimated the amount of funds required and the timings. This will help the company in linking the investment and the financing decisions on a continuous basis.

Therefore, Mr. Vikrant Dhull began with the preparation of a sales forecast for the next four years. He also collected the relevant data about the profit estimates in the coming years. By doing this, he wanted to be sure about the availability of funds from the internal sources. For the remaining funds he is trying to find out alternative sources. Identify the financial concept discussed in the above paragraph. Also, state any two points of importance of the financial concept, so identified.

(CBSE BOARD 2017)

Answer. The financial concept discussed in the paragraph is Financial Planning. Its importance can be highlighted from the following factors:

a. Helps in facing eventual situations: Financial planning helps in forecasting the future situations. In this way, it prepares an organisation to cope with the adverse situations in a better manner.

b. Helps in avoiding surprises and shocks: Through financial planning, an organisation can detect situations of shortage or surplus of funds that may arise in future. Therefore, it prepares the managers in advance for such situations.

QUESTION 21.

Give the meaning of 'Strategy' and 'Rule' as types of plans.

(CBSE BOARD 2017)

Answer.

a. Strategy: Strategy refers to future decisions defining the organisations direction and scope in the long run. Objectives, adopting the required course of action and allocating the necessary resources. They are often defined as the future decisions, which display the direction and scope of the organisation in the end. While formulating a strategy, a manager must consider all the different aspects of the business environment and based upon all factors, should finally take up the strategic decisions.

b. Rule: Rules are specific statement that inform what is to be done and what not to be done in various circumstances. They signify the managerial decision that a particular task or action has to be performed or not. Such rules do not allow any scope for compromise or change.

QUESTION 22.

'Planning reduces creativity'. How?

Answer. Usually in an organisation, the top management performs planning function and the rest of the members are required to implement these plans. As a result, middle management and other members are not allowed to deviate from plans nor they are granted authority to act on their own. Hence, most of the initiative and creativity in them is reduced.

QUESTION 23.

What is meant by budget?

Answer. Budget is a plan in numerical terms, which quantifies desired data. A budget is a statement of expected results expressed in numerical terms for a definite period in the future. For example, a sales budget helps in forecasting the sales of a particular product in different areas during a particular month.

QUESTION 24.

How can (i) Political climate and (ii) Policies of competitors obstruct planning?

Answer.

(i) Obstruction in planning due to political climate

When the government regulates the business practices or introduces new trade policies, the plans of business enterprises may get upset. In addition, political instability affects business plans. For example, change in the taxation policy.

(ii) Obstruction in planning due to policies of competitors

The policies of competitors may lead to change in business policies. . For example, discounting policies of the competitors may lead to change in pricing policy of a business enterprise.

LONG ANSWER TYPE QUESTIONS (5 OR 6 MARKS)

QUESTION 25:

Two years ago Nishant, completed his degree in Textile Engineering. He worked for sometime in a company manufacturing readymade garments. He was not happy in the company and decided to have his own readymade garments manufacturing unit. He set the objectives and the targets and formulate action plan to achieve the same. One of his objectives was to earn 80% profit on the amount invested in the first year. It was decided that raw materials like cloth, thread, buttons etc, will be purchased on two months credit. He also decided to follow the steps required for marketing the products through his own outlets.

He appointed Ritesh as a production manager, who decides the exact manner in which the production activities are to be carried out. Ritesh also prepared a statement showing the requirement of workers in the factory throughout the year. Nishant informed Ritesh about his sales target for different products area wise for the forthcoming quarter.

A penalty of Rs 200 per day was announced for the workers who found smoking in the factory premises.

Quoting lines from the above para identify and explain the different types of plans discussed.

Answer. The different types of plans discussed in the paragraph are listed below.

1. Objective- "One of her objective was to earn 80 % profit on the amount invested in the first year"

Objectives are the end results, which the management seeks to achieve, by its operations. It is to be expressed in specific terms i.e., they should be measurable in quantitative terms, in the form of a written statement of desired results to be achieved within a given time period.

2. Policy- "It was decided that raw materials like cloth, thread, buttons etc. will be purchased on two months credit."

Policies are general statements that guide thinking or channelize energies towards a particular direction. It provides a basis for interpreting strategy. It forms the general response or a course of action to be followed in a particular situation.

3. Procedure- "Decided to follow the steps required for marketing of the products through her own outlets"

A procedure is a set of routine steps defined in a chronological order that are to be followed for the enforcement of a policy.

4. Method- "The exact manner in which the production activities are to be carried out"

Methods provide the prescribed ways or manner in which a task can be performed considering the objective. It considers one step of an entire procedure and defines the step to be taken for the completion of the given task.

5. Rule- "A Penalty of Rs 200 per day was announced for the workers who found smoking in the factory premises"

A rule refers to a standard or specific statement that gives information about what is to be done and what is not to be done. Rules are the simplest type of plans.

6. Budget- "Ritesh also prepared a statement showing the requirement of workers in the factory throughout the year"

A budget is a statement of expected results expressed in numerical terms for a definite period in the future.

QUESTION 26:

Is planning actually worth the huge costs involved? Explain.

Answer :

Planning involves huge costs in terms of time and money. It involves analysis, research and

scientific calculations that involve huge cost. However, despite being an expensive function it is a very basic and essential function of an organisation. Following are some of the highlighted factors due to which we can say that planning is a very significant action despite of the gigantic costs.

(i) **Renders Direction:** Planning clearly states the goals and objectives to be achieved. Thus, it acts as a guide for the actions to be taken. It provides a direction to the actions of different departments of the organisation. They guide the managers about things to be done, what route to take and how the objectives are to be achieved. It ensures that the path taken for accomplishment of goals is righteously chosen. Planning also ensures that various departments of the organisation work in a coordinated manner towards the achievement of the desired objectives.

(ii) **Subdued Risk:** By guiding an organisation in the right direction, it accredits its managers to analyse and anticipate changes. This leads to a reduction in uncertainty of the foreseen events. Planning shows how to deal with situations, which may arise in the due course of management, though it does not fully eliminate the problems.

(iii) **Minimized Overlapping:** As the managers are well comprehended with the policies and plans of the organisation, they coordinate the activities together to reach the objectives. Thus, overlapping of the work is reduced. In addition, any wastage of resources that takes place due to overlapping is reduced. Proper planning ensures that there is no confusion and misunderstanding and the work proceeds smoothly.

(iv) **Encourages Creativity:** Planning serves as the stepping-stone of any organization's success. It includes formulating policies and plans which requires innovation. It is a crucial activity, which demands the best of managers thinking capabilities and creativity. It calls out for new ideas by the management to attain the goals.

(v) **Helps in Decision Making:** Planning serves as the basis for decision making. Planning involves analysing the future, evaluating the various courses of action and choosing best alternative as per the objective. Thus, following a proper planning process helps the managers in taking rational decisions.

(vi) **Essential for Controlling:** Planning states the objectives that are to be achieved. Thus, it sets the standards against which the performance is evaluated. It also helps in determining whether there is any deviation from the said objectives and thereby, facilitates the corrective measures.

Hence, we can infer that despite the costs involved, planning is a very important function in management and worth the costs incurred.

Treatment of Goodwill

1 Mark Questions

1. Under what circumstances will the premium for goodwill paid by the incoming partner not be recorded in the books of accounts. (Compartment 2014)

Ans. When the incoming partner pays his share of goodwill privately to the sacrificing partners, outside the business, then no entry is passed in the books of the firm.

2. State the need for treatment of goodwill on admission of a partner. (Delhi 2010)

Ans. When a new partner is admitted, his share in future profits of the firm is equal to the sacrifice of profit by an existing partner or partners of the firm. The amount he pays to compensate this sacrifice, is in the form of goodwill. Therefore, it is important to treat goodwill at the time of admission of a partner.

2 Marks Question

3. A and B are partners with capitals of Rs. 90,000 and Rs. 1,00,000 respectively. They decide to admit C into the partnership for $\frac{1}{4}$ th share in the future profits. C is to bring a sum of Rs. 80,000 as his capital. Calculate the amount of goodwill. (All India 2008)

A's capital	=	90,000
B's capital	=	1,00,000
C's capital	=	80,000
Total capital of partners	=	<u>₹ 2,70,000</u>

Calculation of total capital on C's admission taking his capital as base

$$\text{C's share} = \frac{1}{4} \text{ th}$$

C brings as capital = 80,000

For $\frac{1}{4}$ th share, capital = 80,000

$$\text{Total capital} = 80,000 \times 4 = ₹ 3,20,000$$

$$\text{Hidden goodwill} = 3,20,000 - 2,70,000 = ₹ 50,000$$

$$\therefore \text{C's share of goodwill} = 50,000 \times \frac{1}{4} = ₹ 12,500$$

4. Hemant and Nishant were partners in a firm sharing profits in the ratio of 3 : 2. Their capitals were Rs. 1,60,000 and Rs. 1,00,000 respectively. They admitted Somesh on 1st April, 2013 as a new partner for $\frac{1}{5}$ share in the future profits. Somesh brought Rs. 1,20,000 as his capital. Calculate the value of goodwill of the firm and record necessary journal entries for the above transactions on Somesh's admission.

(All India 2014)

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
2013 Apr 1	Bank A/c To Somesh's Capital A/c (Being the cash brought in by Somesh for his capital)	Dr	1,20,000	1,20,000
Apr 1	Somesh's Capital A/c To Hemant's Capital A/c To Nishant's Capital A/c (Being the credit given for goodwill to Hemant and Nishant on Somesh's admission)	Dr	44,000	26,400 17,600

Working Note

Calculation of Hidden Goodwill

Somesh's capital = ₹ 1,20,000 for $\frac{1}{5}$ share

(a) Total capital of new firm = $1,20,000 \times \frac{5}{1} = ₹ 6,00,000$

(b) Hemant, Nishant and Somesh's capital = $1,60,000 + 1,00,000 + 1,20,000 = ₹ 3,80,000$

Goodwill of the firm ($a - b$) = $6,00,000 - 3,80,000 = ₹ 2,20,000$

Somesh's share = $2,20,000 \times \frac{1}{5} = ₹ 44,000$

5. Abhay and Beena are partners in a firm. They admit Chetan as a partner with $\frac{1}{4}$ th share in the profits of the firm. Chetan brings Rs. 2,00,000 as his share of capital. The value of the total assets of the firm is Rs. 5,40,000 and outside liabilities are valued at Rs. 1,00,000 on that date. Give the necessary entry to record goodwill at the time of Chetan's admission. Also show your working notes.

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Chetan's Capital A/c To Abhay's Capital A/c To Beena's Capital A/c (Being Chetan's share of goodwill adjusted in existing partners' capital accounts)	Dr	40,000	20,000 20,000

(i) Calculation of Chetan's Share of Goodwill

(a) New firm's capital on the basis of Chetan's capital and his share = $2,00,000 \times \frac{4}{1} = 8,00,000$

(b) Adjusted Capitals of Old Partners = Assets – Liabilities

$$= 5,40,000 - 1,00,000 = 4,40,000$$

(+)	New partner's capital	= 2,00,000
		₹ 6,40,000

Value of hidden goodwill (a + b) = $8,00,000 - 6,40,000 = 1,60,000$

$$\text{Chetan's share} = 1,60,000 \times \frac{1}{4} = ₹ 40,000$$

6. Asin and Shreyas are partners in a firm. They admit Ajay as a new partner with 1/5th share in the profits of the firm. Ajay brings Rs. 5,00,000 as his share of capital. The value of the total assets of the firm was Rs. 15,00,000 and outside liabilities were valued at Rs. 5,00,000 on that date. Give the necessary journal entry to record goodwill at the time of Ajay's admission. Also, show your workings. (All India 2013)

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Ajay's Capital A/c Dr		2,00,000	
	To Asin's Capital A/c			1,00,000
	To Shreyas's Capital A/c			1,00,000
	(Being adjustment entry passed for goodwill)			

Working Note

(i) Calculation of Ajay's Share of Goodwill

(a) New firm's capital on the basis of Ajay's capital and his profit share

$$= 5,00,000 \times \frac{5}{1} = ₹ 25,00,000$$

(b) Adjusted Capital of Old Partners = Assets – Liabilities

$$= 15,00,000 - 5,00,000 = ₹ 10,00,000$$

(+)	New partner's capital	= ₹ 5,00,000
		₹ 15,00,000

Value of hidden goodwill (a – b) = $25,00,000 - 15,00,000 = 10,00,000$

$$\text{Ajay's share} = 10,00,000 \times \frac{1}{5} = ₹ 2,00,000$$

7. A and B were partners in a firm sharing profits and losses in the ratio of 3 : 2. They admitted C as a new partner for 3/7th share in the profits and the new profit sharing ratio will be 2 : 2 : 3. C bought tRs. 2,00,000 as his capital and Rs. 1,50,000 as premium for goodwill. Half of their share of premium was withdrawn by A and B from the firm. Calculate sacrificing ratio and pass necessary journal entries for the above transactions in the books of the firm. (All India 2009)

Old ratio between A and B = 3 : 2

New ratio among A, B and C = 2 : 2 : 3

Sacrificing Ratio = Old Share – New Share

$$\therefore \text{A's sacrifice} = \frac{3}{5} - \frac{2}{7} = \frac{21-10}{35} = \frac{11}{35}$$

$$\text{B's sacrifice} = \frac{2}{5} - \frac{2}{7} = \frac{14-10}{35} = \frac{4}{35}$$

Sacrificing ratio between A and B = 11 : 4

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Cash A/c Dr		3,50,000	
	To C's Capital A/c			2,00,000
	To Premium for Goodwill A/c			1,50,000
	(Being cash brought in for capital and goodwill by C)			
	Premium for Goodwill A/c Dr		1,50,000	
	To A's Capital A/c			1,10,000
	To B's Capital A/c			40,000
	(Being amount of goodwill credited to old partners in their sacrificing ratio i.e. 11 : 4)			
	A's Capital A/c Dr		55,000	
	B's Capital A/c Dr		20,000	
	To Cash A/c			75,000
	(Being half goodwill withdrawn by A and B in sacrificing ratio)			

8. A and B were partners in a firm sharing profits in the ratio of 4 : 3. They admitted C as a new partner for 3/7th share in the profits of the firm. The new profit sharing ratio will be 2 : 2 : 3. C brought Rs. 2,00,000 as his capital and Rs. 60,000 for his share of premium as goodwill, half of which was withdrawn by A and B from the firm. Calculate sacrificing ratio and pass necessary journal entries in the books of the firm for the above transactions. (All India 2009)

Old ratio between A and B = 4 : 3

New ratio among A, B and C = 2 : 2 : 3

Sacrificing Ratio = Old Share – New Share

$$\therefore \quad \text{A's sacrifice} = \frac{4}{7} - \frac{2}{7} = \frac{2}{7}; \quad \text{B's sacrifice} = \frac{3}{7} - \frac{2}{7} = \frac{1}{7}$$

\therefore Sacrificing ratio between A and B = 2 : 1

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Cash A/c Dr		2,60,000	
	To C's Capital A/c			2,00,000
	To Premium for Goodwill A/c			60,000
	(Being cash brought in for capital and goodwill by C)			
	Premium for Goodwill A/c Dr		60,000	
	To A's Capital A/c			40,000
	To B's Capital A/c			20,000
	(Being goodwill credited to old partners in their sacrificing ratio i.e. 2 : 1)			
	A's Capital A/c Dr		20,000	
	B's Capital A/c Dr		10,000	
	To Cash A/c			30,000
	(Being half goodwill withdrawn by A and B in sacrificing ratio)			

6 Marks Question

9. A and B were partners in a firm sharing profits and losses in the ratio of 5 : 3. They admitted C as a new partner. A surrendered 1/3rd of his share in favour of C and B surrendered 1/4 th of his share in favour of C. C brought Rs. 1,50,000 for his capital and Rs. 58,000 for his share of goodwill. Calculate new profit sharing ratio of A, B and C, sacrificing ratio of A and B and pass necessary journal entries for the above transactions on C's admission. (Delhi 2008)

Old ratio between A and B = 5 : 3

$$A \text{ surrendered} = \frac{1}{3} \times \frac{5}{8} = \frac{5}{24} \times \frac{4}{4} = \frac{20}{96}$$

$$B \text{ surrendered} = \frac{1}{4} \times \frac{3}{8} = \frac{3}{32} \times \frac{3}{3} = \frac{9}{96}$$

∴ Sacrificing ratio = 20 : 9

Calculation of New Profit Sharing Ratio

$$A's \text{ new share} = \frac{5}{8} - \frac{20}{96} = \frac{60 - 20}{96} = \frac{40}{96}$$

$$B's \text{ new share} = \frac{3}{8} - \frac{9}{96} = \frac{36 - 9}{96} = \frac{27}{96}$$

$$C's \text{ new share} = \frac{20}{96} + \frac{9}{96} = \frac{29}{96}$$

∴ New ratio = 40 : 27 : 29

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Cash A/c Dr To C's Capital A/c To Premium for Goodwill A/c (Being cash brought in for capital and goodwill by C)		2,08,000	1,50,000 58,000
	Premium for Goodwill A/c Dr To A's Capital A/c To B's Capital A/c (Being goodwill credited to old partners in their sacrificing ratio i.e. 20 : 9)		58,000	40,000 18,000

10. B and C were partners in a firm sharing profits and losses in the ratio of 4 : 3. They admitted D as a new partner for 1/4th share in the profits which he acquired from B and C in 3 : 4 ratio. D brought Rs. 1,80,000 for his capital and Rs. 42,000 for his 1/4th share in goodwill. Calculate new profit sharing ratio of B, C and D and pass necessary journal entries for the above transactions on D's admission in the books of the firm. (Delhi 2008)

Old ratio between B and C = 4 : 3

$$D's \text{ share} = \frac{1}{4} \text{ th}$$

$$B's \text{ sacrifice} = \frac{1}{4} \times \frac{3}{7} = \frac{3}{28}$$

$$C's \text{ sacrifice} = \frac{1}{4} \times \frac{4}{7} = \frac{4}{28}$$

Sacrificing ratio = 3 : 4

Calculation of New Profit Sharing Ratio

$$B's \text{ new share} = \frac{4}{7} - \frac{3}{28} = \frac{16 - 3}{28} = \frac{13}{28}$$

$$C's \text{ new share} = \frac{3}{7} - \frac{4}{28} = \frac{12 - 4}{28} = \frac{8}{28}$$

$$D's \text{ new share} = \frac{3}{28} + \frac{4}{28} = \frac{7}{28}$$

New ratio = 13 : 8 : 7

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Cash A/c Dr		2,22,000	
	To D's Capital A/c			1,80,000
	To Premium for Goodwill A/c			42,000
	(Being cash brought in for capital and goodwill by D)			
	Premium for Goodwill A/c Dr		42,000	
	To B's Capital A/c			18,000
	To C's Capital A/c			24,000
	(Being goodwill credited to old partners in their sacrificing ratio)			

11. K and Y were partners in a firm sharing profits in 3 : 2 ratio. They admitted Z as a new partner for 1/3rd share in the profits of the firm. Z acquired his share from K and Y in 2 : 3 ratio. Z brought Rs. 80,000 for his capital and Rs. 30,000 for his 1/3rd share as premium. Calculate the new profits sharing ratio of K, Y and Z and pass necessary journal entries for the above transactions in the books of the firm. (All India 2008)

Old ratio between K and Y = 3 : 2

$$Z's \text{ share} = \frac{1}{3} ;$$

$$K's \text{ sacrifice} = \frac{2}{5} \times \frac{1}{3} = \frac{2}{15} ;$$

$$Y's \text{ sacrifice} = \frac{3}{5} \times \frac{1}{3} = \frac{3}{15}$$

∴ Sacrificing ratio = 2 : 3

Calculation of New Profit Sharing Ratio

$$\begin{aligned} K's \text{ new share} &= \frac{3}{5} - \frac{2}{15} \\ &= \frac{9-2}{15} = \frac{7}{15} \end{aligned}$$

$$\begin{aligned} Y's \text{ new share} &= \frac{2}{5} - \frac{3}{15} \\ &= \frac{6-3}{15} = \frac{3}{15} \end{aligned}$$

$$Z's \text{ new share} = \frac{2}{15} + \frac{3}{15} = \frac{5}{15}$$

New ratio = 7 : 3 : 5

JOURNAL

Date	Particulars	LF	Amt (Dr)	Amt (Cr)
	Cash A/c Dr		1,10,000	
	To Z's Capital A/c			80,000
	To Premium for Goodwill A/c			30,000
	(Being cash brought in for capital and goodwill by Z)			
	Premium for Goodwill A/c Dr		30,000	
	To K's Capital A/c			12,000
	To Y's Capital A/c			18,000
	(Being goodwill credited to old partners in their sacrificing ratio i.e., 2 : 3)			

O.P. JINDAL SCHOOL ANGUL
PYTHON QUESTION BANK
CLASS - 12

Q1. Which of the following are modules/libraries in Python?

- a. NumPy
- b. Pandas
- c. Matplotlib
- d. All of the above

Ans. d. All of the above

Q2. NumPy stands for _____

- a. Number Python
- b. Numerical Python
- c. Numbers in Python
- d. None of the above

Ans. b. Numerical Python

Q3. Which of the following libraries allows to manipulate, transform and visualize data easily and efficiently.

- a. Pandas
- b. NumPy
- c. Matplotlib
- d. All of the above

Ans. d. All of the above

Q4. PANDAS stands for _____

- a. Panel Data Analysis

- b. Panel Data analyst**
- c. Panel Data**
- d. Panel Dashboard**

Ans. c. Panel Data

Q5. _____ is an important library used for analyzing data.

- a. Math**
- b. Random**
- c. Pandas**
- d. None of the above**

Ans. c. Pandas

Q6. Important data structure of pandas is/are _____

- a. Series**
- b. Data Frame**
- c. Both of the above**
- d. None of the above**

Ans. c. Both of the above

Q7. Which of the following library in Python is used for plotting graphs and visualization.

- a. Pandas**
- b. NumPy**
- c. Matplotlib**
- d. None of the above**

Ans. c. Matplotlib

Q8. Pandas Series can have _____ data types

- a. float**
- b. integer**

- c. String
- d. All of the above

Ans.

Q9. _____ is used when data is in Tabular Format.

- a. NumPy
- b. Pandas
- c. Matplotlib
- d. All of the above

Ans. b. Pandas

Q10. Which of the following command is used to install pandas?

- a. pip install pandas
- b. install pandas
- c. pip pandas
- d. None of the above

Ans. a. pip install pandas

Q11. A _____ is a collection of data values and operations that can be applied to that data.

- a. Data Structure
- b. Data Frame
- c. Table
- d. None of the above

Ans. a. Data Structure

Q12. A _____ is a one-dimensional array.

- a. Data Frame

- b. Series**
- c. Both of the above**
- d. None of the above**

Ans. b. Series

Q13. Which of the following statement is wrong?

- a. We can create Series from Dictionary in Python.**
- b. Keys of dictionary become index of the series.**
- c. Order of indexes created from Keys may not be in the same order as typed in dictionary.**
- d. All are correct**

Ans. d. All are correct

Q14. A Series by default have numeric data labels starting from _____.

- a. 3**
- b. 2**
- c. 1**
- d. 0**

Ans. d. 0

Q15. The data label associated with a particular value of Series is called its _____

- a. Data value**
- b. Index**
- c. Value**
- d. None of the above**

Ans. b. Index

Q16. Which of the following module is to be imported to create Series?

- a. NumPy
- b. Pandas
- c. Matplotlib
- d. None of the above

Ans. b. Pandas

Q17. Which of the following function/method help to create Series?

- a. series()
- b. Series()
- c. createSeries()
- d. None of the above

Ans. b. Series()

Q18. Write the output of the following :

```
>>> import pandas as pd
```

```
>>> series1 = pd.Series([10,20,30])
```

```
>>> print(series1)
```

a.

Output:

```
0  10
```

```
1  20
```

```
2  30
```

```
dtype: int64
```

b.

Output:

```
10
```


20

30

dtype: int64

c.

Output:

0

1

2

dtype: int64

d. None of the above

Ans. a.

Q19. When you print/display any series then the left most column is showing _____ value.

a. Index

b. Data

c. Value

d. None of the above

Ans. a. Index

Q20. How many values will be there in array1, if given code is not returning any error?

```
>>> series4 = pd.Series(array1, index = ["Jan", "Feb", "Mar", "Apr"])
```

a. 1

b. 2

c. 3

d. 4

Ans. d. 4

Q21. Which of the following statement will create an empty series named "S1"?

- a. `S1 = pd.Series(None)`
- b. `S1 = pd.Series()`
- c. Both of the above
- d. None of the above

Ans. c. Both of the above

Q22. How many elements will be there in the series named "S1"?

```
>>> S1 = pd.Series(range(5))
```

```
>>> print(S1)
```

- a. 5
- b. 4
- c. 6
- d. None of the above

Ans. a. 5

Q23. When we create a series from dictionary then the keys of dictionary become _____

- a. Index of the series
- b. Value of the series
- c. Caption of the series
- d. None of the series

Ans. a. Index of the series

Q24. Write the output of the following :

```
>>> S1=pd.Series(14, index = ['a', 'b', 'c'])
```

```
>>> print(S1)
```

a.

a 14
b 14
c 14
dtype: int64
b.
a 14
dtype: int64
c. Error
d. None of the above

Ans. a.

Q25. Write the output of the following:

```
>>> S1=pd.Series(14, 7, index = ['a', 'b', 'c'])  
>>> print(S1)
```

a.
a 14
b 7
c 7
dtype: int64
b.
a 14
b 7
dtype: int64
c. Error
d. None of the above

Ans. c. Error

Q26. Write the output of the following :

```
>>> S1=pd.Series([14, 7, 9],index = range(1, 8, 3))  
>>> print(S1)
```

a.
14 1
7 4
9 7
dtype: int64
b.
1 14
4 7
7 9
dtype: int64

- c. Error
- d. None of the above

Ans. b.

Q27. Which of the following code will generate the following output?

```
Jan 31
Feb 28
Mar 31
dtype: int64
```

a.

```
import pandas as pd
S1 = pd.Series(data = [31,28,31], index=["Jan","Feb","Mar"])
print(S1)
```

b.

```
import pandas as pd
S1 = pd.Series([31,28,31], index=["Jan","Feb","Mar"])
print(S1)
```

- c. Both of the above
- d. None of the above

Ans. c. Both of the above

Q28. Write the output of the following:

```
import pandas as pd
S1 = pd.Series(data = range(31, 2, -6), index = [x for x in "aeiou" ])
print(S1)
```

a.

```
a 31
e 25
i 19
o 13
u 7
dtype: int64
```

b.

```
a 31
e 25
i 19
o 13
dtype: int64
```

- c. Error
- d. None of the above

Ans. a.

Q29. What type of error is returned by following code?

```
import pandas as pd
S1 = pd.Series(data = (31, 2, -6), index = [7, 9, 3, 2])
print(S1)
```

- a. **SyntaxError**
- b. **IndexError**
- c. **ValueError**
- d. None of the above

Ans. c. **ValueError**

Q30. Write the output of the following :

```
import pandas as pd
S1 = pd.Series(data = 2*(31, 2, -6))
print(S1)
```

- a.
0 31
1 2
2 -6
dtype: int64
- b.
0 31
1 2
2 -6
3 31
4 2
dtype: int64
- c.
0 31
1 2
2 -6
3 31
dtype: int64
- d.

```
0 31
1 2
2 -6
3 31
4 2
5 -6
dtype: int64
```

Ans. d.

Q31. We can imagine a Pandas Series as

a _____ in a spreadsheet

- a. Column
- b. Cell
- c. Table
- d. None of the above

Ans. a. Column

Q32. We can assign user-defined labels to the index of the series?(T/F)

- a. True
- b. False

Ans. a. True

Q33. Write the output of the following :

```
import pandas as pd
series2 = pd.Series(["Kavi","Shyam","Ravi"], index=[3,5,1])
print(series2 > "S")
```

- a.
3 False
5 False
1 False
dtype: bool
- b.
3 False
5 True

1 False
dtype: bool
c.
3 True
5 True
1 True
dtype: bool
d. None of the above

Ans. b

Q34. Which of the following statement is correct for importing pandas in python?

- a. import pandas
- b. import pandas as pd
- c. import pandas as pds
- d. All of the above

Ans. d. All of the above

Q35. What type of error is returned by following statement?

```
import pandas as pnd  
pnd.Series([1,2,3,4], index = ['a','b','c'])
```

- a. SyntaxError
- b. IndexError
- c. ValueError
- d. None of the above

Ans. c. ValueError

Q1. What do you mean by Pandas in Python?

Ans. PANDAS (PANel DAta) is a high-level data manipulation tool used for analyzing data. Pandas library has a very rich set of functions.

Q2. Name three data structures available in Pandas.

Ans. Three data structures available in Pandas are :

1. **Series**
2. **DataFrame**
3. **Panel**

Q3. Write command to install pandas in python.

Ans. pip install pandas

Q4. What do you mean by Series in Python?

Ans. A Series is a one-dimensional array containing a sequence of values of any data type (int, float, list, string, etc) which by default have numeric data labels (called index) starting from zero. Example of a series containing names of students is given below:

Index Value

0 Arnab

1 Samridhi

2 Ramit

3 Divyam

4 Kritika

Q5. Define data structure in Python.

Ans. A data structure is a collection of data values and operations that can be applied to that data.

Q6. Write the code in python to create an empty Series.

Ans.

```
import pandas as pd  
S1 = pd.Series( )  
print(S1)
```

OR

```
import pandas as pd  
S1 = pd.Series( None)  
print(S1)
```

OUTPUT : Series([], dtype: float64)

Q7. Name a method which is used to create Series in Python.

Ans. Series()

Q8. Write a program in Python to create a series of first five even numbers.

Ans.

```
import pandas as pd
S1 = pd.Series([2, 4, 6, 8, 10])
print(S1)
```

OUTPUT :

```
0    2
1    4
2    6
3    8
4   10
dtype: int64
```

Q9. Write a program in Python to create series of vowels.

Ans.

```
import pandas as pd
S1 = pd.Series(["a","e","i","o","u"])
print(S1)
```

OUTPUT :

```
0    a
1    e
2    i
3    o
4    u
dtype: object
```

Q10. Write a program in Python to create the pandas series of all the characters in the name accepted from user.

Ans.

```
import pandas as pd
A = input("Enter your name : ")
S1 = pd.Series(list(A))
print(S1)
```

OUTPUT :

Enter your name : amit

0 a

1 m

2 i

3 t

dtype: object

Q11. Write a program in Python to create a Series in Python from the given dictionary. D = {"Jan" : 31, "Feb" : 28, "Mar" : 31}

Ans.

```
import pandas as pd
D = {"Jan" : 31, "Feb" : 28, "Mar" : 31}
S1 = pd.Series(D)
print(S1)
```

OUTPUT :

Jan 31

Feb 28

Mar 31

dtype: int64

Q12. Write a program to create a series from dictionary that stores classes (6,7,8,9,10) as keys and number of students as values.

Ans.

```
import pandas as pd
D = {6 : 140, 7 : 125, 8 : 100, 9 : 136, 10 : 200}
S1 = pd.Series(D)
print(S1)
```

OUTPUT :

```
6    140
7    125
8     100
9    136
10   200
dtype: int64
```

Q13. Write the output of the following :

```
import pandas as pd
S1 = pd.Series(12, index = [4, 6, 8])
print(S1)
```

Ans. Output is :

```
4    12
6    12
8    12
dtype: int64
```

Q14. Write the output of the following :

```
import pandas as pd
S1 = pd.Series(range(1,15,3), index=[x for x in "super"])
print(S1)
```

Ans.

s 1

```
u    4
p    7
e   10
r   13
dtype: int64
```

Pandas Series Class 12 IP Important Questions

Q15. Write the output of the following :

```
import pandas as pd
S1 = pd.Series(range(100, 150, 10), index=[x for x in "My name is Amit
Gandhi".split()])
print(S1)
```

Ans.

```
My      100
name    110
is      120
Amit    130
Gandhi  140
dtype: int64
```

Q16. Write the output of the following :

```
import pandas as pd
L1=[1,"A",21]
S1 = pd.Series(data=2*L1)
print(S1)
```

Ans.

```
0    1
1    A
2   21
3    1
4    A
5   21
dtype: object
```

Q17. Name any two attributes of Series in Python.

Ans. Two attributes of Series in Python are :

1. **index**
2. **values**

Q18. Which property of series return all the index value?

Ans. index property return all the index value

O.P. JINDAL SCHOOL ANGUL

CLASS 12 QUESTION BANK

INDIAN ECONOMY ON THE EVE OF INDEPENDENCE

1. Where was the first iron and steel company established? 1.
- (A) Kolkata
- (B) Jamshedpur
- (C) Patna
- (D) Ranchi
2. Which of the following was the major occupation on the eve of independence? 1.
- (A) Industry
- (B) Services
- (C) Agriculture
- (D) None of these
3. In which of the following sectors is manufacturing activity included? 1.
- (A) Primary
- (B) Tertiary
- (C) Secondary
- (D) All of these
4. Suez Canal was opened for transport in 1.
- (a) 1850
- (b) 1853
- (c) 1869
- (d) 1901

5. What was the motive behind the deindustrialization by the colonial Govt. in India?

1.

6. What is meant by commercialization of agriculture?

1.

7. What do you mean by infant mortality rate?

3.

8. Write about industrial development during period 1950-1990.

3.

11. What were the main causes of India's agricultural stagnation during the colonial period?

3.

12. The traditional handicraft industries were mined under the British rule. Do you agree with this view? Give reasons in support of your answer.

3.

13. Critically appraise some of the shortfalls of the industrial policy pursued by the British. colonial administration.

6.

14. Give a quantitative appraisal of India's demographic profile during the colonial period.

6.

Class12-Question bank for May

Chapter-KEEPING QUIET

Q1. Choose the correct option:

- 1)The poet specifically uses number 12.What do you think the number 12 signifies?
 - a) the months of the year
 - b) the number of sun signs
 - c)the numbers represented on the clock
 - d) all of the above
- 2)How KEEPING QUIET is going to help the man who works as a Salt Gatherer?
 - a) He will get time to take care of his wounded hands.
 - b) He will not work as Salt Gatherer
 - c) He will introspect about the type of work he does
 - d) None of the above
- 3)What does the expression 'hurt hands' imply?
 - a) Destruction that humans have caused to themselves

b) Destruction caused to environment in pursuit of man's selfish needs

c) Both (a) and (b)

d) None of the above

4) Explain the phrase: "Victory with no survivors".

a) Celebrating victory

b) Due to mass deaths no one is left to celebrate victory

c) Huge loss of human life

d) Huge loss of property

5,) What does the expression "put on clean clothes " simply?

a) Leave the evil ways

b) To make peace with fellow human beings

c) Attend a conference in decent clothes

d) Both (a) and (b)

Q2.a) How will KEEPING QUIET Protect our environment?

b) What will 'counting upto twelve and Keeping still' help us to achieve?

Q3.a) How can suspension of activities help?

b) What is the sadness the poet refers to in the poem?

c) What is the exotic moment that the poet refers to?

d) What are the different types of wars mentioned in the poem?

What is the poet's attitude towards them?

Q4) Analyse the importance of dramatic count to twelve in the poem?

Q5) Analyse the poetic devices used in the poem.

Variations in Psychological Attributes

1-mark questions...

1. What is assessment?
2. Calculate the MA of a 10-year-old boy whose IQ is 120?

3. _____ is an individual's preference for engaging in one or more specific activities relative to others.
4. tests involve divergent thinking and assess such abilities as ability to produce a variety of ideas.
5. Bindu is a remarkable singer and has won many accolades. She is known as a child prodigy. Which of the following terms best describe Bindu's abilities?
 - a. Talent
 - b. Giftedness
 - c. Naturalistic intelligence
 - d. Interest

2-mark questions...

1. Explain componential intelligence?
2. What is aptitude? What are the forms of aptitude test?
3. Difference between individual test and group test?

3-mark questions....

1. What is creativity? What is the relationship between culture and creativity?
2. Difference between verbal, nonverbal and performance test?

4 mark questions.....

1. Describe Robert Sternberg's Triarchic theory of intelligence.
2. Differentiate between simultaneous and successive processing, giving examples.

5 mark questions...

1. Explain Gardner's theory of multiple intelligence?

3. Which type of diabetes is rare among people?
4. What is the formula to know the BMI of an individual?
5. What should be the normal blood pressure of an adult?

FILL IN THE BLANKS.

1. The normal blood pressure of an adult is considered mmHg.
2. Type I and Type II are the two types of
3. is that condition of the body in which the amount of fat increases to extreme levels.
4. There are three types of asanas, i.e., meditative asanas, relaxative asanas and.....
5. An adult with a BMI more than or equal to 30 than the ideal BMI is usually considered to be.....

STATE TRUE OR FALSE

1. *Tadasana* is performed in sitting position. (True/False)
2. *Shavasana* is performed in supine position. (True/False)
3. Regular practice of *Tadasana*, *Vakrasana*, *Shalabhasana* and *Bhujangasana* helps in reducing back pain. (True/False)
4. Bones and joints become strong by regular practice of asanas. (True/False)
5. A person suffering from joint pain should perform *vajrasana*. (True/False)

CHOOSE THE CORRECT ANSWER

1. Which one of the following asana is not a remedial asana for treating obesity? [AI 2020]
(a) *Vajrasana* (b) *Trikonasana* (c) *Chakrasana* (d) *Ardhmatseyendrasana*
2. Which one of the following asanas is not performed in standing position?
(a) *Tadasana* (b) *Ardhchakrasana* (c) *Sukhasana* (d) *Trikonasana*
3. Which asana is a meditative asana?
(a) *Vajrasana* (b) *Trikonasana* (c) *Bhujangasana* (d) *Chakrasana*
4. Which one of the following asanas is performed in sitting position?
(a) *Chakrasana* (b) *Sukhasana* (c) *Bhujangasana* (d) *Tadasana*
5. What should be the normal blood pressure of an adult?
(a) 110/70 mm Hg (b) 140/90 mm Hg (c) 120/80 mm Hg (d) 140/95 mm Hg
6. In which type of lifestyle diseases our airways become blocked or narrowed causing difficulty in breathing?
(a) Obesity (b) Asthma (c) Diabetes (d) Back Pain
7. The other name of *Bhujangasana* is:
(a) Eagle pose (b) Cobra pose (c) Fish pose (d) Tree pose
8. The formula to calculate the BMI of an individual is:
(a) $\frac{\text{Weight in kg}}{\text{Height in m}}$ (b) $\frac{\text{Height in m}}{\text{Weight in kg}}$ (c) $\frac{\text{Height in m}}{(\text{Weight in kg})^2}$ (d) $\frac{\text{Weight in kg}}{(\text{Height in m})^2}$
9. According to WHO criteria, the normal BMI of an individual should be
(a) 18.5–22.5 (b) 18.5–22.9 (c) 18.5–23.9 (d) 18.5–24.9
- *10. Back pain is mainly caused by:
(a) Lack of physical activity (b) Excessive smoking
(c) Lack of flexibility (d) All the above
- *11. Which one of the following asanas should be practised for preventing back pain?
(a) *Shalabhasana* (b) *Trikonasana* (c) *Chakrasana* (d) *Shavasana*
12. In which disease a patient feels difficulty in breathing?
(a) Diabetes (b) Back pain (c) Asthma (d) Obesity

13. Match the following diseases with the related cause:

- | | | | |
|------------------|--------------------------|----------------|----------------|
| (1) Diabetes | (a) Excess fats | | |
| (2) Hypertension | (b) Insulin | | |
| (3) Asthma | (c) Blood pressure | | |
| (4) Obesity | (d) Respiratory problems | | |
| (a) b, c, d, a | (b) a, b, c, d | (c) d, c, b, a | (d) c, d, a, b |

14. Which one of the following asanas can be performed immediately after the meals? [AI CBSE 2020]

- (a) *Chakrasana* (b) *Sukhasana* (c) *Vajrasana* (d) *Halasana*

15. Which one of the following asanas is not used for preventing as well as treating obesity? [AI CBSE 2020]

- (a) *Vajrasana* (b) *Tadasana* (c) *Trikonasana* (d) *Ardhmatseyendrasana*

16. Who quoted "*Sthiram Sukham Aasanam*"?

- (a) Agam (b) Baba Ramdev (c) Patanjali (d) Shri Arvind

17. Which one of the following asanas should be used for preventing and treating hypertension?

- (a) *Shavasana* (b) *Trikonasana* (c) *Vakrasana* (d) *Shalabhasana*

18. Which asana is helpful in maintaining normal blood pressure? [AI CBSE 2020]

- (a) *Shavasana* (b) *Padmasana* (c) *Shalabhasana* (d) *Vakrasana*

19. Gaumukhasana, Chakrasana and Matsayasana are helpful in curing which disease? [AI CBSE 2020]

- (a) Diabetes (b) Back pain (c) Obesity (d) Asthma

20. Which one of the following asanas is not used for curing obesity?

- (a) *Bhujangasana* (b) *Vajrasana* (c) *Trikonasana* (d) *Hasthasana*

21. One of the possible causes for obesity could be: [Sample Paper 2021]

- (a) Heredity (b) Excessive eating (c) Fast metabolism (d) Both (a) & (b)

22. Match the following diseases with the related cause:

1.	Diabetes	(a)	Accumulation of fat
2.	Hypertension	(b)	Insulin
3.	Asthma	(c)	Blood pressure
4.	Obesity	(d)	Respiratory tract

23. Match the following asanas with lifestyle disease.

1.	Back Pain	(a)	<i>Chakrasana</i>
2.	Obesity	(b)	<i>Shalabhasana</i>
3.	Asthma	(c)	<i>Shavasana</i>
4.	Hypertension	(d)	<i>Hasthasana</i>

24. The following are the two statements which are labelled Assertion (A) and Reason (R).

A. Assertion (A): Diabetes is really a very dangerous lifestyle disease.

B. Reason (R): Diabetes can lead to renal failure, loss of vision, amputation of limbs and cardiovascular diseases if it is not controlled.

In the context of the above two statements, which one of the following is correct?

- (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
 (b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
 (c) (A) is true, but (R) is false.
 (d) (A) is false, but (R) is true.

ANSWERS

OBJECTIVE TYPE/MULTIPLE CHOICE ANSWERS

Give one word answers.

- | | | | |
|----------------|-----------|--------------------|---|
| 1. Patanjali | 2. Asthma | 3. Type I diabetes | 4. $BMI = \frac{\text{Weight in kg}}{(\text{Height in m})^2}$ |
| 5. 120/80 mmHg | | | |

Fill in the blanks.

- | | | | |
|-----------|-------------|------------|----------------------|
| 1. 120/80 | 2. diabetes | 3. Obesity | 4. Corrective asanas |
| 5. Obese | | | |

State True or False.

- | | | | | |
|----------|---------|---------|---------|----------|
| 1. False | 2. True | 3. True | 4. True | 5. False |
|----------|---------|---------|---------|----------|

Choose the correct answer.

- | | | | |
|---|--------------------------------|--------------------------------|---|
| 1. (c) <i>Chakrasana</i> | 2. (c) <i>Sukhasana</i> | 3. (a) <i>Vajrasana</i> | 4. (b) <i>Sukhasana</i> |
| 5. (c) 120/80 mmHg | 6. (b) Asthma | 7. (b) Cobra pose | 8. (d) $\frac{\text{Weight in kg}}{(\text{Height in m})^2}$ |
| 9. (d) 18.5–24.9 | 10. All of the above | 11. (a) <i>Shalabhasana</i> | 12. (c) Asthma |
| 13. (a) b, c, d, a | 14. (b) <i>Sukhasana</i> | 15. (b) <i>Tadasana</i> | 16. (c) Patanjali |
| 17. (a) <i>Shavasana</i> | 18. (a) <i>Shavasana</i> | 19. (d) Asthma | 20. (a) <i>Bhujangasana</i> |
| 21. (d) Both (a) & (b) | 22. 1-(b), 2-(c), 3-(d), 4-(a) | 23. 1-(b), 2-(d), 3-(a), 4-(c) | |
| 24. (a) Both (A) and (R) are true and (R) is the correct explanation of (A) | | | |
| 25. (d) All of the above | 26. (d) High blood pressure | 27. (b) 25–29.9 | |
| 28. (b) Pancreas | 29. (b) Maharshi Patanjali | | |