IAS WITH DR RAVI
AIM. PREPARE. ACHIEVE

Day 19 | 20 MCQs with explanations

APPSC Group 1 · 1,000 Topics in 100 Days
Topics 181–190 · IAS with Dr Ravi

1 · Khaljis: Alauddin's conquests, market reforms and revenue reforms

Consider the following statements about the reign of Alauddin Khalji:

1. His revenue measures required the khuts, muqaddams and chaudhuris to pay the same taxes as other cultivators.
2. Malik Kafur's campaign of 1309-10 against Warangal ended with the annexation of the Kakatiya kingdom to the Delhi Sultanate.
3. Besides the kharaj on cultivation, he levied a tax on grazing (charai) and a tax on houses (ghari).
4. He insisted that the land revenue of the areas near Delhi be paid in cash rather than in grain.

Which of the statements given above is/are correct?

1. 2 and 3 only
2. 1 and 3 only
3. 1, 2 and 4 only
4. 3 and 4 only

> **Q1. Answer: (2) 1 and 3 only**
>
> - Statement 1 is correct: NCERT says local chieftains lost the right to levy taxes and had to pay taxes themselves; the khuts, muqaddams and chaudhuris were made to pay the same taxes as others, and their own levies were abolished.
> - Statement 2 is wrong: Prataparudra surrendered and agreed to pay tribute; Kafur did not annex the kingdom. Of the southern kingdoms, only Devagiri was annexed under Alauddin, in 1313. The end of the Kakatiya kingdom is in Topic 2.
> - Statement 3 is correct: NCERT names three taxes: kharaj on cultivation, a tax on cattle and a tax on houses. These were the charai (grazing) and the ghari (houses), both levied on top of the kharaj.
> - Statement 4 is wrong: both cash and grain were accepted, and near Delhi the government preferred grain, which filled the State granaries that supported the fixed prices.
> - Why the other options are wrong: (1) includes statement 2, which is wrong, and leaves out statement 1, which is correct. (3) includes statements 2 and 4, which are wrong, and leaves out statement 3. (4) includes statement 4, which is wrong, and leaves out statement 1.

2 · Khaljis: Alauddin's conquests, market reforms and revenue reforms

Match List I (Officer or department of Alauddin Khalji's government) with List II (What it did):

List I (Officer or department)	List II (What it did)
A. Diwan-i-riyasat	1. Inquired into the accounts of revenue collectors and recovered the arrears they owed
B. Diwan-i-mustakhraj	2. Intelligence officers who sent the Sultan a daily report on the markets
C. Munhiyan	3. Registered the merchants and fixed the prices of goods sold in the markets of Delhi
D. Barid	4. Secret spies who sent the Sultan their own separate reports on the markets

1. A-1, B-3, C-4, D-2
2. A-3, B-1, C-2, D-4
3. A-1, B-3, C-2, D-4
4. A-3, B-1, C-4, D-2

> **Q2. Answer: (4) A-3, B-1, C-4, D-2**
>
> - A-3: the diwan-i-riyasat was the department of commerce; it registered the merchants and fixed the prices of goods in the markets of Delhi.
> - B-1: the diwan-i-mustakhraj inquired into the accounts of revenue collectors and recovered the arrears they owed. It belonged to the revenue side, not the markets.
> - C-4: the munhiyan were secret spies who sent their own separate reports, as a check on the others.
> - D-2: the barid were intelligence officers who sent a daily report on the markets.
> - Why (1) is wrong: it gives the recovery of arrears to the diwan-i-riyasat and the fixing of prices to the diwan-i-mustakhraj, so it swaps the work of the two diwans.
> - Why (2) is wrong: it makes the munhiyan the intelligence officers with the daily reports and the barid the secret spies, so it swaps the work of the barid and the munhiyan.
> - Why (3) is wrong: it swaps the work of the two diwans and also the work of the barid and the munhiyan.

3 · Comptroller and Auditor General of India

Consider the following statements about the Comptroller and Auditor General of India (CAG):

1. After he ceases to hold office, the CAG is eligible for further office under the Government of a State, but not under the Government of India.
2. Under the 1971 Act, the CAG holds office for six years from the date he assumes office, but vacates it earlier if he attains the age of 65 years.
3. The administrative expenses of the CAG's office, including the salaries of the persons serving in it, are voted by the Lok Sabha every year.
4. Under the 1971 Act, a body is deemed to be substantially financed when its grants or loans from the Consolidated Fund in a year are not less than Rs 25 lakh and not less than 75 per cent of its total expenditure.

Which of the statements given above is/are correct?

1. 2 only
2. 1 and 3 only
3. 1, 3 and 4 only
4. 2 and 4 only

> **Q1. Answer: (4) 2 and 4 only**
>
> - Statement 1 is wrong: Article 148(4) says the CAG is not eligible for further office either under the Government of India or under the Government of any State after he has ceased to hold office. The bar covers both.
> - Statement 2 is correct: the 1971 Act gives a term of six years from the date he assumes office, and he vacates office earlier if he attains the age of 65 years.
> - Statement 3 is wrong: Article 148(6) charges the administrative expenses of the office, including all salaries, allowances and pensions of the persons serving in it, on the Consolidated Fund of India. Charged expenditure is not put to the vote, though either House may discuss it.
> - Statement 4 is correct: section 14 of the Act deems a body substantially financed when its grants or loans in a year are not less than Rs 25 lakh and not less than 75 per cent of its total expenditure.
> - Why the other options are wrong: (1) has statement 2 alone and leaves out statement 4, which is correct. (2) includes statements 1 and 3, which are both wrong, and leaves out statements 2 and 4, which are correct. (3) also includes statements 1 and 3, and leaves out statement 2, which is correct.

4 · Comptroller and Auditor General of India

Match List I (Article of the Constitution) with List II (what the Article provides):

List I (Article)	List II (What the Article provides)
A. Article 149	1. What the CAG finds on the accounts of the Union goes to the President, and on the accounts of a State to the Governor, who cause it to be laid before the legislature
B. Article 150	2. The CAG performs the duties and exercises the powers in relation to the accounts of the Union, of the States and of other bodies that a law of Parliament prescribes
C. Article 151	3. The CAG ascertains and certifies the proceeds of a tax or duty, less the cost of collection, in or attributable to any area, and his certificate is final
D. Article 279	4. The President, on the advice of the CAG, prescribes the form in which the accounts of the Union and of the States are kept

1. A-2, B-4, C-1, D-3
2. A-1, B-4, C-2, D-3
3. A-2, B-3, C-1, D-4
4. A-1, B-3, C-2, D-4

> **Q2. Answer: (1) A-2, B-4, C-1, D-3**
>
> - A-2: Article 149 gives the CAG the duties and powers in relation to the accounts of the Union, of the States and of any other authority or body that a law of Parliament prescribes. That law is the 1971 Act.
> - B-4: Article 150 says the accounts of the Union and of the States are kept in the form the President prescribes on the advice of the CAG. Here the President decides; the CAG advises.
> - C-1: Article 151 sends the CAG's reports on the Union's accounts to the President and those on a State's accounts to the Governor, who cause them to be laid before Parliament or the Legislature of the State.
> - D-3: Article 279 defines net proceeds as the proceeds of a tax or duty reduced by the cost of collection, and makes the CAG's certificate of the net proceeds in or attributable to any area final. Here the CAG has the last word.

- Why (2) is wrong: it exchanges Articles 149 and 151. The duties and powers given by a law of Parliament are Article 149; the reports that go to the President and the Governor are Article 151.
- Why (3) is wrong: it exchanges Articles 150 and 279. The form of accounts, prescribed by the President on the CAG's advice, is Article 150; the final certificate of net proceeds is Article 279.
- Why (4) is wrong: it makes both exchanges, so all four pairs are wrong.

5 · President: election, qualifications and impeachment

Match List I (Article of the Constitution) with List II (What it provides):

List I (Article of the Constitution)	List II (What it provides)
A. Article 54	1. The elected members of the Legislative Assemblies of Delhi and Puducherry take part in choosing the President
B. Article 62	2. The election of a President cannot be called in question on the ground that there was a vacancy among the members of the body that elected him
C. Article 55	3. A person elected to fill a vacancy caused by death or resignation holds office for a full term of five years from the date he enters upon it
D. Article 71	4. Until the figures of the first census taken after 2026 are published, the value of each vote is worked out on the population of 1971

1. A-1, B-3, C-4, D-2
2. A-4, B-2, C-1, D-3
3. A-1, B-2, C-4, D-3
4. A-4, B-3, C-1, D-2

> **Q1. Answer: (1) A-1, B-3, C-4, D-2**
>
> - A-1: the Explanation to Article 54, inserted by the 70th Amendment (in force from 1 June 1995), makes "State" include the National Capital Territory of Delhi and the Union territory of Puducherry for the electoral college.
> - B-3: Article 62(2) says that the person elected to fill a vacancy caused by death, resignation, removal or otherwise holds office for the full term of five years from the date he enters upon his office.
> - C-4: the proviso to the Explanation to Article 55 fixes the 1971 census as the population base until the figures of the first census taken after 2026 are published.
> - D-2: Article 71(4) says the election cannot be called in question on the ground of any vacancy among the members of the electoral college. This clause was first put in by the 11th Amendment (1961).

- Why (2) is wrong: it exchanges both pairs. It gives the 1971 census base to Article 54 and Delhi and Puducherry to Article 55, and it puts the electoral-college vacancy under Article 62 and the full-term rule under Article 71.
- Why (3) is wrong: it exchanges Articles 62 and 71. Both speak of a vacancy, but Article 62 deals with a vacancy in the office of President, and Article 71 with a vacancy among the electors.
- Why (4) is wrong: it exchanges Articles 54 and 55. Article 54 says who makes up the electoral college, Delhi and Puducherry included; Article 55 says how the value of each vote is worked out, on the 1971 population.

6 · President: election, qualifications and impeachment

Consider the following statements about the President of India:

1. Elected members of the State Legislative Assemblies have no part in the procedure for the impeachment of the President.
2. The Vice-President must forthwith communicate a resignation of the President to the Speaker of the Lok Sabha.
3. If a member of a State Legislative Assembly is elected President, he is deemed to have vacated his seat in the Assembly on the date he enters upon his office.
4. The notice of a resolution to prefer a charge for impeachment must be signed by not less than one-third of the total number of members of the House.

Which of the statements given above is/are correct?

1. 1, 2 and 4 only
2. 1 only
3. 1, 2 and 3 only
4. 2, 3 and 4 only

> **Q2. Answer: (3) 1, 2 and 3 only**
>
> - Statement 1 is correct: Article 61 leaves impeachment to the two Houses of Parliament. The elected MLAs vote in the election (Article 54) but have no part in impeachment.
> - Statement 2 is correct: under Article 56(1)(a) the resignation is addressed to the Vice-President, and under Article 56(2) he forthwith communicates it to the Speaker of the Lok Sabha.
> - Statement 3 is correct: this is Article 59(1). The seat is deemed vacated on the date he enters upon his office.
> - Statement 4 is wrong: Article 61(2)(a) requires the notice to be signed by not less than one-fourth of the total number of members of the House, not one-third. Two-thirds of the total membership is the majority needed to pass the resolution.
> - Why the other options are wrong: (1) includes statement 4, which is wrong, and leaves out statement 3, which is correct. (2) leaves out statements 2 and 3, which are correct. (4) includes statement 4, which is wrong, and leaves out statement 1, which is correct.

7 · Basic characteristics of the Indian economy as a developing economy

Consider the following statements about the Indian economy as a developing economy:

1. In the World Bank's FY2027 income classification, the lower-middle-income group has Atlas GNI per capita for 2025 of US$ 1,176 to US$ 4,635.
2. Per capita income is obtained by dividing the corresponding aggregate income by population.
3. According to MoSPI's Provisional Estimates for 2025-26, gross fixed capital formation was less than one-fifth of India's GDP at current prices.
4. NITI Aayog's January 2024 discussion paper projected that more than a quarter of India's population was multidimensionally poor in 2022-23.

Which of the statements given above is/are correct?

1. 2, 3 and 4 only
2. 1 only
3. 1 and 2 only
4. 3 and 4 only

> **Q1. Answer: (3) 1 and 2 only**
>
> - Statement 1 is correct: the World Bank's FY2027 thresholds use Atlas GNI per capita for 2025. The lower-middle-income interval is US$ 1,176–4,635.
> - Statement 2 is correct: per capita means per person. Divide aggregate income by population; India's official per capita income measure is per capita NNI.
> - Statement 3 is wrong: GFCF was 31.9 per cent of GDP at current prices in 2025-26 in the 5 June 2026 Provisional Estimates, not less than one-fifth (20 per cent).
> - Statement 4 is wrong: the paper gives a projected estimate of 11.28 per cent for 2022-23. The projected estimate of 29.17 per cent belongs to 2013-14. These are projected estimates, not direct survey measurements for those years.
> - Why the other options are wrong: (1) contains statements 3 and 4, which are wrong, and leaves out statement 1. (2) leaves out statement 2, which is correct. (4) contains only the two wrong statements.

8 · Basic characteristics of the Indian economy as a developing economy

Match List I (Share in India's economy, from MoSPI's Provisional Estimates of 5 June 2026 and the PLFS Annual Report 2025, usual status) with List II (Its value, per cent):

List I (Share)	List II (Per cent)
A. Share of agriculture in all workers, 2025	1. 31.9
B. Gross fixed capital formation as a share of GDP at current prices, 2025-26	2. 20.2
C. Share of regular wage or salaried employees in all workers, 2025	3. 43.0
D. Share of casual labour in all workers, 2025	4. 23.6

1. A-1, B-3, C-4, D-2
2. A-3, B-1, C-4, D-2
3. A-1, B-3, C-2, D-4
4. A-3, B-1, C-2, D-4

Q2. Answer: (2) A-3, B-1, C-4, D-2

- A-3: the PLFS Annual Report 2025 puts 43.0 per cent of all workers in agriculture (44.8 per cent in 2024).
- B-1: MoSPI's Provisional Estimates released on 5 June 2026 give GFCF as 31.9 per cent of GDP at current prices for 2025-26.
- C-4: regular wage or salaried employees were 23.6 per cent of all workers in 2025, up from 22.4 per cent in 2024.
- D-2: casual labourers were 20.2 per cent of all workers in 2025. Regular employees outnumbered casual labourers in 2024 too (22.4 against 20.0); self-employed workers (56.2 per cent) are still more than half.
- Why the other options are wrong: (1) exchanges A and B; (4) exchanges C and D; (3) makes both exchanges. The correct mapping is A-3, B-1, C-4, D-2.

9 · Green Revolution and its effects

Match List I (Institution linked with the Green Revolution) with List II (Its link with a scientist of the Green Revolution):

List I (Institution linked with the Green Revolution)	List II (Its link with a scientist of the Green Revolution)
A. Indian Agricultural Research Institute (IARI)	1. Norman Borlaug's affiliation at the time of his Nobel Peace Prize of 1970
B. International Maize and Wheat Improvement Center (CIMMYT)	2. M.S. Swaminathan was its Director General from 1982 to 1988
C. Indian Council of Agricultural Research (ICAR)	3. M.S. Swaminathan became its Director General in 1972
D. International Rice Research Institute (IRRI)	4. M.S. Swaminathan was with it from 1954 to 1972

1. A-3, B-1, C-4, D-2
2. A-4, B-1, C-3, D-2
3. A-3, B-2, C-4, D-1
4. A-4, B-2, C-3, D-1

> **Q1. Answer: (2) A-4, B-1, C-3, D-2**
>
> - Why it is correct: Swaminathan was with IARI from 1954 to 1972 (A-4). When Borlaug received the Nobel Peace Prize of 1970, his affiliation was CIMMYT in Mexico City (B-1). In 1972 Swaminathan moved on to become Director General of ICAR (C-3). From 1982 to 1988 he was Director General of IRRI (D-2).
> - Why (1) is wrong: it exchanges the two Indian bodies. Swaminathan was first at the institute, IARI, from 1954; only in 1972 did he become Director General of the council, ICAR.
> - Why (4) is wrong: it exchanges the two international centres. Borlaug's centre was the one in Mexico, CIMMYT; the centre that Swaminathan headed from 1982 to 1988 was IRRI, in the Philippines.
> - Why (3) is wrong: it makes both exchanges, so all four of its pairs are wrong.

10 · Green Revolution and its effects

Consider the following statements about the Green Revolution in India:

1. The High Yielding Varieties Programme was taken up as a full-fledged programme from the kharif season of 1966.
2. The Agricultural Prices Commission and the Food Corporation of India were both set up in 1965.
3. Between 1960-61 and 1970-71, the yield per hectare of rice rose by a larger percentage than the yield per hectare of wheat.

Which of the statements given above is/are correct?

1. 1 and 2 only
2. 1 and 3 only
3. 2 and 3 only
4. 2 only

> **Q2. Answer: (1) 1 and 2 only**
>
> - Statement 1 is correct: the Fourth Plan says the HYV programme was taken up as a full-fledged programme from kharif 1966 onwards. Before that, exotic seeds had only been tried out: Mexican dwarf wheat in 1963-64 and Taichung Native-1 paddy in 1965.
> - Statement 2 is correct: a support price policy came in 1964, and the Agricultural Prices Commission was set up the next year, 1965 (in January, as Topic 84 noted). The Food Corporation of India was also established in 1965, from 1 January, under the Food Corporations Act of 1964.
> - Statement 3 is wrong: it reverses the position. Wheat yield rose from 851 to 1,307 kg per hectare, by about 54 per cent; rice yield rose from 1,013 to 1,123 kg per hectare, by only about 11 per cent. Wheat gained far more.
> - Why the other options are wrong: (2) leaves out statement 2, which is correct, and includes statement 3, which is wrong. (3) leaves out statement 1, which is correct, and includes statement 3. (4) leaves out statement 1, which is correct.

11 · Ports of Andhra Pradesh: major and non-major ports

Match List I (Port in Andhra Pradesh) with List II (Feature):

List I (Port)	List II (Feature)
A. Visakhapatnam	1. Non-major port in Nellore district
B. Gangavaram	2. Its inner harbour was built by the Bengal Nagpur Railway between 1927 and 1933 for manganese ore traffic
C. Krishnapatnam	3. A captive port that supports offshore facilities in the KG Basin
D. Ravva	4. Non-major port in Visakhapatnam district

Select the correct answer using the codes given below:

1. A-2, B-1, C-4, D-3
2. A-3, B-4, C-1, D-2
3. A-3, B-1, C-4, D-2
4. A-2, B-4, C-1, D-3

> **Q1. Answer: (4) A-2, B-4, C-1, D-3**
>
> - A-2: the Port's history page says the Bengal Nagpur Railway built the land-locked Inner Harbour of Visakhapatnam between 1927 and 1933, for manganese ore traffic from the Central Provinces.
> - B-4: Gangavaram is a non-major port in Visakhapatnam district.
> - C-1: Krishnapatnam is a non-major port in Nellore district.
> - D-3: the Andhra Pradesh Maritime Board describes Ravva as a captive port that supports offshore facilities in the KG Basin.
> - Why (1) is wrong: it exchanges Gangavaram and Krishnapatnam; they are in different districts.
> - Why (2) is wrong: it exchanges Visakhapatnam and Ravva, giving Visakhapatnam the captive role of Ravva and Ravva the 1927 to 1933 inner harbour of Visakhapatnam. B-4 and C-1 are right.
> - Why (3) is wrong: it makes both exchanges, Visakhapatnam with Ravva and Gangavaram with Krishnapatnam. None of its four pairs is right.

12 · Ports of Andhra Pradesh: major and non-major ports

Consider the following statements about the ports of Andhra Pradesh and the law on ports:

1. The Major Port Authorities Act, 2021 replaced the Indian Ports Act, 1908.
2. Under the Indian Ports Act, 2025, a State Maritime Board is responsible for the administration of the major ports in its State.
3. In 2025-26, Visakhapatnam Port handled more cargo than Mumbai Port.
4. Visakhapatnam Port was first opened to ocean traffic in 1964.

Which of the statements given above is/are correct?

1. 1 and 3 only
2. 2 and 4 only
3. 3 only
4. 1, 2 and 4

> **Q2. Answer: (3) 3 only**
>
> - Statement 1 is wrong: the Major Port Authorities Act, 2021 replaced the Major Port Trusts Act, 1963. The Indian Ports Act, 1908 was repealed by section 85(1) of the Indian Ports Act, 2025.
> - Statement 2 is wrong: section 15(1) of the 2025 Act makes the State Maritime Board responsible for "ports other than major ports". Major ports are managed by the Boards of the Major Port Authorities under the Union.
> - Statement 3 is correct: in 2025-26 (advance estimates) Visakhapatnam handled 91.17 MT and Mumbai 75.15 MT (Ministry of Ports, Shipping and Waterways, March 2026 table).
> - Statement 4 is wrong: Visakhapatnam was opened to ocean traffic on 7 October 1933. 1964 is the year it was transferred to a Port Trust.
> - Why the other options are wrong: (1) contains statement 1; (2) contains statements 2 and 4; (4) contains statements 1, 2 and 4. All of these are wrong.

13 · Nature and scope of science and technology

Consider the following statements:

1. The duty to develop the scientific temper was added to the Constitution by the Constitution (Forty-second Amendment) Act, 1976.
2. According to Karl Popper, a theory is scientific only if it can be proved true beyond any doubt.
3. India’s Gross Expenditure on Research and Development was less than 1 per cent of GDP in 2023-24, according to the officially reported GERD figure.
4. Technological problems can stimulate the development of scientific knowledge.

Which of the statements given above is/are correct?

1. 1, 3 and 4 only
2. 1, 2 and 4 only
3. 2, 3 and 4 only
4. 1 only

> **Q1. Answer: (1) 1, 3 and 4 only**
>
> - Statement 1 is correct: Article 51A(h), a Fundamental Duty, asks every citizen to develop the scientific temper, humanism and the spirit of inquiry and reform; the Constitution (Forty-second Amendment) Act, 1976 added it.
> - Statement 2 is wrong: Popper's criterion of falsifiability says the opposite. A theory is genuinely scientific only if it is possible in principle to establish that it is false. Science does not claim proof beyond any doubt; NCERT, too, lists verification or falsification of theories among the steps.
> - Statement 3 is correct: GERD was 0.84 per cent of GDP in 2023-24 (PIB, Ministry of Science and Technology, 29 July 2026), which is below 1 per cent.
> - Statement 4 is correct: improving steam engines stimulated thermodynamics. Science and technology influence one another.
> - Why the other options are wrong: (2) includes statement 2, which is wrong, and leaves out statement 3, which is correct. (3) includes statement 2 and leaves out statement 1, which is correct. (4) leaves out statements 3 and 4, which are correct.

14 · Nature and scope of science and technology

Match List I (Term) with List II (Meaning):

List I (Term)	List II (Meaning)
A. Basic research	1. Work that uses established theories to develop techniques that alter natural phenomena
B. Applied research	2. An assumption that is put to the test and then modified in the light of the results
C. Hypothesis	3. Work whose aim is to improve scientific theories
D. Theory	4. A rational explanation of laws that have been found from experience

1. A-1, B-3, C-4, D-2
2. A-3, B-1, C-4, D-2
3. A-1, B-3, C-2, D-4
4. A-3, B-1, C-2, D-4

Q2. Answer: (4) A-3, B-1, C-2, D-4

- Why it is correct: basic research aims at improving scientific theories (A-3). Applied research uses scientific theories to develop technology or techniques that alter natural phenomena (B-1). A hypothesis is developed, tested by various means and then modified (C-2); NCERT calls even Newton's law of gravitation an assumption or hypothesis. A theory explains the empirical (experiential) laws in a scientifically rational manner (D-4).
- Why (1) is wrong: it exchanges both pairs, so all four matches are wrong.
- Why (2) is wrong: it exchanges the hypothesis and the theory. The tested and modified assumption is the hypothesis; the rational explanation of laws found from experience is the theory.
- Why (3) is wrong: it exchanges the two kinds of research. Improving theories is the aim of basic research; using theories to develop techniques is applied research.

15 · Statement and conclusion

A statement is given below, followed by two conclusions numbered I and II. Take the statement to be true, and decide which of the conclusions logically follow(s) from it.

Statement: A State government has made a rule: "Every new government building with a roof area of more than 100 square metres must have a rainwater harvesting structure. Such a building that does not have one will not be given a completion certificate."

Conclusions:

- I. Every new government building that has a rainwater harvesting structure will be given a completion certificate.
- II. A new government building with a roof area of 150 square metres that has no rainwater harvesting structure will not be given a completion certificate.

1. Only conclusion I follows
2. Neither I nor II follows
3. Only conclusion II follows
4. Both I and II follow

> **Q1. Answer: (3) Only conclusion II follows**
>
> - The rule has two parts: a building of more than 100 square metres must have the structure, and such a building without it will not be given a completion certificate. It runs in one direction: no structure, so no certificate.
> - Conclusion II, follows directly. 150 square metres is more than 100, so the building in II is "such a building". It has no structure, so by the rule it will not be given a completion certificate. The figure 150 is not a new fact; it is a case that the rule clearly covers.
> - Conclusion I, reverses (the second form in 2.3). It reads "no structure, so no certificate" as "structure, so certificate". The rule does not say that a structure is enough; a building may be refused a certificate for some other reason. I does not follow.
> - Why (1) is wrong: it accepts the reversal in I and rejects II as if 150 square metres were a new fact.
> - Why (2) is wrong: it is right about I, but it rejects II for the same reason, although applying a rule to a case it covers follows.
> - Why (4) is wrong: it is right about II, but it accepts the reversal in I.

16 · Statement and conclusion

A statement is given below, followed by three conclusions numbered I, II and III. Take the statement to be true, and decide which of the conclusions logically follow(s) from it.

Statement: A district committee has chosen exactly one of two villages, Village P and Village Q, for this year's award for clean drinking water. The name of the chosen village will be announced on Monday. Every village that wins this award gets a grant of Rs 10 lakh for its water supply.

Conclusions:

- I. Village P has been chosen for this year's award.
- II. Village Q has been chosen for this year's award.
- III. At least one of the two villages, P and Q, will get a grant of Rs 10 lakh for its water supply.

1. Neither I nor II follows, but III follows
2. Either I or II follows, and III also follows
3. Either I or II follows, but III does not follow
4. Neither I nor II follows, and III does not follow either

> **Q2. Answer: (2) Either I or II follows, and III also follows**
>
> - Conclusions I and II, one at a time. The statement does not say which village was chosen, so neither I nor II follows by itself.
> - I and II as a pair. Exactly one village has been chosen, so I and II cannot both be true; and the choice was between P and Q only, so one of them must be true. All three conditions of the either-or case hold. Either I or II follows.
> - Conclusion III. Take each case that the statement leaves open. If P was chosen, P wins the award and so gets the grant of Rs 10 lakh. If Q was chosen, Q gets it. In both cases at least one of the two villages gets the grant. III follows, although the statement does not say which village it will be.
> - Why (1) is wrong: it judges I and II only one at a time, rejects both, and stops there; it misses the complementary pair.
> - Why (3) is wrong: it rejects III because the chosen village is not named. But III is true in each of the two cases, so it follows.
> - Why (4) is wrong: it makes both of these mistakes.

17 · Time and work: efficiency and ratio method

A is 50 per cent more efficient than B, and C is twice as efficient as B. Working together, A, B and C finish a piece of work in 8 days. In how many days can C alone finish the same work?

1. 18 days
2. 20 days
3. 24 days
4. 48 days

Q1. Answer: (1) 18 days

- Worked solution, step 1: take B's efficiency as 2 units a day. A is 50 per cent more efficient: 2 × 150/100 = 3 units a day. C is twice as efficient as B: 4 units a day. Together: 3 + 2 + 4 = 9 units a day.
- Step 2: the three finish in 8 days, so the work is 9 × 8 = 72 units.
- Step 3: C alone takes 72 ÷ 4 = 18 days.
- Check: A alone takes 72 ÷ 3 = 24 days and B alone 72 ÷ 2 = 36 days. 1/24 + 1/36 + 1/18 = 3/72 + 2/72 + 4/72 = 9/72 = 1/8, so together they take 8 days, as given.
- Why (2) is wrong: 20 days comes from reading "50 per cent more efficient" as "A takes 50 per cent less time than B". That makes A twice as efficient as B (4 units a day), the three do 10 units a day, the work becomes 80 units and C takes 80 ÷ 4 = 20 days. In fact A's efficiency is 3 : 2 to B's, and A takes one-third less time, not half.
- Why (3) is wrong: 24 days is A's time (72 ÷ 3), not C's. The same figure comes from treating the three as equally efficient (3 × 8 = 24).
- Why (4) is wrong: 48 days comes from using the ratio of efficiencies as the ratio of days: "C is twice as efficient as B" read as "C takes twice B's days". Then C does 1 unit a day, the three do 6 units a day, the work becomes 48 units and C takes 48 days. A worker who is twice as efficient takes half the time.

18 · Time and work: efficiency and ratio method

A alone can finish a piece of work in 16 days and B alone in 8 days. They start the work together. After 4 days A leaves, and B finishes the rest of the work alone. The payment for the whole work is Rs 4,800. How much should B receive?

1. Rs 2,400
2. Rs 2,880
3. Rs 3,200
4. Rs 3,600

> **Q2. Answer: (4) Rs 3,600**
>
> - Worked solution, step 1: the LCM of 16 and 8 is 16, so the work is 16 units. A does 16 ÷ 16 = 1 unit a day and B does 16 ÷ 8 = 2 units a day.
> - Step 2: in the first 4 days the two do 4 × (1 + 2) = 12 units. 4 units are left, and B does them in 4 ÷ 2 = 2 days. So A worked 4 days and B worked 4 + 2 = 6 days.
> - Step 3: work done by A = 1 × 4 = 4 units; by B = 2 × 6 = 12 units. The ratio of work is 4 : 12 = 1 : 3.
> - Step 4: B's share = 4,800 × 3/4 = Rs 3,600. A's share = Rs 1,200.
> - Check: 1,200 + 3,600 = 4,800, and 4 + 12 = 16 units, the whole work.
> - Why (1) is wrong: Rs 2,400 is half the payment. It shares equally because the two started together, but B did three times as much work as A.
> - Why (2) is wrong: Rs 2,880 = 4,800 × 6/10. It shares in the ratio of the days worked (4 : 6), as if the two were equally efficient.
> - Why (3) is wrong: Rs 3,200 = 4,800 × 2/3. It shares in the ratio of efficiencies (1 : 2), as if both had worked for the same number of days. B worked 6 days and A only 4.

19 · Removal of judges: constitutional process and dated developments

Consider the following statements about the procedure under the Judges (Inquiry) Act, 1968:

1. A notice of a motion for the removal of a Judge must be signed by not less than 50 members if it is given in the Lok Sabha, and by not less than 100 members if it is given in the Rajya Sabha.
2. Where notices of a motion are given in both Houses on the same day and the motion is admitted in both, the inquiry committee is constituted jointly by the Speaker and the Chairman.
3. The inquiry committee consists of a Judge of the Supreme Court, a Judge of a High Court and a member of Parliament nominated by the presiding officer.
4. If the committee finds that the Judge is not guilty of any misbehaviour, the motion pending in the House is not proceeded with.

Which of the statements given above is/are correct?

1. 1 and 2 only
2. 1 and 3 only
3. 2 and 4 only
4. 3 and 4 only

> **Q1. Answer: (3) 2 and 4 only**
>
> - Statement 1 is wrong: The numbers are the other way round. Section 3(1) requires not less than 100 members for a notice in the Lok Sabha, and not less than 50 members for a notice in the Rajya Sabha.
> - Statement 2 is correct: The first proviso to section 3(2) says that where notices are given in both Houses on the same day and the motion is admitted in both Houses, the committee is constituted jointly by the Speaker and the Chairman. In Justice Varma's case the motion was admitted only in the Lok Sabha, so on 16 January 2026 the Supreme Court held that no joint committee was needed and the Speaker's committee was valid.
> - Statement 3 is wrong: Under section 3(2) the second member is chosen from among the Chief Justices of the High Courts, not from among the Judges of a High Court, and the third is a distinguished jurist. No member of Parliament sits on the committee.

- Statement 4 is correct: Section 6(1) says that if the report finds the Judge not guilty of any misbehaviour, or not suffering from any incapacity, no further steps are taken in either House and the pending motion shall not be proceeded with.
- Why the other options are wrong: (1) includes statement 1, which is wrong, and leaves out statement 4. (2) includes statements 1 and 3, both wrong. (4) includes statement 3, which is wrong, and leaves out statement 2.

20 · Removal of judges: constitutional process and dated developments

Match List I (provisions of the Constitution) with List II (what each provides):

List I	List II
A. Article 61	1. A charge preferred by one House of Parliament is investigated by the other House, and a resolution passed by not less than two-thirds of the total membership of the investigating House removes the holder from the date on which it is passed
B. Article 124(4)	2. The clauses on removal and on the law of Parliament regulating the investigation and proof of misbehaviour apply to a High Court, with references to the High Court in place of references to the Supreme Court
C. Article 217(1)(b)	3. Removal only by an order of the President, passed after each House has presented, in the same session, an address supported by a majority of its total membership and by two-thirds of its members present and voting
D. Article 218	4. A proviso in the Article on appointment and tenure, saying that a Judge of a High Court may be removed by the President in the manner provided for a Judge of the Supreme Court

1. A-3, B-1, C-4, D-2
2. A-1, B-3, C-4, D-2
3. A-3, B-1, C-2, D-4
4. A-1, B-3, C-2, D-4

> **Q2. Answer: (2) A-1, B-3, C-4, D-2**
>
> - Why it is correct: Article 61 is the impeachment of the President: one House prefers the charge, the other investigates it, and a resolution of two-thirds of the total membership of the investigating House removes him (A-1). Article 124(4) is the removal of a Judge of the Supreme Court by an order of the President after an address by each House by the special majority, in the same session (B-3).

Article 217(1)(b) is a proviso in the Article on the appointment and tenure of a High Court Judge (C-4). Article 218 applies clauses (4) and (5) of Article 124 to the High Courts (D-2).

- Why (1) is wrong: It exchanges Articles 61 and 124(4). The President is not removed by an order passed after an address; a Judge is not removed by a resolution of the investigating House.
- Why (4) is wrong: It exchanges Articles 217(1)(b) and 218. It is Article 218 that carries over clause (5), the law of Parliament on investigation and proof; Article 217(1)(b) is the proviso on tenure.
- Why (3) is wrong: It makes both exchanges, so all four pairs are wrong.