

SCIENCE FORM 3

MODULE 4: REPRODUCTION

Arahan:

1. Modul ini mengandungi **empat puluh tiga** soalan. Semua soalan adalah dalam bahasa Inggeris.
2. Modul merangkumi **enam** konstruk yang diuji
K1-Memahami soalan dalam Bahasa Inggeris
K3-Memahami istilah sains dalam Bahasa Inggeris
K5-Menguasai konstruk pengetahuan
K6-Menguasai konstruk kefahaman
K7-Menguasai konstruk kemahiran
K10-Memahami pengajaran dan pembelajaran dalam Bahasa Inggeris
3. Murid hendaklah menulis maklumat diri dalam kertas jawapan objektif disediakan. Murid juga perlu memastikan maklumat konstruk, nombor soalan dan jumlah soalan seperti yang dibaca oleh guru di dalam ruangan disediakan dalam kertas jawapan objektif sebelum ujian.
4. Bagi **soalan objektif**, anda perlu menandakan jawapan dengan **menghitamkan pilihan jawapan** pada pilihan jawapan **A** , **B** , **C** atau **D** pada kertas jawapan objektif.

Contoh:

Antara berikut, yang manakah haiwan?

A. Pokok B. Kambing C. Kereta D. Pen

A

C

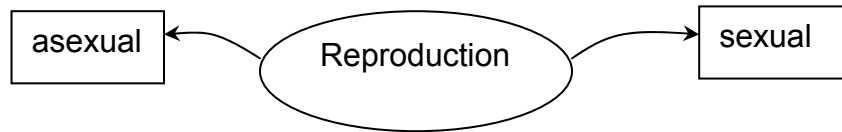
D

E

5. Bagi **soalan 36 hingga 43**, soalan dikemukakan secara lisan oleh guru manakala jawapan diberi secara bertulis oleh pelajar.
6. Jawab **semua** soalan.

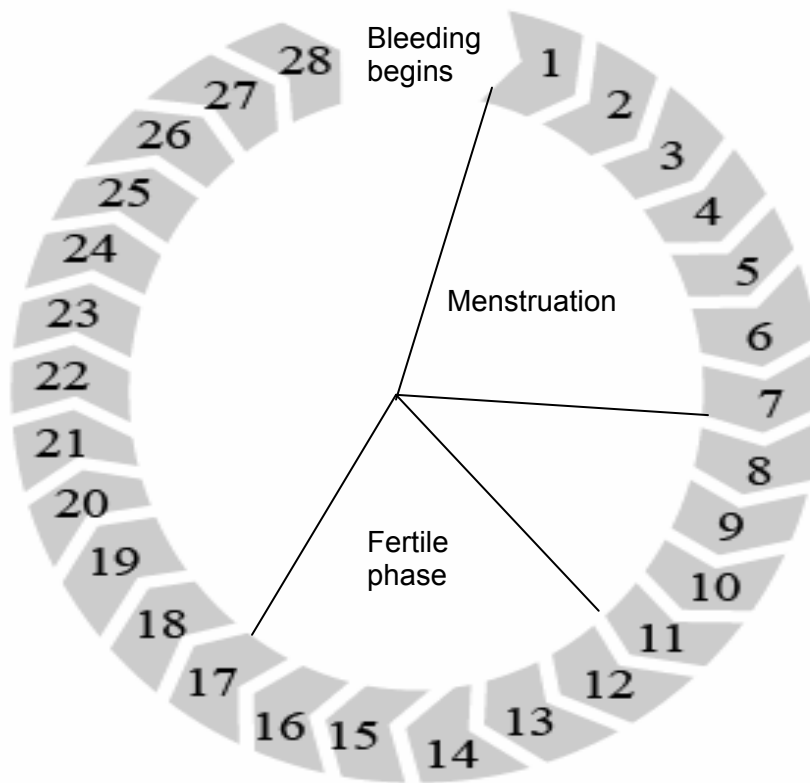
Modul ini mengandungi **22** halaman bercetak

1. The figure shows the types of reproduction in living organism



How many ways can a living organism reproduce?

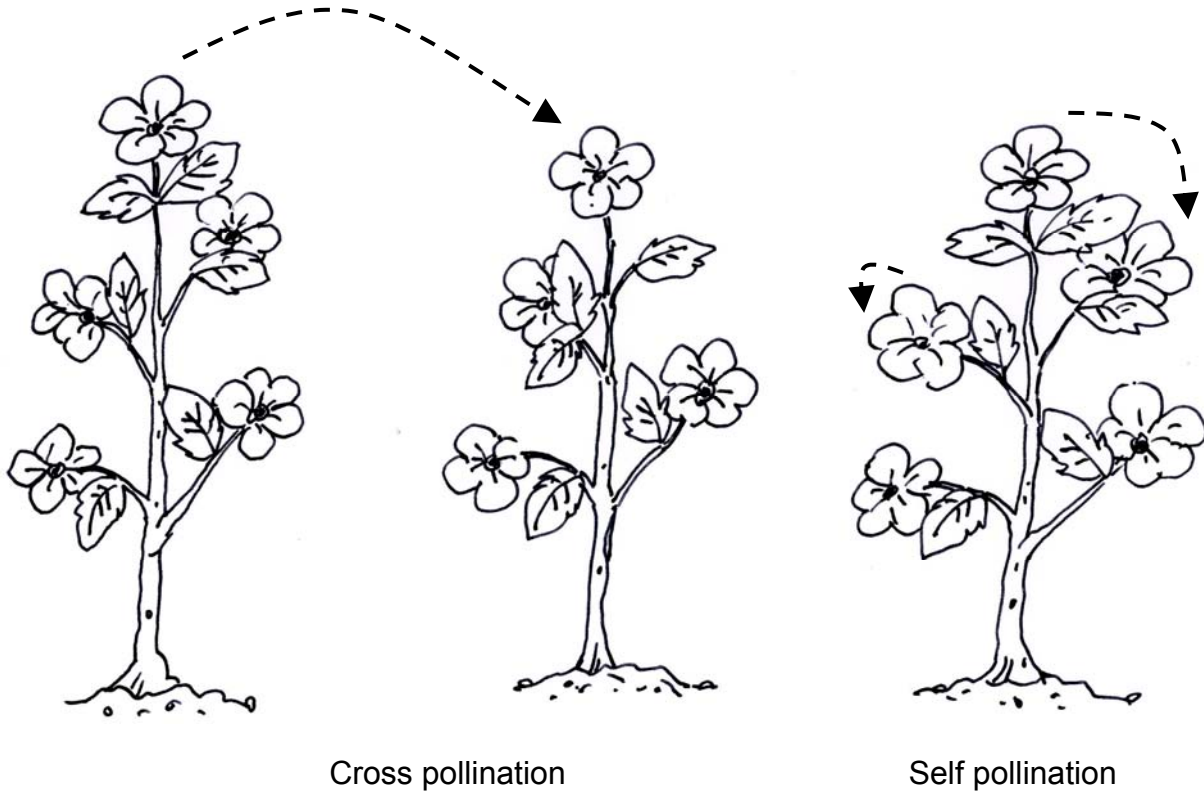
- A 1
 - B 2
 - C 3
2. The figure shows a regular menstrual cycle



How long is the menstrual cycle?

- A 7 days
- B 11 days
- C 17 days
- D 28 days

3. The figure shows types of pollinations in flowering plants



How many type(s) of pollinations are there in the figure?

- A 1
 - B 2
 - C 3
 - D 4
4. The suitable temperature for a seed to germinate is around 28°C . What is the range of temperature ($^{\circ}\text{C}$) for a seed to germinate?
- A 0 – 5
 - B 20 – 35
 - C 60 – 70

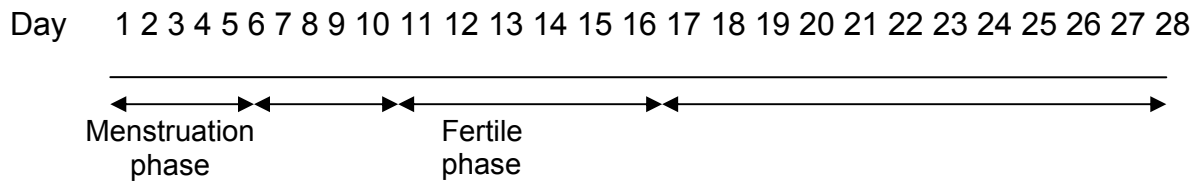
5. A flowering plant can reproduce vegetatively using its various parts such as runners, rhizomes, tuber, sucker, bulb and leaf. Which of the following is **not** a vegetative part of flowering plant?

- A Leaf
- B Sucker
- C Runner
- D Flower

6. The process in which unicellular organism divides and separates into two equal sizes is known as _____ .

- A budding
- B binary fission
- C spore formation
- D regeneration

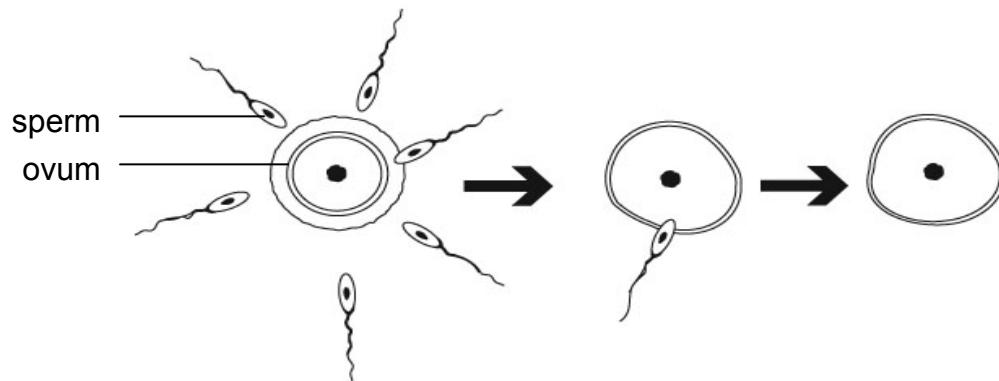
7. The figure shows a menstrual cycle.



The process when an ovary produces an ovum during the fertile phase is known as _____.

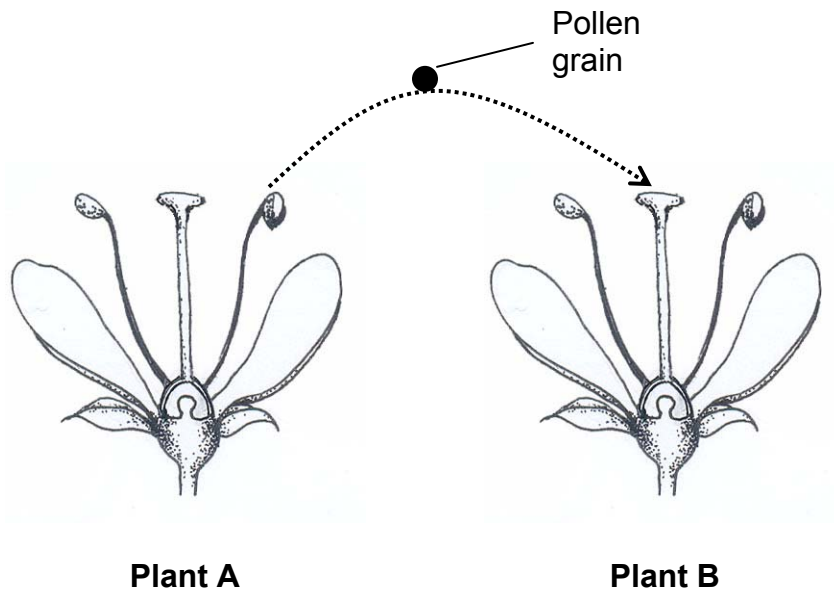
- A ovulation
- B fertilisation
- C pollination

8. The figure shows the process of _____



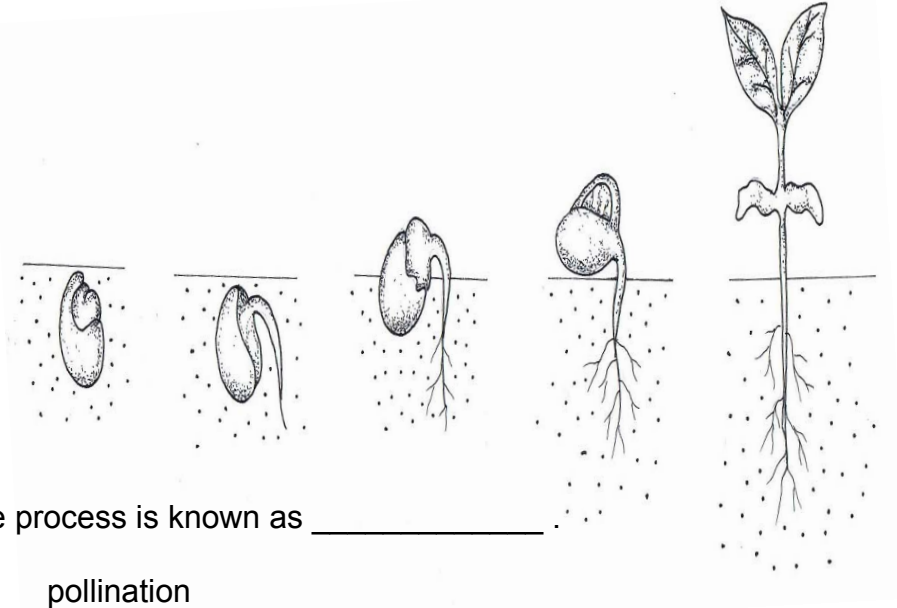
- A ovulation
- B fertilisation
- C menstruation
- D germination

9. The figure shows the process of _____ .



- A self-pollination
- B cross-pollination
- C germination

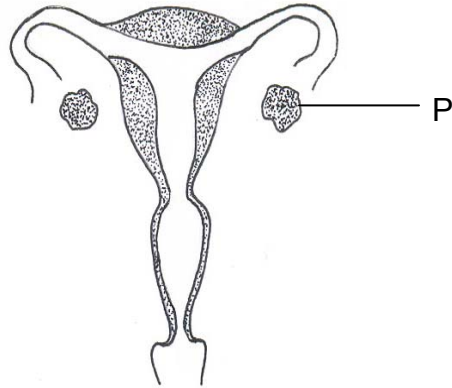
10. The figure shows stages where a seed develops into a seedling.



The process is known as _____.

- A pollination
 - B fertilization
 - C germination
11. Reproduction of a new plant from a certain part of the plant is known as _____.
- A binary fission
 - B spores formation
 - C vegetative reproduction
12. Which of these reproductive processes are asexual reproductions?
- I Budding
 - II Regeneration
 - III Rhizome
- A I and II
 - B I and III
 - C II and III
 - D I, II and III

13. The figure shows a female reproductive system.



What is the function of P?

- A The place where fertilization occurs
 - B To control the sex hormones
 - C To produce the female sex gametes
 - D To remove excess sperms that enter the body
14. Which part of the female reproductive system is involved during the delivery of a baby?
- A cervix
 - B ovary
 - C fallopian tube
15. The female and male gametes of flowering plants are located at the _____.
- A sepal and stamen
 - B pistil and ovary
 - C ovule and pollen grain
 - D filament and anther

16. Which of the following develops from an ovary after fertilisation?

- A Spore
- B Seed
- C Fruit
- D Gamete

17. Which parts of the seed will grow during germination?

- I Testa
- II Plumule
- III Cotyledon
- IV Radicle

- A I and II
- B I and III
- C II and III
- D II and IV

18. Female infertility is caused by

- A impotence
- B low sperm count
- C blocked fallopian tube
- D penis unable to ejaculate sperms

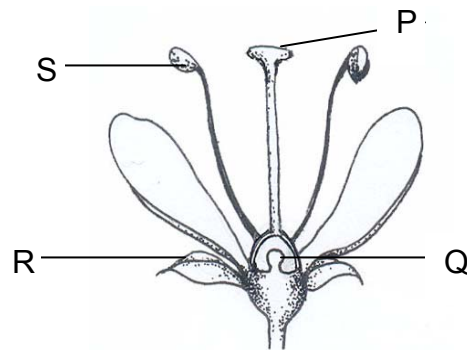
19. Which of the following birth control is **not** a mechanical method?

- A Ligation
- B Condom
- C IUD
- D Diaphragm

20. Which of the following birth control methods is used by males?

- A IUD
- B Vasectomy
- C Spermicides
- D Contraceptive pills

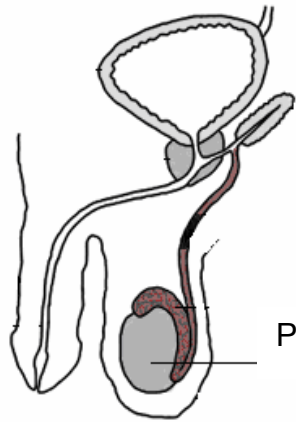
21. The figure shows the process of pollination



Where does the transfer of pollen grain take place?

- A $P \rightarrow R$
 - B $P \rightarrow Q$
 - C $S \rightarrow P$
 - D $S \rightarrow Q$
22. Cross-pollination is better than self pollination because the offspring _____ .
- I produces more fruits
 - II survives better under bad weather
 - III is less resistant to diseases
- A I and II
 - B I and III
 - C II and III
 - D I, II and III

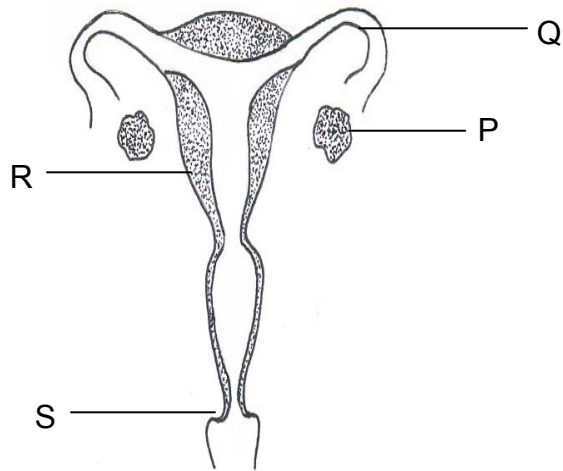
23. The figure shows the male reproductive organ.



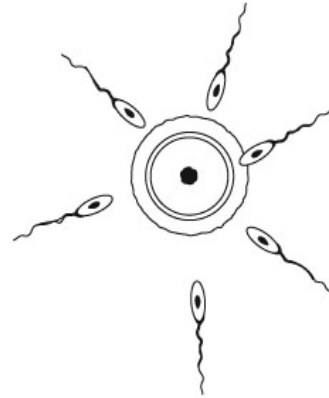
What happens if the structure P does not function? The man is unable to _____

- A regulate his body temperature
- B produce seminal fluid
- C delivers sperms into the vagina
- D produce sperms and the male sex hormones

24. The figure shows a process which occurs in the female reproduction system during fertilisation.



Reproduction system



Fertilisation process

In which part does this process take place?

- A P
- B Q
- C R
- D S

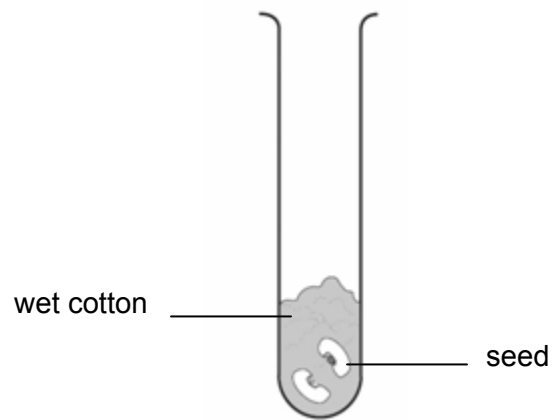
25. The figure shows a flowering plant.



Which of the following is the pollinating agent for this plant?

- A Insect
- B Bird
- C Wind
- D Water

26. The figure shows a test tube containing seed kept in a refrigerator.

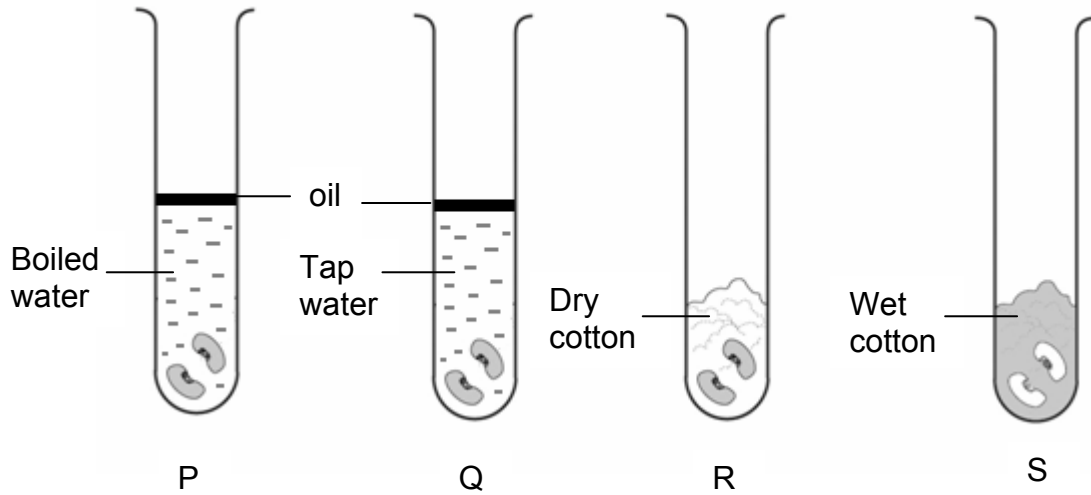


The seed did not germinate after four days because there is an absence of

_____ .

- A A sunlight
- B B air
- C C water
- D D warmth

27. The figure shows an experiment to study the conditions needed for germination of seeds.



Which of the following show the germination of seeds after five days?

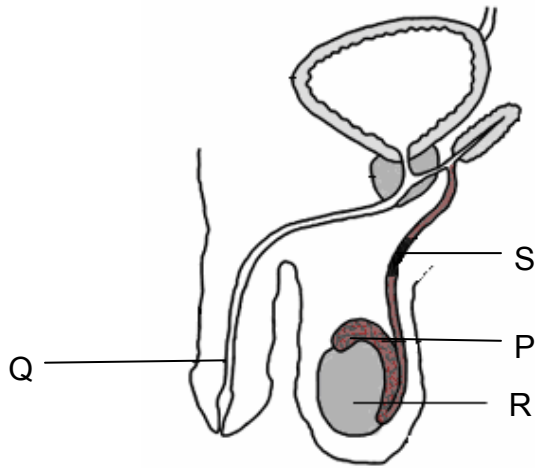
- A P and Q
 B Q and S
 C S and R
 D R and S
28. The figure shows characteristics of plants

| <u>Plant P</u> | <u>Plant Q</u> | <u>Plant R</u> |
|---|---|---|
| <ul style="list-style-type: none"> ▪ Big and colourful flower ▪ Produces nectar | <ul style="list-style-type: none"> ▪ Produces large quantity of pollen grains ▪ Does not produce nectar | <ul style="list-style-type: none"> ▪ Produces small quantity of pollen grains ▪ Short filament and small anther |

Which plant is pollinated by animals?

- A Plant P and plant Q
 B Plant P and plant R
 C Plant Q and plant R

29. The figure shows a male reproductive system.



Choose the correct pathway to release the sperm.

- A P → Q → R
- B Q → P → S
- C R → S → Q
- D S → R → P

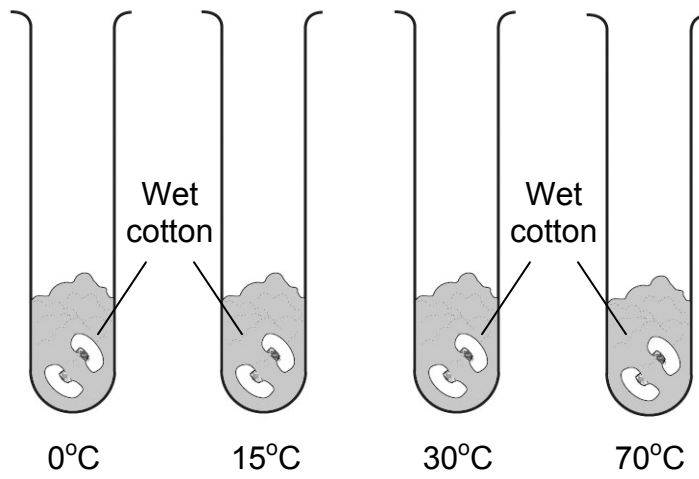
30. The figure shows the calendar for March 2008

| MARCH 2008 | | | | | | |
|------------|----|----|----|----|----|----|
| S | M | T | W | T | F | S |
| | | | | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

Aminah has her first day of menstruation on the 6th of March. When is her next menstruation?

- A 1 April 2008
- B 2 April 2008
- C 3 April 2008
- D 4 April 2008

31. The figure shows an experiment to study the conditions for seeds to germinate.



What is the manipulated variable for this experiment?

- A Temperature
- B Oxygen
- C Water

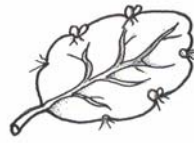
32. The table shows the different conditions in the test tube P, Q, R and S that are used to study the factors that affect the seeds germination. After 5 days, in which of the test tubes will the seed germinate?

| | Test tube | Temperature | Oxygen | Water |
|---|-----------|-------------|---------|---------|
| A | P | 27°C | present | absent |
| B | Q | 27°C | present | present |
| C | R | 5°C | present | absent |
| D | S | 5°C | present | present |

33 The figure shows the parts of plant that can reproduce vegetatively.



Shallot



Bryophyllum



Banana plant



Potato



Ginger

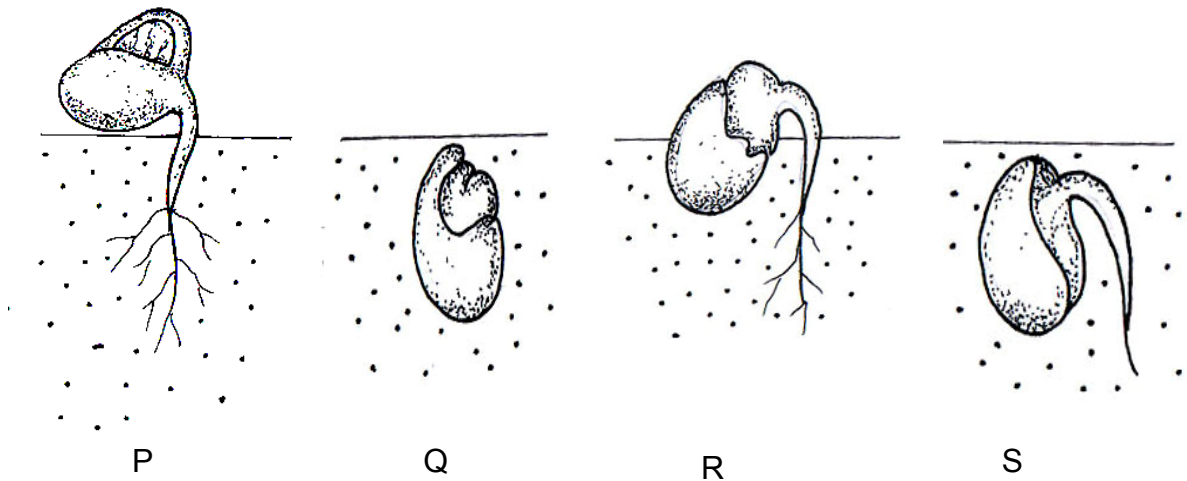


Yam

Which of the following is **correct**?

| | Root | Stem |
|---|--------------|--------------|
| A | Potato | Banana plant |
| B | Bryophyllum | Yam |
| C | Banana plant | Ginger |
| D | Shallot | Yam |

34. The figure shows the germination of a seed



Choose the **correct** stages in the germination of seed.

- A P→Q→R→S
- B P→R→Q→S
- C Q→R→S→P
- D Q→S→R→P

35. The figure shows the flowers of flowering plants



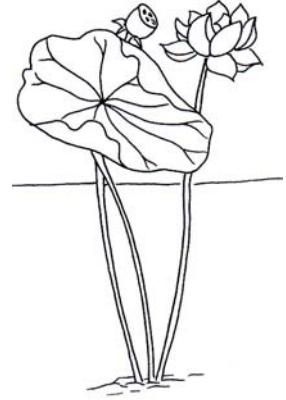
P: sunflower



Q: corn



R: hibiscus



S: water lily

Which flowers are pollinated by insects?

- A P and Q
 - B Q and R
 - C R and S
 - D P and R
36. Drugs, alcohol and tobacco smoke are known as
- A miscarriage
 - B birth defects
 - C mental retardation
 - D harmful substances
37. Give one way to overcome sterility
- A Natural family planning
 - B Birth control pills
 - C Barrier method such as condom
 - D Hormone treatments

38. Name two types of reproduction.
- A Budding and asexual
 - B Spore formation and binary fission
 - C Regeneration and asexual
 - D Asexual and sexual
39. A flowering plant can reproduce vegetatively by using its _____
- I root
 - II stem
 - III fruit
 - IV leaf
- A I and II
 - B I and III
 - C I, II and III
 - D I, II and IV
40. How many time(s) does ovulation occur in a month?
- A 1
 - B 2
 - C 3
 - D 4

41. Name the human sexual organs.

I Penis

II Sperm

III Ovary

IV Ovum

A I and II

B I and III

C II and III

D II and IV

42. A male reproductive organ of flower consists of _____ .

A filament, anther and ovary

B stigma, style and ovary

C filament and anther

D stigma, style and anther

43. The environmental factors needed by the seeds to germinate are _____.

I water

II light

III oxygen

IV temperature

A I and II

B I and III

C I, II and III

D I, III and IV



KEMENTERIAN PELAJARAN MALAYSIA
KERTAS JAWAPAN OBJEKTIF
Ujian Diagnostik



Nama Pelajar:

Tahun/ Tingkatan : 3 Mata Pelajaran: SAINS

Nama Sekolah: Modul: 4

**GUNAKAN PENSIL 2B ATAU BB SAHAJA.
TENTUKAN TIAP-TIAP TANDA ITU HITAM DAN MEMENUHI KESELURUHAN RUANG.
PADAMKAN HINGGA HABIS MANA-MANA TANDA YANG ANDA UBAH
SILA HITAMKAN JAWAPAN DI BAWAH MENGIKUT HURUF JAWAPAN YANG ANDA PILIH**

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

- 31 (A) (B) (C) (D) (E)
- 32 (A) (B) (C) (D) (E)
- 33 (A) (B) (C) (D) (E)
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- 35 (A) (B) (C) (D) (E)

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- 49 (A) (B) (C) (D) (E)
- 50 (A) (B) (C) (D) (E)

- 6 (A) (B) (C) (D) (E)
- 7 (A) (B) (C) (D) (E)
- 8 (A) (B) (C) (D) (E)
- 9 (A) (B) (C) (D) (E)
- 10 (A) (B) (C) (D) (E)

- 36 (A) (B) (C) (D) (E)
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- 38 (A) (B) (C) (D) (E)
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- 40 (A) (B) (C) (D) (E)

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- 53 (A) (B) (C) (D) (E)
- 54 (A) (B) (C) (D) (E)
- 55 (A) (B) (C) (D) (E)

- 11 (A) (B) (C) (D) (E)
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- 59 (A) (B) (C) (D) (E)
- 60 (A) (B) (C) (D) (E)

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- 17 (A) (B) (C) (D) (E)
- 18 (A) (B) (C) (D) (E)
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- 20 (A) (B) (C) (D) (E)
- 21 (A) (B) (C) (D) (E)
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- 25 (A) (B) (C) (D) (E)
- 26 (A) (B) (C) (D) (E)
- 27 (A) (B) (C) (D) (E)
- 28 (A) (B) (C) (D) (E)
- 29 (A) (B) (C) (D) (E)
- 30 (A) (B) (C) (D) (E)

| | <u>Konstruk</u> | <u>No. Soalan</u> | <u>Jumlah Soalan</u> | <u>Bilangan Soalan Gagal Dijawab</u> | <u>Kegunaan Guru</u> |
|----|--------------------------|--------------------------|--------------------------|--------------------------------------|--------------------------|
| 1 | K1 | 1-5 | 5 | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | K3 | 6-11 | 6 | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | K5 | 12-22 | 11 | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | K6 | 23-28 | 6 | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | K7 | 29-35 | 7 | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | K10 | 36 - 43 | 8 | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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| 9 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |